

THE APPLICATION OF DIGITAL STORYTELLING TO IMPROVE STUDENTS' LISTENING SKILL AT SMP NEGERI 6 TONDANO

ADITYA BRAYEN MARAMIS, SANERITA T. OLII, OLGA RORINTULUS

*English Education Department
Faculty of Language and Arts
Universitas Negeri Manado
Correspondence author: saneritaolii@unima.ac.id*

Received: 06 October 2022

Accepted: 31 October 2022

Published: 31 October 2022

Abstract: This study aimed to improve the listening skill of eighth grade students of SMP Negeri 6 Tondano by using Digital Storytelling. This study used pre-experimental research with quantitative approach and one group pretest posttest design where the data was obtained from the students' listening test. The sample in this study were 27 students at SMP Negeri 6 Tondano. The findings of this study indicated a significant difference before and after using digital storytelling by obtained the mean score of 57.66 for the pre-test and 72.40 for the post-test with an increase of 25.56%. Wilcoxon analysis showed that there was a significant difference from the test before and after using digital storytelling with the Wilcoxon test results got Asymp. Sig. (2-tailed) = <.001 which is less than asymp. sig. (2-tailed) <0.05. Based on these findings, it can be concluded that using digital storytelling is effective for improving the listening skill of eighth grade students at SMP Negeri 6 Tondano.

Keywords: *Listening Skill, Digital Storytelling, Improving, Effective.*

INTRODUCTION

The development of this increasingly modern era, technology is growing rapidly to create various sophisticated technologies that can be utilized by all humans, with this technological advancement, various kinds of learning media are opened that can make it easier for students to learn. The fast-paced technological changes over

the last few years have increased the interest of educators towards the convergence of technology in education (Rong & Noor, 2019). Technological advances make researchers competing in the application of effective and fun learning media through modern technologies (Lengkoan et al, 2022). English teachers are required to make learning in the classroom fun and easy to understand so that the understudies will not feel bored when learning is taking put, so that the application of digital storytelling is the right choice to create a pleasant atmosphere in the classroom. According to Syafryadin (2020), it becomes more attractive to use innovative models in engaging student's motivation in learning English. Digital storytelling is one of the alternative methods that makes learning English is more interesting ".

Digital storytelling is an interesting place to be applied in learning because in modern times, teenagers are more focused on the internet, so choosing digital as a learning strategy really helps students to learn in an effective and fun way. Today's education is in a high digital revolution where the application of learning is increasingly sophisticated, therefore to take advantage of digital technology in learning, Digital Storytelling is the right choice so digital storytelling is a new form of storytelling which is usually only written / made on paper but over the time it have become more modern so that there have been several changes, such as storytelling to digital storytelling, where this new form is more interesting because the combination of images and video and sound can make students learn more enthusiastic about learning, the other name of combining videos is audio visual, according to Woodhill (2021), Audio visual refers to the electronic equipment or media that hosts both the video and sound components of a production. This might include projectors, video screens, microphones, web streaming equipment, live broadcasting equipment, or many other types of technology.

The combination that is applied in the digital storytelling media can make the class more colourful and less stressful because the animation video can make students enjoy the lesson even more. Learning using digital storytelling is one of the

learning media that can make the classroom atmosphere come alive, with the lively atmosphere in the classroom making it easier for students to learn new things and easier to understand a discussion. Digital storytelling is usually applied in learning English because the application of digital storytelling in learning English can make it easy for students to understand with a combination of animated images and video.

Learning English is the foremost imperative thing in present day times since English is a universal dialect that can be utilized when we meet outsiders, not only that English is also often used in the world of work, therefore it is an important language to learn. Ollie (2021) stated that language skills consist of listening, speaking, reading, and writing, and language components consist of vocabulary, structure, and pronunciation. The listening process involves understanding a speaker's accent or pronunciation, the speaker's grammar and vocabulary, and comprehension of meaning (Liando et al., 2018). In teaching English there are many ways and techniques that can make students easily to understand lessons in media. Using media as an alternative can support teaching and learning processes (Adawiyah, 2017). Digital storytelling also can be used to assist student in listening skill. According to Rorimpandey (2019), Listening has an important role in language teaching, through listening we can improve other language skills such as speaking and writing. Listening is one of the most important skills in English because to learn English we also need to understand what the meaning of the words is. Digital storytelling might help students' to be strategic listening. Clearly, digital storytelling decreases the lack of students on the issues such as spelling, pronunciation, and handwriting. Listening is one of the more difficult skills to master as it necessitates a higher amount of focus and intensity to fully understand the sound (Posumah et al., 2021). Listening skill is very important in communicating, having good listening skill can make it easier for someone to make conversation with others, having good listening skill can also make someone successful. In addition, to increase student interest in learning, there must be an active role from parents in motivating

children, so the parents not only put their children and waiting for the result in their achievement or progress in learning education (Rorintulus et al., 2021).

