The Effect of Modified Flipped Classroom Learning Assisted Students' Worksheets on English Reading Comprehension

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Abstract

The flipped classroom is a possible learning model solution that can be used occasionally. With modification through various media tailored to students' needs, the modified flipped classroom has been proven to improve motivation and results. Studying in English lessons is at the upper middle level. This research aims to identify the influence of learning that a modified flipped classroom helps student worksheets toward English reading comprehension. This research applies quasi-research with a pre-test and post-test control group design. The participants in this research were 89 students. The experimental group (N=44) was taught to use a modified flipped Classroom, and the temporary control group (N=45) was taught to use a flipped Classroom. The researcher used statistical tests factorial anova and found a different understanding of significant reading between the two groups, Where the group that used the modified flipped classroom obtained better results. Research findings: the author tried to conclude that there is a difference in English reading comprehension between group students who received treatment by applying the modified flipped classroom model and those who obtained treatment using the flipped classroom model.

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INTRODUCTION

Student-centered learning requires pushing learners to have the competencies needed nowadays. As stated by Reigeluth & An (2021) stated about student-centered learning is a perspective that focuses on the learner (heredity, experience, views, setting background, talents, interests, capacities, and needs), which are oriented towards learning (knowledge the best in learning and process and practice the most effective teaching in giving highest motivation.

According to Garrett (2008), student-centered learning puts forward meaning, discovery, and authentic activity. The teaching also emphasizes creating an environment of knowledgeable learning, more natural constructive from teacher and student discussion results rather than knowledge transfer from teachers and students. Studying is a complex and unique process for students because, in learning all aspects of oneself, students will be involved physically and mentally (Degeng, 1997). Slavin (2008) describes that somebody will get knowledge in the best way to experience it, and then knowledge will be well constructed.

Many institutions still hold to principles of behaviorism, which tends to be unfavorable to students. Students cannot construct ideas and thoughts freely because the walls prohibit them, like the use of cellphones and laptops at school, which demands them to dominate various fields of knowledge. However, limited sources learn it only from teachers, and sources learn what the teacher has. Facts like this also happened at MAN 5 Jombang, where the author teaches. At school, they still use principles of behaviorism, limiting the space for teachers and students to move in and implementing quality teaching that aims to improve results in learning and student motivation. This gives rise to The author's initiative to change the learning model by using principles that encourage constructivist students to be active during learning activities, teach ongoing, and improve their success.

Flipped classroom learning has been modified and is believed to overcome limited space and study time. Modified flipped classroom (modified flipped classroom) answers the education demands in this Generation Z era. The flipped classroom is one of them from implementing blended learning activities activity learning not only in the classroom but also outside the classroom; not only does the teacher play a role as center information. However, students and other resources information are also sources for learners; not just the time already Scheduled lessons can be used in learning, but teachers and students can also use time outside study hours for online learning.

In language learning, the flipped classroom only uses video media, which is still insufficient to help learners understand all the material. This is because the video only explains the material through explanation in a way that, sometimes, verbally for students cannot understand if not accompanied by other media as scaffolding (assistance) in learning language. Speak about scaffolding, a gift to students during the early stages of learning. Scaffolding terms Alone originate from Vygotsky's Zone of Proximal Development teachings, which Wood, Bruner, and Ross introduced in 1976 (Santrock, 2019). In this research, researchers modified the learning model and flipped the classroom by providing scaffolding through student worksheets in the experimental group.

This explains that in this study, the researcher modified the learning model by applying the flipped class approach. Flipped Classroom is a method in which students learn material outside of class, usually through videos or reading materials, so that class time can be used for discussion or practical activities. In this context, the researcher provided "scaffolding" or additional support to students in the experimental group through student worksheets. Scaffolding helps students understand and apply concepts that have been learned by providing guidance, questions, or assignments that aim to facilitate the learning process. In this way, the researcher seeks to increase the effectiveness of learning and help students be more prepared when involved in classroom activities.

Many researchers have researched learning models in flipped classrooms. These studies found that the flipped classroom model positively impacts successful Study students. Not only success in learning, motivation and interest in Study students also increased. Girmen & Kaya (2019) carried out Classroom Action Research using a flipped classroom model in a 4th-grade elementary school and successfully increased cognitive, emotional, social, and psychomotor student skills in a significant way. Researchers have also implemented other research on middle

school students using the flipped classroom (Olakanmi, 2017; Winter, 2018). They have modified the media using technology and discovered that the flipped classroom could improve students' motivation and performance. Students and many researchers want to research flipped classrooms for students and even teachers. They found that implementing the modified flipped classroom improved student's performance at high school (Basal, 2015; Kinteki, 2019; Mubarok et al., 2019).

Based on the review above, the researcher researches how to influence learning in a modified flipped classroom to help student worksheets on students' English reading comprehension. This research aims to determine whether there is a difference in reading English between groups taught using a learning model modified flipped classroom and those that use a flipped classroom learning model.

