

## Research Article

## Examining the efficacy of hybrid learning in students' English grammar achievement

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doi: [10.33750/ijhi.v6i1.173](https://doi.org/10.33750/ijhi.v6i1.173)**Abstract**

Students' knowledge and acquisition of a second language is seen to improve with hybrid learning. Using offline and online activities is anticipated to produce greater results than conventional face-to-face activities. This study aims to compare the levels of learning achievement between conventional and hybrid learning strategies used in an English grammar class. 40 year -7 students, divided into two classes of 20 each, participated in the study as respondents. Pre-experimental research methods were used in this study, and the participants' pre- and post-test mean scores were compared. Multiple-choice questions were present on both the pre-test and post-test. The results demonstrated an improvement in both the pre-test (46.5) and post-test (46.5) means (71.00). Also, data from the statistical analysis revealed that Sig. (2-tailed) is 0.000, less than (0.05), indicating a significant mean difference in grammar learning achievement affected by hybrid media after being supplied to students compared to conventional learning. It is concluded that hybrid learning may raise student achievement, particularly in English grammar.

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**1. Introduction**

Human life is influenced by education. The quality of a civilization's education was a significant factor in the rise to fame of earlier civilizations as world wonders; its education also influenced each civilization's good and bad aspects. If we read, we will realize that in this digital era, advanced nations depend on the quality of their education, and the quality of its education influences the nation's progress in terms of development (Yuliani & Hartanto, 2020). Through efforts to provide training and instruction, education is a process to improve the attitudes and behaviors of students on both an individual and a population scale. Therefore, education is a treatment or procedure to acquire the necessary knowledge, comprehension, and practice in a rational and, of course, scientifically based manner.

Education is a process of maturation of young people carried out by adults (Squires, 1993). The educational process will never be separated from the learning process. the concept of learning itself is derived from the word "learning," which

refers to an individual's transformational process. In other words, someone is said to be learning when there has been a change for the better. The learning outcomes students achieve at the end of the learning process indicate that educational objectives have been met.

In this regard, teachers are required to restore the situation in learning in the hope of meeting the *Kriteria Ketuntasan Minimal (KKM)* or passing grade determined at school. The problem above can be one of the reasons why learning English, especially grammar skills, at school has yet to meet expectations in the results obtained. We need a model or the appropriate growing experience technique to address the problems mentioned above, whether the strategy is joined with the model, or the model is joined with a media that can support the class's growing experience. According to McKimm et al (2003), teachers should ensure that they effectively assist students in navigating online learning resources, which provide a wealth of information and opportunities. A hybrid learning model, also known as video-assisted blended learning as a medium, is one of the learning

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models researchers provide. In the United States, numerous schools were closed, and scheduled tests and examinations were postponed. Some American schools forced to close due to the coronavirus may not reopen for the remainder of the academic year (St Amour, 2020). In addition, according to McGowan (2020), dozens of independent schools in New South Wales were closed, and some students switched to online classes. Although some schools were opened, strict measures were implemented to guarantee students a social distance strategy and home learning.

In Indonesia, where almost all regions recommend it, hybrid learning has gained much traction as an alternative to classroom instruction. Using network technologies to create, maintain, deliver, and facilitate learning at any time and location distinguishes hybrid learning from traditional learning. Hybrid learning allows students to access their materials anytime and anywhere (Hwang, 2018).

A mixed mode of instruction, hybrid learning, or blended learning is the formal combination of online and traditional face-to-face instruction. "Hybrid learning" and "blended learning" are used interchangeably, although these terms refer to the same thing. However, Hinterberger et al. (2004) distinguish these two terms. "hybrid learning" refers to combining traditional education and technology-based distance learning. In contrast, "blended learning" combines traditional and innovative pedagogical best practices, such as online tutorials or other technology.