SMP Negeri 6 Tondano is one of the public schools in Tondano with as many as 144 students with B accreditation. The overall condition of the building can be said to be good. This school has 7 classrooms, 1 teacher's room, 1 principal's room, 1 library, 1 school canteen, and student bathrooms. Before this research was conducted, the researchers had seen the entire series of English learning in class VIII b and found the weaknesses of students in learning English, namely in listening skill, researcher have also searched for information about the level of listening skill to English teachers at the school and indeed the level of students' listening skill is still poor so it can be seen that to apply learning that involves digital storytelling to improve students' listening skill, it is said to be possible because there are several supporting factors such as, students already know the proper way of learning with LCD supporting media, students are proficient in operating gadgets, schools already support WIFI network access, therefore the researchers took this title to be applied in class VIII b in SMP Negeri 6 Tondano.

RESEARCH METHOD

Research Design

This study used a quantitative approach with a pre-experiment design. Pre-experiment designs are research schemes in which a subject or a group is observed after a treatment has been applied, in order to test whether the treatment has the potential to cause change (Frey, 2018).

The design of this study used "*One Group Pretest-posttest Design*". A one-group pretest–posttest design was a type of research design that is most often utilized by behavioral researchers to determine the effect of a treatment or intervention on a given sample (Allen, 2017). Namely, the design of this research was applied the pre-test as a form of no action for students, then post-test as a form of change to students who have taken action.

This study aimed assessed the effectiveness of digital storytelling in improving students' listening skill.

Formula *One Groups Pretest and Posttest Design*:

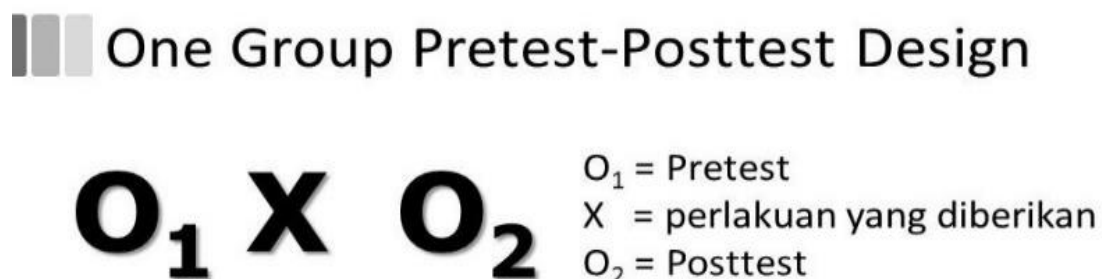


Figure 3.1. *Pre-experiment One Groups Pretest and Posttest Design*

Subject of the study

According to Jaikumar (2018) one group pretest-posttest design is a simple type of pre-experimental design where only the experimental group selected as the study. This study, researcher only took a sample of 27 students in class B of SMP Negeri 6 Tondano. From these 27 people continued to be observed their every action in class.

Technique of Collecting Data

Data collection techniques are the most important thing to know the results of the research.

1. Pre-test

The researcher gave a pre-test to the students based on the material to be taught without prior treatment where the researcher gave questions which consist of Multiple Choice, Fill the Blank.

2. Post-test

This post-test was given to students when they finish treatment, this post-test aimed to find out the progress of students after being given treatment to find out whether using digital storytelling to improve students' listening skill is an effective way by calculating the overall pre-test and post-test. The test which consists of Multiple Choice, Fill the Blank.

Data Analysis

Data processing used in this study was to calculate the percentage of student learning outcomes based on performance indicators (Nurjanah, 2019).

1. Assessing students' correct answers used the formula:

$$\text{Score} = \frac{\text{Students' correct answer}}{\text{Total numbers of the questions}} \times 100$$

Score	Criteria
90-100	Excellent
80-89	Very good
70-79	Good
60-69	Fair
59-0	Bad

Table 3.4.1. *learning success criteria*

2. Calculating the percentage progress of student learning outcomes using digital storytelling learning media.

The formula:

$$P = \frac{X_2 - X_1}{X_1} \times 100\%$$

P = Percentage

X_1 = Pre-test mean score

X_2 = Post-test mean score

3. Students' data that has been collected through the test, will be analyzed using IBM SPSS (Statistical Package for the Social Science), to find out the changes in students in applying the application of digital storytelling to improve listening skill to see the score of mean, median, mode, minimum, maximum and standard deviation.

