USING FLIPPED LEARNING MODEL IN TEACHING LISTENING COMPREHENSION TO THE STUDENTS IN SMAN 6 MAROS

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Abstract

New technologies have given students better ways to invest more productive time in class, such as listening classes. This study focuses on the effect of flipped learning on students' listening comprehension. Its objectives are to evaluate students' reactions to the flipped learning paradigm and to examine the effectiveness of flipped learning in enhancing high school students English listening skills. Quantitative research methodologies were used in this experiment. The outcomes demonstrated that the flipped learning methodology at SMA Negeri 6 Maros increased students' English listening abilities. Based on the questionnaire, students have a positive view of learning English with the flipped learning model. They agreed that using the flipped learning model made them more active in class. The results of this study can be very helpful in guiding the teaching of listening comprehension for high school teachers and improving listening comprehension for high school students.

Keywords — *Flipped Learning, Listening Comprehension, Student Responses.*

INTRODUCTION

Listening is an important life skill. Additionally, it is crucial for acquiring the understandable input required for language development. Lin (2002) asserts that students who can listen and comprehend well are better equipped to participate in class activities. Language instructors must work harder to enhance their pupils' listening comprehension. Information and communication technology advancements recently have had a huge impact on the educational field as well as other facets of society.

New technologies are easily applied to design and facilitate the educational activities required in today's student-centered learning environment, (Rafiola, Setyosari, Radjah, & Ramli, 2020). The flipped classroom concept is basically presented as an implementation of a blended

learning classroom, where students individually study content via an online platform before class, and used their time for discussion and problem-solving in- class activities, Maxson & Szaniszlo (2015). With less class time, students have more opportunities to have one-on-one interactions. Thus, the focus of teaching and learning shifts from teacher-centered to learner-centered. Flipped classrooms are often interpreted simply as the opposite of homework or direct lectures. Flipped learning, in which students receive foundational knowledge before entering the classroom, allows teachers and students to focus more on higher-order thinking skills. To ensure the success of flipped learning, instructors must strike a balance between three main areas: content delivery, pedagogical knowledge, and technology integration, where educators integrate technology into the classroom for educational purposes, (Koehler, Mishra, & Cain 2013).

Regarding the English Foreign Language (EFL) context, Lee & Wallace (2018) conducted flipped instruction to Korean university students in ESL subjects. Students are required to complete a course assessment and a reflective learning log. The research concluded that students rated flipped learning mostly positively, although they initially struggled to adjust to the online platform. The students appreciated it due to three foremost benefits: receiving prompt and thorough feedback, providing ample opportunity to explore the material in-depth, and improving critical thinking on the material before class activities. Moreover, peer interactions were identified as a favorable advantage as well.

This study makes an effort to determine, at the very least, whether utilizing a flipped learning model in the classroom helps students' listening comprehension as well as what the students' responses are to the listening course using the flipped learning model.

LITERATURE REVIEW

1. Listening

Listening is one of the most crucial language abilities. The ability to hear and understand what is being said is called listening. Additionally, it is a challenging task, and pupils may comprehend what is said by using past knowledge. Various meanings exist for the phrase “listening comprehension”. Learning to listen is a distinct process for understanding spoken language. The act of listening comprehension requires the listener to concentrate on understanding the conversation's message. It is essential to understand English prosody, vocabulary, and structure. There are four components of listening. The first is the capacity to

discern between identical sounds in the second language and different sounds in the native language in terms of intonation patterns and voice attributes. The second is being able to understand a speaker's complete message. The third is the capacity to retain that message in one's auditory memory until it can be digested. As a result, comprehension is the last element. There are three different categories of listening comprehension strategies, according to many experts. They are socio-affective, cognitive, and metacognitive.