According to Adem and Senturk (2010), the courses and programs have online and offline components. These can be called a hybrid, web-enhanced, mixed, or blended mode, among other names. Online or e-learning instruction is combined with in-person instruction in a hybrid learning model, also known as blended learning. As a result, this combination of education aims to combine the advantages of internet-based education, such as students' easy access at any time and reduced time consumption. The goal of the traditional or eye-to-eye learning model is to connect students with other students and educators in the classroom and assist them in learning the recently introduced illustration material.

Hybrid learning or blended learning models have advantages and disadvantages. Because learning takes place both online and in person, this learning model can be utilized to deliver education at any time and from any location. The second has complementary advantages; this learning is more effective and efficient and adds to the advantages. Students have easier access to learning resources. In this study, the hybrid learning model combines the traditional face-to-face and online models using Zoom as media.

A plan or pattern called the learning model directs learning in tutorials or the classroom. The learning model alludes to the learning approach utilized, including showing goals, phases of learning exercises, learning climate, and homeroom the board. A teacher must be aware of the model used when teaching English grammar lessons. The models used have many kinds, and all have their uniqueness. Therefore, for the learning process to run smoothly and effectively, a teacher needs to be aware of the advantages and disadvantages of the model used to teach the material.

From previous research, the method used by English teachers, especially grammar, is the conventional model: giving assignments and discussions. Because most students are less involved in the teaching and learning process and most of the results obtained are low, this method reveals that traditional methods are less effective in teaching and learning, particularly in grammar lessons. Therefore, researchers are interested in researching hybrid learning methods that can help teach and learn to improve student achievement, especially in English Grammar.

This research aims to determine the level of learning achievement of students' English grammar using a hybrid learning model. This research proposed two research questions as follows:

- What is the level of learning achievement of students' English grammar using hybrid learning?
- Are there any significant differences in students' learning achievement between English grammar used hybrid learning and conventional learning?

## 2. Method

### 2.1. Research Design

In this research, we applied a pre-experimental research method. The treatment applied in this research is hybrid learning, which involves students' activities outside the classroom using computers and the Internet. Pre-test and post-test measured the individual student's achievement at the treatment's beginning and end. Thus, a paired t-test was applied to compare the means of the group's scores. The t-test aims to know whether the two groups' means are significantly different (Fraenkel & Wallen, 2009; Hinton et al., 2014). It also identifies the relationship between the treatment group and its outcomes after experiencing hybrid learning.

### 2.2. Research Sampling

According to Creswell (2012), the sample is a subgroup of the target population planned to be studied by researchers to generalize about the target population. The research sample was taken out of the population using a convenience sampling technique. The sample, 62 students of two classes (A and B) from a junior high school in Kendari, Southeast Sulawesi, Indonesia, was taken using convenience sampling. However, there were only a total of 40 students (20 students from each of the two classes) who were willing to participate in this research. Therefore, 20 students from Class A became the experimental group and were taught using a hybrid learning method, and 20 students from Class B became the control group and were taught conventionally.

### 2.3. Research Instruments

The research instruments used in this study are as follows:

#### 2.3.1. Observation Checklist

According to Baker (2006), observation is a complex research method because it often requires the researcher to play several roles and use several techniques, including the five senses, to collect data. In addition, despite the level of involvement with the study group, the researcher must never forget their primary role and remain detached enough to collect and

analyze data relevant to the problem under investigation. In the present study, we conducted observations by observing an English language teacher (a male teacher identified as "Mr. H") in the school taught Class A and Class B from the beginning to the end of the research activity. We provided student observation sheets as a guideline for us and the participants.

### 2.3.2. English Grammar test

A test is used to determine the presence or absence of specific learning outcomes in students or groups. Through the test, the researcher can discover the success or failure of the teaching and learning process. In the present study, the test was conducted in the form of a pre-test and a post-test. The post-test was conducted to measure the English grammar learning achievements of the students in the two classes.