4. Wilcoxon Test SPSS

According to (Hayes, 2021) Wilcoxon test is a nonparametric statistical test that compares two paired groups, the tests essentially calculate the difference between sets of pairs and analyze these differences to establish if they are statistically significantly different from one another. The researcher applied a Wilcoxon test to find out more significantly about the improvement that was obtained between the pre-test and post-test of students in applying digital storytelling to improve listening skill. The hypothesis testing are

1. H_0 The application of digital storytelling is not effective in improving students' listening skill.
2. H_1 The application of digital storytelling is effective in Improving students' listening skill.

The criteria for testing the hypothesis are as follows: if asymp. sig. (2-tailed) < 0.05 then the hypothesis (H_1) is accepted, while if asymp sig. (2-tailed) > 0.05 then the hypothesis (H_0) is accepted.

FINDINGS AND DISCUSSION

Finding

The findings in this study in the implementation of learning using learning media in the form of digital storytelling to improve students' listening skill and hypothesis testing, with the object of research consisting of 27 people consisting of 11 men and 16 women. For further explanation of the data analysis is below.

1. Students' Listening Skill

Table 4.1.1 Frequency of Students' Listening Skill Pre-test

Pre-Test				
No.	Category	Score	F	P%
1.	Excellent	90-100	0	0%
2.	Very good	80-89	0	0%
3.	Good	70-79	2	8%
4.	Fair	60-69	9	33%
5.	Bad	59-0	16	59%
			27	100
Total				

Table 4.1.1 shows that the percentage of the pre-test scores classified as bad was 16 (59%) students, fair was 9 (33%) students, good was 2 (8%) students.

Table 4.1.2 Frequency Table of Listening Skill Pre-Test SPSS Test

PRE-TEST					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	26	1	3.7	3.7	3.7
	46	1	3.7	3.7	7.4
	50	4	14.8	14.8	22.2
	53	3	11.1	11.1	33.3
	57	7	25.9	25.9	59.3
	61	2	7.4	7.4	66.7
	65	7	25.9	25.9	92.6
	73	1	3.7	3.7	96.3
	77	1	3.7	3.7	100.0
	Total	27	100.0	100.0	

Table 4.1.3 Frequency of Students' Listening Skill Post-Test

No.	Category	Score	Post-Test	
			F	P%
1.	Excellent	90-100	1	4%
2.	Very good	80-89	4	15%
3.	Good	70-79	8	29%
4.	Fair	60-69	14	52%
5.	Bad	59-0	0	0%
	Total		27	100

Table 4.1.4 shows that the percentage of the post-test scores classified as fair was 14 (52%) students, good was 9 (29%) students, very good was 4 (15%) students, excellent was 1 (4%) student.

Table 4.1.4 Frequency Table of Listening Skill Post-Test SPSS Test

POST TEST					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	61	2	7.4	7.4	7.4
	65	5	18.5	18.5	25.9
	69	7	25.9	25.9	51.9
	73	4	14.8	14.8	66.7
	76	1	3.7	3.7	70.4
	77	3	11.1	11.1	81.5
	81	2	7.4	7.4	88.9
	84	1	3.7	3.7	92.6
	88	1	3.7	3.7	96.3
	92	1	3.7	3.7	100.0
	Total	27	100.0	100.0	