2. Flipped Learning

Flipped learning involves switching from traditional classroom lectures to a range of hands-on activities. Aaron Sams (2013), who is credited with creating the concept of the "flipped classroom," describes it as a teaching strategy in which students do assignments or participate in some class activities outside of the usual classroom setting. Different academics provide various definitions of flipped classrooms based on prior research. according to Minesota (2013), there are three characteristics of the most successful flipped classroom approaches. First, the classroom learning environment is highly structured, and educators must constantly plan to maintain the kids' interest in the lesson. Second, the purpose of class activities should be to motivate students to complete assignments, take tests, and apply or recall what they have previously learned in flip materials. Lastly, it is highly encouraged for students to work outside of the classroom and take part in in-person meetings through grading also educator expectations to complete out-of-class work. The advantages of a flipped classroom have been extensively researched in a variety of settings. The main benefit is that it lengthens the class's interaction time. Fulton (2012). According to Fulton, this gives students the freedom to learn whenever and wherever they want and at their own pace. The lecturer interacts with the students more than really lecturing when using lecture videos.

3. Responses

The response is typically described as a residual idea or estimate following an observation. The six impressions grow into a consciousness that may exist both in the present moment and in the future. Through observation and sensation, the reaction is obtained. The listener is compelled to offer some sort of overt, instantaneous response to what has been spoken in many, if not most, instances. This might take the form of a spoken response to a question or a nonverbal gesture like a head nod or following directions.

METHODS

1. Research Design

A one-group, pre- and post-test experimental design was adopted in this study. Pre-test, therapy, and post-testing were used to gather data, and questionnaires. Gay, Mills, & Airasian (2012), states that the experimental method is the research method that represents the most effective approach to solving practical and theoretical educational problems and to advancing education as a science. The experimental design is used to check the development of the student's listening comprehension before receiving treatment. The treatment (X) occurred between pre-test (O1) and post-test (O2). The research design is shown in the following diagram:

Pre-test	Treatment	Post-test
O1	X	O2

Which:

O1: Pre-test

X: Treatment

O2: Post-test

A quantitative descriptive approach was adopted by the researcher. Senior high school students were used in the researcher's experimental design, which included a pre-test, treatment, and post-test. Following that, ten statements about the employment of flipped learning models in their listening class were delivered to the students to elicit their opinions. This design was utilized by the researcher to compare how well students' listening comprehension improved before and after adopting the flipped learning model as a teaching method in their listening class.

2. Variable of Research

a. There are two variables in this study:

1) The usage of the flipped learning model as a teaching approach is the independent variable.
2) The listening comprehension grade of the pupils serves as the dependent variable.

b. Operational Definition

Flipped learning is a learning model in which students study concepts and materials at home through prepared media such as articles, audio, and videos, then complete assignments and discussions in class, where the teacher becomes a facilitator. Understanding what is being heard and identifying it requires active listening comprehension. For the sake of this study, it is the capacity to comprehend and retain song lyrics. This means that someone who can understand spoken language can do more than just listen; they can also infer its meaning and message.

3. Population and Sample

Students from SMAN 06 Maros' senior secondary school make up the study's population. The sample for this study, which employed a cluster random sampling method, consisted of eleventh-grade Kelas Peminatan Bahasa Inggris students at SMAN 06 Maros.

4. Technique of Data Analysis

a. Pretests and posttest

The data from the test were analyzed by using the procedures as follows: Classifying the scores of the students based on the Kemendikbud categories.

Table 1. Score Categories

Score Interval	Category
93-100	Very Good
84-92	Good
75-83	Average
<75	Poor

(Kemendikbud, 2017)

The researcher outlines the steps involved in data analysis in the paragraphs that follow. The statistical program SPSS (Statistical Program for Social Sciences) analysis method was used to examine the study's data.

1) To compare the frequency and percentage of the students' pre- and post-test scores, use SPSS.
2) To compute the standard deviation and hypothesis, use SPSS.