## 2.4. Procedure of Collecting Data

We observed students in the two classes to examine their achievement in English grammar through a hybrid learning and conventional method. The grammar test was made after we had observed them in classroom activities. We provided a grammar test that contained 20 multiple-choice questions to measure the results of the students' English learning process using the hybrid learning approach (in Class A) and the conventional method (in Class B).

## 2.5. Data Analysis

We conducted pre-test and post-test score analyses to determine the students' English grammar levels. The subsequent analysis is a statistical analysis using a t-test based on SPSS. The t-test measured the significant difference in English grammar results of the group taught using hybrid learning (Class A) and the other group taught in the conventional way (Class B).

## 2.6. Validity and Reliability of the Test

In designing the grammar test as an instrument of this research, we measured the reliability and validity of the test. Validity refers to whether a test measures what it aims to measure. Reliability refers to an understanding that an instrument is reliable enough to be used.

## 4. Results and Discussion

In this part, we describe the results of research measuring the students' English grammar using hybrid learning and the conventional way. The results of Class A are compared to those of Class B. The research results are followed by a discussion to bridge the research results and the supporting sources.

### 4.1. Results

#### 4.1.1. Validity test

The validity of the test is crucial in research. A valid instrument measures what it proposes to measure. Therefore, to get accurate data, the validity of the test must be used. In the present research, we used a correlation formula to analyze the fact of the item. In this test, we found several invalid items from the 20 items. Of the 20 test items, 10 were valuable

items related to the Pearson Correlation. We continued this research using item numbers 1, 2, 4, 5, 8, 9, 11, 15, 16, and 17.

#### 4.1.2. Reliability Test

Although the items have passed the validity test, the reliability test was necessary to measure whether the items were reliable. The invalid items have been eliminated during this test. Here is the result of the reliability test as measured using SPSS.

Table 1. The result of the reliability test

Cronbach's AlphaBased on the Standardized Item	n	r table α 5%level of significance
0.619	10	.000

Table 1 above shows the reliability status of the instruments. In this table, Alpha shows 0.619 reliability. We need to compare the score with the Cronbach alpha value to measure that the items meet the reliability requirement. The acceptable  $\alpha$  value in social science is 0.60 (Ghazali, 2008). Table 1 shows that Cronbach's Alpha is  $0.619 > 0.60$ . We can conclude that the items are reliable. Since the instrument accomplished both validity and reliability tests, we continued the analysis and decided to use the items both for the pre-test and post-test.

#### 4.1.3. Analysis of Pre-test and Post-test

In this session, the following activities were conducted:

##### 4.1.3.1. Pre-test score analysis

Before implementing the treatment through the teaching and learning process using a hybrid learning approach (in Class A), we administered a pre-test. The pre-test was done to measure students' understanding of English grammar before they were given the treatment. The distribution of students' scores on the pre-test can be seen in the table below.

Table 2. Pre-test score analysis

Mark	Category	Frequency	Percentage
81-100	Very High	0	0%
61-80	High	3	15%
41-60	Fair	7	35%
21-40	Low	9	45%
0-20	Very Low	1	5%
<b>Total</b>		<b>20</b>	<b>100%</b>

Table 2 provides the percentage of each student related to their level in the pre-test. As can be seen, none of the students got the highest rate during the pre-test. 15% of the students met the "high" category, and 35% met the "fair" category. Almost half of the students were categorized in the "low" category, and 5% were in the "very low" category.

##### 4.1.3.2. Post-test score analysis

After conducting treatments with the help of Mr H, we provided the students with a post-test to determine the treatments' effectiveness. The post-test was made with the same form as the pre-test. The post-test score distribution can be seen in the following table.

Table 3. Post-test score analysis

Mark	Category	Frequency	Percentage
81-100	Very High	4	20%
61-80	High	9	45%
41-60	Fair	5	25%
21-40	Low	1	5%
0-20	Very Low	1	5%
<b>Total</b>		<b>10</b>	<b>100%</b>

Table 3 provides the percentage of each student related to their level in the pre-test. As can be seen, almost half of the students were in the "high" category. The second highest score, 25%, met the "fair" category, followed by 20% in the "very high" category. In the post-test, only 5% of the students met the "low" and "very low" categories, respectively.