METHODS

This study used a pre-test design and a quasi-experimental post-test (Tuckman, 1999). The total number of research subjects was 89, with details of 44 students in the experimental group and 45 students in the experimental group. The experimental group was taught with assisted modified flipped classroom student worksheets. Meanwhile, group control was only given help in videos with lessons in standard flipped Classrooms.

The total number of participants was 89 students. The experimental group consisted of 44 students, and the control group consisted of 45 students. Specifically, research subject data is presented in Table 1.

Table 1. Participants Research

| No. | Learning model | Number of Students | | Total |
		Man	Woman	
1	Modified Flipped Classroom	16	28	44
2	Flipped Classroom	19	26	45
	Total	35	54	89

This research occurred in the eighth semester of the 2021/2022 academic year. Before treatment existed, a pre-test was given to the experimental and control groups with the same question items. After the treatment is complete, it is implemented in the second group, followed by a post-test with the same number of question items and difficulty level as the pre-test questions. This is done to avoid the answers being the same for the pre-test and post-test questions, equalizing the item.

During learning, experimental and control groups do online learning via Whatsapp groups and offline learning in class. The experimental and control groups received online material in videos containing content about learning materials. Group experiments get scaffolding through student worksheets, while group controls no.

The research instrument was tested for validity and reliability and was formerly given to research subjects. Validity content and construct are used to test instrument validity (Creswell & Creswell, 2017). Reliability testing is to find out

how big is the tool measuring can trustworthy. Reliability refers to the accuracy (consistency) of the tool measure. Data analysis in this research is descriptive from percentage and analysis statistics using ANOVA formula.

RESULTS & DISCUSSION

The results of this research are explained starting from participant, value pre-test and post-test, statistical analysis, and hypothesis testing. Score results in pre-tests carried out before experimental and control groups are given different treatments calculated based on rubric assessments that have been determined previously. The post-test was carried out after treatment for the experimental and control groups. The assessment rubric used is also the same as that used for the pre-test.

Table 2. Pre-Test and Post-Test Scores

Group	Pre Test	Post Test	Acquisition	Pre-Test	Post-Test
Experiment	67.61	80.43	12.82	6.581	4.123
Control	70.62	76.42	5.8	7.136	3.441

The table explains that results learned after being given research treatment (post-test), reading comprehension in the experimental class was 80.43 ± 4.123 (mean $\pm$ SD), and the average in the control class was 76.42 ± 3.441.

Furthermore, the mark post-test analyzed whether there was a significant difference between the student's pre-test reading comprehension and the experimental and control groups. The statistics are in Table 3 below.

Table 3. Analysis of Post-Test Scores for Reading Comprehension

		Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
		F	Sig.	f		Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Reading comprehension	Equal variances assumed	2,995	,087	,986	87	,000	4,010	,804	,411	,608
	Equal variances are not assumed.			,976	83,617	,000	4,010	,806	,407	,612

Based on the independent sample t-test on reading comprehension, it looks like the probability (significance) is 0.000 (< 0.05), meaning there is a difference in reading comprehension between the two groups' treatments. Levene's test's significance value is higher than 0.05 (0.087). This value shows that the research data is homogeneous.

In a way, the proof is used to test the research hypothesis, which aims to determine whether the hypothesis proposed in this research can be accepted or rejected H_1, there is a difference in English reading comprehension (Y_1) between students using a learning model, modified flipped classroom (X_1), and flipped classroom (X_2). Furthermore, the hypothesis was tested through SPSS calculations,

and results were obtained, as shown in Table 4 below.

Table 4. Hypothesis Testing

		F	sig	t	df	Sig (2-tailed)
Pemahaman Membaca Flipped Classroom	Equal variances assumed	.853	.358	-2.405	87	.018
	Equal variances not assumed			-2.407	86.749	.018
Pemahaman Membaca Modifed Flipped Classroom	Equal variances assumed	2.995	.087	4.986	87	.000
	Equal variances not assumed			4.976	83.617	.000

Based on the independent sample comprehension test table read, the probability (sig) prior treatment is 0.018 and 0.000 (<0.05), then H $_0$ rejected and H $_1$ accepted. In conclusion, there is a difference in the ability to read English between students who get treatment using a learning model modified flipped classroom and those who use a learning model flipped classroom.

DISCUSSION

Based on the results of SPSS calculations, the obtained number probability (sig) on the student's reading comprehension test in the experimental and group control is 0.000 and 0.018 (< 0.05), then concluded that H_0 was rejected and H_1 accepted. In conclusion, differences exist between receiving students' treatment by applying a learning-modified flipped model and a flipped classroom. Based on comparative data on the reading English that applies the modified flipped classroom model and those that use the flipped classroom model, it is found that students in the experimental group got better values with an average of 80.43 than students in the control that got an average value of 76.42.

This finding aligns with several researchers who also researched the use of the flipped model classroom (Diningrat, 2022; Reflianto et al., 2021), who found that the experimental group obtained results by reading English higher than the control group. Previous research shows that a flipped classroom learning strategy combined with a learning model such as reciprocal or adding technological media has an effect that results in a study, especially on English reading comprehension.