3) Use SPSS to determine the difference between the pre- and post-test mean values that is statistically significant.
4) Use SPSS, to calculate the gain score of the students' post-tests.
5) Use SPSS, to calculate the KKM distribution frequency.

b. Questionnaire

The results of the questionnaire were scored using a Likert scale, which gauges how strongly someone agrees or disagrees with a proposition. The data is interpreted using the following categories:

Table 2. Classification Interval

Classification	Category
33-40	Very Positive
24-32	Positive
18-23	Negative
10-17	Very Negative

The questionnaire itself used the Likert Scale which consisted of the following four-point scales:

Table 3. Likert Scale

Statement	Score	
	Positive	Negative
Strongly Agree	4	1
Agree	3	2
Disagree	2	3
Strongly Disagree	1	4

The mean score is calculated by using the formula:

$$X = \frac{\sum x}{N}$$

Where:

X: Mean Score

$\sum$X: Total row score

N: The total number of participants

(Gay et el., 2012)

The percentage score is calculated by using the formula:

$$P = \frac{F}{N} X\ 100$$

P: Percentage

F: Frequency

N: Amount of sample

(Gay et el., 2012)

Therefore, the researcher can evaluate the hypothesis that flipped learning model can improve students' listening comprehension by assessing observations and test data, as well as questionnaires to determine students' responses can improve their listening comprehension after observing and learning a certain language.

RESULTS

Research results present the results of a listening test and a questionnaire taken to answer the research questions of the first chapter. The research question is "Is the use of flipped learning model effective to improve the students` listening comprehension, and What are the students' responses towards the application of flipped learning model in their listening class?". The researchers collected data through listening tests and questionnaires, 28 students were taken as subjects in this research.

1. Listening Achievement

The results of data analysis were assessed by pre-and post-test, and the scores were recorded and analyzed for all participants.

Table 4. Frequency & Percentage of Students' Pre-Test and Post-Test

No.	Scale	Classifications	Pre-Test		Post-Test	
			F	P	F	P
1	93-100	Very Good	2	7.1%	12	42.9%
2	84-92	Good	1	3.6%	11	39.3%
3	75-83	Average	6	21.4%	3	10.7%
4	<75	Poor	19	67.9%	2	7.1%
TOTAL			28	100.0%	28	100.0%

a. Normality test

Requirements analysis tests were performed using normality tests to assess if Wilcoxon tests or paired t-tests are more practical. The paired T-test may be used to further analyze the data if the value of Sig. > 0.05 indicates that it is normally distributed, whereas the Wilcoxon test can be used to further analyze data that is not normally distributed. Because there are less than 30 samples, the Shapiro-Wilk normality test is utilized.

Table 5. Normality Test Result

Treatment	Sig.
Pretest	0.239
Posttest	0.007

Based on the table above, information is obtained that the Sig value from the pretest is 0.239, and from the posttest is 0.007. Because there is a sig value < 0.05, the hypothesis significance test between two paired samples is carried out by the Wilcoxon test.

b. Hypothesis Analysis

The Wilcoxon test is used to assess the impact of the flipped learning paradigm on enhancing students' listening comprehension. The results of the normality test are used to inform the results of the two-sample paired hypothesis significance test. When the data is not regularly distributed, the Wilcoxon test is used to compare the mean value of a variable from two paired sample data. The reasoning for this choice is as follows.

1) If the value of Sig. < 0.05, then H0 is rejected, which means that the use of the flipped learning model as a teaching strategy improves students' listening comprehension.
2) If the significance value of sig > 0.05, then H0 is accepted, which means that the use of the flipped learning model as a teaching strategy does not improve students' listening comprehension.

The following are the results of the Wilcoxon test which can be seen in the table below:

Table 6. Mean Score and Standard Deviation

Result	*Mean ± SD*	*Mean diff.*	Sig.
Pretest	59.357 ± 21.010	-31.321	0.000
Posttest	90.678 ± 8.819		

Based on the table above, information is obtained that the pretest mean score is 59,357 while the posttest mean score is 90,678. The mean difference is -31,321, that value is negative, thus it is found that there is an increase in the mean score of pretests to the posttest value of 31,321. In addition, the value of Sig. 0.000 < 0.05, thus it can be concluded that there is a difference in the pretest and post-test mean scores. This shows that H0 is rejected, which means that using flipped learning model as the teaching strategy improves students' listening comprehension.

c. Univariate analysis

Univariate analysis is an analysis that is used to summarize a set of data so that it becomes useful information for many people, an example of univariate analysis is descriptive statistics. Descriptive statistics are an important part of research used to describe the basic characteristics of the data to be used. Data makes sense when it can be presented as a summary descriptive statistic of a data set with or without analysis in a way that is easy to understand. Descriptive statistics are used to convey information simply. One type of descriptive statistics is the frequency distribution. Below are the frequency distribution results of the pre-test and post-test listed in the following table.