#### 4.1.3.3. Post-test score analysis of the control group

We gave the control group a post-test to compare their results to the treatment groups. The post-test was made with the same questions. The post-test score distribution can be seen in the following table.

Table 4. Post-test score analysis

Mark	Category	Frequency	Percentage
81-100	Very High	0	0%
61-80	High	3	15%
41-60	Fair	6	30%
21-40	Low	9	45%
0-20	Very Low	2	10%
<b>Total</b>		<b>20</b>	<b>100%</b>

Table 4 provides the percentage of each student related to their level in the pre-test. As can be seen, all students were categorized as "very low." 10% of the students were in the "very low" category. Only 15% of the students were in the "high" category. However, 30% of the students were in the "fair" category. Regrettably, almost half of the students were categorized as "low."

#### 4.1.4. Learning outcomes

Treatment was given by Mr. H to the experimental group (Class A) with a hybrid learning approach assisted by the

Table 6. 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
Learning outcomes	Equal variances assumed	0.19	0.66	4.43	38	0.000	26.00	5.87	14.12	37.88
	Equal variances are not assumed.			4.43	36.68	0.000	26.00	5.87	14.11	37.89

Based on the calculation of the  $t = 4.43$  with  $df = 38$  and  $p = 0.000$  ( $p < 0.001$ ), it was found that there was a significant mean difference between the experimental and control group for grammar learning achievement.

Zoom application. The materials were presented in the form of a PowerPoint presentation. Questions were provided in the form of an online quiz. Mr. H also provided an online discussion through Zoom. Hybrid learning combines offline learning models with online ones. Students interacted actively during the learning process. Members of Class A were obviously more enthusiastic about expressing opinions. They could also access recorded learning materials because they were uploaded on YouTube.

Meanwhile, a conventional learning approach was applied by Mr. H to the control group (Class B). The learning activities in the group were teacher-centered. Because a teacher provided information, Mr. H conveyed information to students in stages using the blackboard. Students only listened to his explanation and answered the questions that he asked them.

#### 4.1.5. Statistical analysis

This study examined the learning achievement between the experiment group taught using hybrid learning and the control group taught conventionally. It was hypothesized that there is no significant mean difference in learning achievement between the experimental group taught using hybrid learning and the control group taught using the conventional method. Table 5 below shows the group statistics of both the experimental and control group.

Table 5. Group Statistics

	Class	N	Mean	Std. Deviation	Std. Error Mean
Learning outcomes	Experiment group	20	71.00	20.23	4.52
	Control group	20	45.00	16.70	3.73

The above Table 5 reveals that the mean score of the experimental group is 71.00, and that of the control group is 45.00. Thus, this research proved that the difference is significant. For further analysis, we examined the independent sample t-test, and the results are shown in Table 6 below.

## 4.2. Discussion

After processing the data obtained from the English grammar test, which was obtained by using the pre-test and post-test instruments of 10 multiple-choice items in class A (the

experimental group) using the hybrid learning model, it was found that this group's learning outcomes increased.

In a previous study, Kekang (2013) argues that hybrid learning combines traditional learning with e-learning. If learning is done only by e-learning, then the learning is not humane. Hybrid learning is also known as blended learning. A blended learning course effectively teaches the skill and promotes an evidence-based approach to practice in this area. Therefore, the process and the end of learning prove that the hybrid learning model can improve students' cognitive capacity, resulting in learning conditions that are different from usual. In this digital era, hybrid learning is one way to make learning creative.