Furthermore, the use of online media, such as e-learning platforms, Zoom, and WA groups, has also been proven effective in improving social presence among students who are proven to be able to encourage liveliness student during the online learning process (Bond et al., 2021; Hew et al., 2020). The students are monitored actively during the learning process, and teaching directly or indirectly can increase students' effort to understand the text in a more profound, independent way together with fellow students and teachers.

On the other hand, the learning model modified flipped classroom as needed students, of course, can more help give motivation, help study or feedback required by students. This is reinforced by the results of research carried out by (Lin et al., 2019; Ma & Luo, 2022), which modified the learning model flipped classroom

according to the needs of the student so that students feel like they have a chance more participate actively during the learning process teach currently taking place so that student more understand and comprehend the material being studied optimally. This aligns with the statement that model-designed learning based on the needs of students, goals learning, and based framework correct theory will optimize the desired results (Awidi & Paynter, 2019).

Among others, a few worth reviewing have been returned in this research: modifications to the flipped classroom and the technology used to support a more exciting learning process for students. Modifications made by researchers are limited to modifying learning media, such as adding media files, images, photos, and other things besides video media, such as the initial media for the flipped classroom model in delivering learning material.
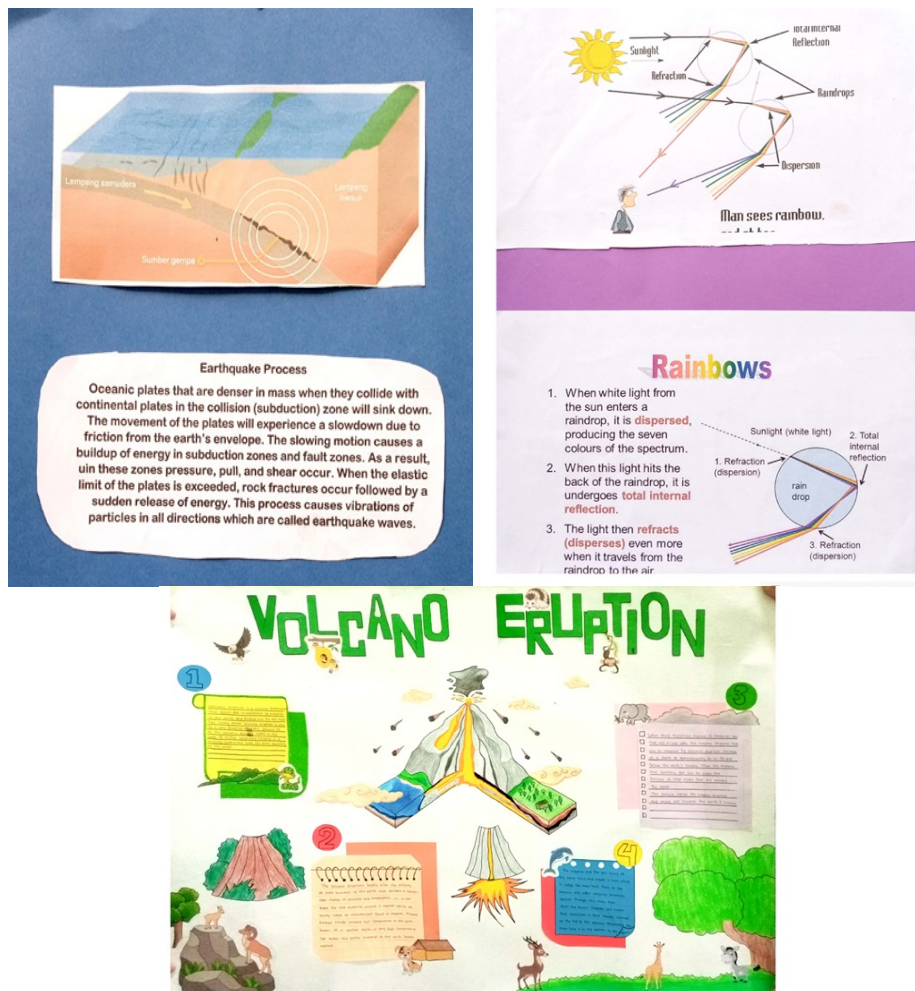

Figure 1. Modifying Learning Media for The Flipped Classroom Model

Maybe we can think about more cutting-edge media, like AR or virtual reality, to help students understand the material better Because students like to enter the real world. Secondly, we can think about online classes, which are more attractive; however, there are still light costs other than the WA group, which is already spelled out obsolete. Researchers indeed decided to use WA groups to

communicate with students because this media is the only light media cost. In place of the researcher conducting research, one obstacle in the online learning process is that it is not a smooth existing network because wifi often makes errors, and students usually do not have enough data to learn online.

CONCLUSION

Based on the research findings, the author tried to conclude that there is a difference in English reading comprehension between students by applying the modified flipped classroom model and the flipped classroom model. Comparative data shows that English reading comprehension that applies the modified flipped classroom model is higher than English reading comprehension values using the flipped classroom model. This proves that given a flipped classroom, proper modification by the learner's needs will positively impact the student's learning.

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