Table 7. KKM Frequency Distribution Results

No	Category	Score	Pre-Test		Post-Test	
			Frequency	Percentage%	Frequency	Percentage%
1	Very Good	93-100	2	7.1%	12	42.9%
2	Good	84-92	1	3.6%	11	39.3%
3	Average	75-83	6	21.4%	3	10.7%
4	Poor	<75	19	67.9%	2	7.1%
TOTAL			28	100.0%	28	100.0%

From Table 7 information was obtained that at the pretest, the results of respondents with poor criteria were 19 respondents 67.9%, respondents with average criteria were 6 respondents 21.4%, respondents with good criteria 1 respondent 3.6%, and respondents with very good criteria as many as 2 respondents with a percentage of 7.1%. In the posttest, information was obtained that respondents with poor criteria were 2 respondents 7.1%, respondents with average criteria were 3 respondents 10.7%, respondents with good criteria were 11 respondents 39.3%, and respondents with very good criteria were 12 respondents with a percentage of 42.9%.

d. Gain Score Results

The gain score is a test used to determine the difference between the pretest and posttest scores. In this research, the Gain Score was used to see the comparison of students' score before and after being given treatment. The test uses SPSS version 26 to see the N-Gain score data, the average N-Gain value that has been obtained is then interpreted based on the table below.

Table 8. N-Gain Value Criteria

Value <g>	Criteria
<g> ≥ 0.7	High
0.3 ≤ <g> < 0.7	Medium
<g> < 0.3	Low

Based on the table above, it is obtained that the average n-gain value is 0.7532, and the value is in the interval <g> ⩾ 0.7, thus it can be stated that the student's score after being given treatment has a "high" criteria.

2. Responses

Students' responses result to the flipped learning model, in addition to carrying out pre-tests and post-tests to determine the level of effectiveness of flipped learning in improving students' listening comprehension, the researcher also wanted to find out how students responded to the flipped learning model in their listening class, for this reason, students were also given a questionnaire of ten statements.

Table 9. Questionnaire Result

No.	Responded aspect	Respond			
		Strongly Agree	Agree	Disagree	Strongly Disagree
1.	I like learning with flipped learning as the teaching model.	17,9%	82,1%	0%	0%
2.	Flipped learning gave me the motivation for learning English, especially listening comprehension.	21,4%	78,6%	0%	0%
3.	Flipped learning is effective to improve my listening comprehension.	25%	75%	0%	0%
4.	Flipped learning makes me more active in class.	71,4%	28,6%	0%	0%

5.	I feel some benefits with flipped learning, such as improving my listening comprehension and my knowledge of many things.	32,1%	67,9%	0%	0%
6.	I think learning listening is easier by using this flipped learning.	25%	75%	0%	0%
7.	Learning listening with flipped learning makes it hard for me to improve my listening comprehension.	0%	0%	60,7%	39,3%
8.	In my opinion, learning to listen by using flipped learning strategy is boring.	0%	0%	46,4%	53,6%
9.	I do not feel the benefits of learning to listen by using flipped learning strategy.	0%	0%	57,1%	42,9%
10.	I feel the challenge in this lesson suits my ability.	32,1%	64,3%	3,6%	0%

According to data analysis from the questionnaire, the most of students' responses to the flipped learning model are very positive and positive, As can be seen from the questionnaire mean score, which was determined as follows:

Table 10. Questionnaire Mean Score

Students Responses of the flipped learning model	Scores	
	Mean Score	Percentage
	29.82	29.82%

The total score of SMA Negeri 6 Maros students is 835 with a total of 28 students. This shows that they agree by using the flipped learning model can improve their listening comprehension, where the mean score of the questionnaire results is 29.82%. The mean score results are supported by the frequency and percentage of questionnaires, as shown in the table below:

Table 11. Questionnaire Frequency & Percentage

Range of Scale	Frequency	Percentage (%)	Classification
33-40	14	50%	Very Positive
23-32	14	50%	Positive
18-23	0	0%	Negative
10-17	0	0%	Very Negative
Total	28	100%	

Table 11 shows that there are 14 (50%) students who get a scale range of 23 – 32 which indicates that students are classified as having a positive response and there are 14 (50%) students who get a scale range of 33 – 40 which indicates that students are classified as having a very positive response.