On the other hand, Webb et al. (2005) experimented similarly to what Taradi et al. (2005) carried out, but with a focus on the postgraduate level. Graduate students in hybrid instruction show increased levels of knowledge learning. Boyle et al. (2003) studied the impact of hybrid learning on students by comparing mixed-learning environments to traditional learning environments. The pass rate of students in the hybrid courses increased by 12% to 23%, compared to that of students who took the traditionally taught classes the previous year.

Regardless of the percentage of time spent online vs in a classroom, McFarlin (2008) showed a positive association between hybrid instruction and student accomplishment. No matter how much time the students spent online, the results indicated that they improved their performance on the three final examinations by an average of 17% compared to the marks they got in traditional classes. Regardless of the time students spend online, the research above demonstrates a good connection between hybrid teaching and student accomplishment. Blended learning increases students' understanding of learning a second language. Using offline and online activities is expected to provide better results than traditional, face-to-face instructional activities.

For the control group, we processed the data obtained from the English grammar test, which was measured using the pre-test and post-test instruments of 10 multiple-choice questions in class A. The learning outcomes show a decrease in the post-test results, which means there was a decline in the post-test results due to the absence of the hybrid learning approach.

Besides, the hybrid learning model applied to the experimental group can improve student learning outcomes. This situation can happen because the learning model used is newly applied to attract students to pay attention to the learning materials. Thus, learning with the hybrid learning approach is effective.

## 5. Conclusion

This study demonstrated that students' English grammar proficiency might be raised by using a hybrid learning strategy. Students who were taught utilizing the hybrid learning model and those who used the traditional method showed significantly different learning outcomes. The use of hybrid learning to enhance English grammar has many advantages, and this study suggested that using a hybrid

learning strategy could produce the same results as grammar-based English language instruction.

## 6. Implication for further research

The findings of this study should assist readers in understanding how hybrid learning affects student accomplishment while also enhancing the knowledge of teaching and learning, particularly for students and teachers who are not native English speakers. The two main approaches to this topic are theoretical and practical.

Theoretically, this work supports the advancement of both the theoretical teaching of learning and the teaching of languages. Also, it attempts to give teachers the knowledge they require on the definitions and various instructional approaches that English teachers might use, particularly while teaching English Grammar. He teaches grammar in English.

Practically speaking, the results of this study give teachers and students useful knowledge and reliable reference materials to assist them in understanding and learning how to teach and how it impacts student accomplishment. Also, the findings of this study will assist ELT teachers in understanding and acknowledging hybrid teaching styles and their usefulness in teaching English, enabling them to influence students favorably and produce desired results. The fundamental information needed to design and implement English lessons effectively comes from understanding and recognizing their teaching methodologies during classes. As a result, we can produce and distribute strategic guidelines intended to aid students in learning English, particularly grammar. They can, in particular, adapt their teaching methods to fit the students' learning preferences.

The results of this study should also offer crucial data and empirical support to other scholars. The results of this study should assist readers in understanding how hybrid learning affects students' success in learning English grammar and expand their knowledge of the English teaching and learning process for both students and inexperienced teachers. This research is typically presented in both theoretical and practical approaches.

This research theoretically supports the development of language teaching and learning theory. Also, it attempts to give teachers the knowledge they require on the various definitions and instructional approaches that English teachers can use, particularly while teaching English grammar. The practical implications of these studies help teachers and students learn how to teach English grammar and how it influences students' academic progress by giving them useful information and reliable reference materials.

The findings of this study will also aid ELT instructors in understanding hybrid learning strategies and their efficacy in teaching English. Recognizing and accepting the hybrid teaching approach's efficacy in helping students learn English grammar will positively impact them and produce the intended results. The fundamental information needed to design and carry out English language lessons effectively comes from understanding and recognizing their teaching methodologies during classes. As a result, we can produce and distribute strategic guides to aid students in learning

English, particularly grammar. They can, in particular, adapt their teaching methods to fit the students' learning preferences. The results of this study should also offer crucial data and empirical support to other scholars.

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