DISCUSSIONS

1. Students' listening comprehension

In this part, the researcher discussed the results of the research that answered the question raised. It aimed to investigate the flipped learning effects on senior high school students listening comprehension. In this study, it was expected that there would be an improvement in students' listening comprehension using the flipped learning model if there was a statistically significant difference (sig 0.05) between the pretest and posttest. A statistically significant difference in favor of the posttest was found using the Wilcoxon test, with a value of Sig. 0.000 0.05. This demonstrates that H0 is not accepted, proving that the flipped learning model is an effective method for teaching pupils to understand what is being said.

Based on the Minimum Completeness Criteria (KKM), students were declared successful if they achieved a score of 75. In this research, there were 26 students whose post-test scores reached beyond the score of 75. Researchers also obtained an average n-gain value of 0.7532, this value is in the interval <g> ⩾ 0.7 (n-gain higher or equal to 0.7) which explains that the value obtained is higher than 0 .7, thus it can be stated that the student's score after being given treatment has a "high" criterion.

The fact that flipped learning forced students to listen to an English audio in class that conveyed the topic of each lecture may be a likely explanation for the outcome of this study. They were required to pay close attention to some audio in order to complete the test and learn the fundamentals of listening comprehension. For three reasons, it might be claimed that the pupils' listening comprehension could have been enhanced by listening to parts of that audio. First, flipped learning makes it easier to help students. They will be provided with the capability to pause, change playback speed, rewind, and replay audio to help them get a better understanding of what they have been listening to. In this case, learning in class also only focuses on the assignments given, including the listening activities given during the treatment.

Second, the flipped learning model that focuses and gradually listens to native speakers in class can make students aware of difficulties in understanding spoken English. This might make students try harder to digest what they listen to and be motivated to improve their listening comprehension. Third, by using the flipped learning model, students can access all material through online platforms and can continue to view it again if students need it. This is related to flipped your classroom to improve student learning (Fulton, 2012), which express the advantages of flipped classrooms are; students can access lecture videos whenever and wherever they want and it provides students to learn at their speed.

2. Students' responses towards the application of flipped learning model in their listening class

The second research question about the students of SMAN 06 Maros responses, based on the results of collecting quantitative data taken from the questionnaire, shows that basically, students feel the benefits of using the flipped learning model in improving listening comprehension. This finding is supported by research results from (Chen & Chuang, 2016) who found that a flipped classroom can save lecture time, provide hands-on contact, and increase preparedness and motivation for learning among students.

Researcher found that students perceive the flipped learning model quite positively. Their responses to the ten statement items were dominated by positive responses. In general, students view flipped learning as a fun and useful learning model. They also agreed that they liked flipped learning as their learning model in listening class, flipped learning also made them more active in class and gave them the motivation to improve their listening comprehension. There are 50% of students who have very positive responses, and 50% of students have positive responses. There are no students who have very negative or negative responses.

CONCLUSIONS

Based on the findings of this study, the researchers came to the conclusion that SMAN 06 Maros students' listening comprehension was improved by the flipped learning paradigm. Based on the results of the kids' listening tests, which improved following treatment, this conclusion was reached.

1. As many as 26 out of 28 students met the KKM criteria. It can be seen that the pre-test with a score (poor) was 19 students, while after the treatment there were only 2 students

who were at a (poor) frequency. In the post-test, as many as 26 of 28 students met the KKM criteria, 12 students (very good), 11 students (good), and 3 students (average).

2. Students perceived the flipped learning model quite positively. Their responses to the ten statement items were dominated by positive responses, they surely have positive thoughts about the use of flipped learning model to improve their listening comprehension.

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