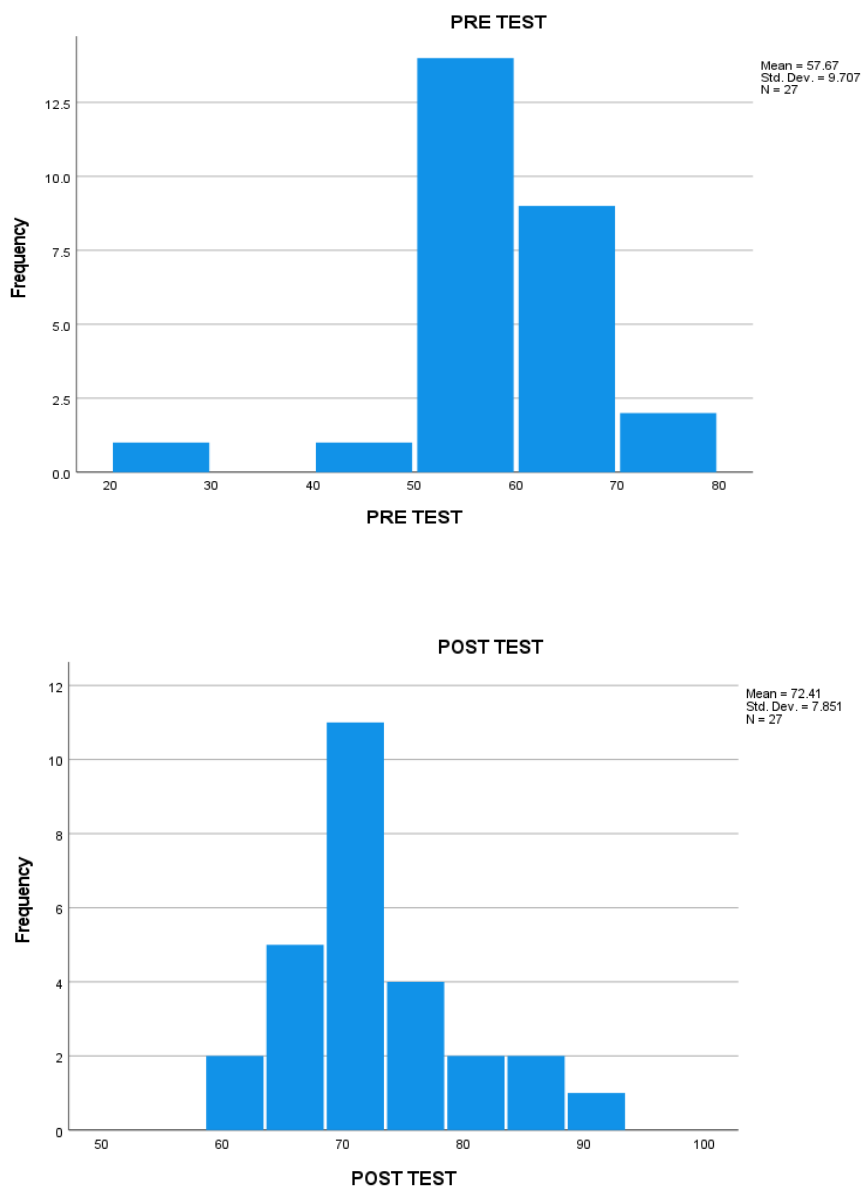
Table 4.1.5 Students' Listening Skills Percentage Mean Score

Category	Students' Score		Improvement (%)
	Pre-test	Post-test	
Listening Skills	57.66	72.40	25.56%

Table 4.1.5 shows that the mean score in terms of listening skill has an increase whose data can be seen in the table above with details as in the post-test there is an increase compared to the pre-test. The post-test got a mean score of 72.40, while the pre-test only got 57.66, it can be seen that by using a digital

storytelling application, in this case to improve students' listening skill increase of 25.56% was obtained

Figure 4.1.1 Histogram Pre-Test and Post-Test



2. Listening Skill of Mean, Median, Mode, Minimum, Maximum and Standard Deviation

Table 4.1.6 The Score of Mean, Median, Mode, Minimum, Maximum, and Standard Deviation

		Statistics	
		PRE TEST	POST TEST
N	Valid	27	27
	Missing	0	0
	Mean	57.67	72.41
	Median	57.00	69.00
	Mode	57 ^a	69
	Std. Deviation	9.707	7.851
	Minimum	26	61
	Maximum	77	92

a. Multiple modes exist. The smallest value is shown

Table 4.1.6 shows data from the mean, median, mode, minimum, maximum, and standard deviation, in this case the mean shows a score of 57.67 which was obtained in the pre-test while in the post-test it got 72.41, the median got 57.00 in the pre-test, while in the post-test it got 57.00. post-test got 69.00, mode got 57a in pre-test while in post-test got 69, std. deviation gets a score of 9,707 in the pre-test while in the post test it gets 7,851, the minimum score obtained in the pre-test is 26 while in the post test it gets a score of 61, the maximum score obtained in the pre-test is 77 while in the post test it gets a score of 92.

3. Hypothesis Testing Use Wilcoxon Test SPSS

This section is the foremost imperative portion of the research. The hypothesis is utilized to find out whether there's a noteworthy distinction in utilizing digital storytelling to progress students' listening skill by looking at the tests given in the form of pre-test and post-test where the hypothesis is

whether digital storytelling is effective in improving students' listening skill. This hypothesis was tested by using the Wilcoxon test SPSS.

The criteria for testing the hypothesis are as follows: If asymp. sig. (2-tailed) <0.05 then the hypothesis (H_1) is accepted, while if asymp sig. (2-tailed) >0.05 then the hypothesis (H_0) is accepted.

Table 4.1.7 Wilcoxon Signed Rank Test

		Ranks		
		N	Mean Rank	Sum of Ranks
Post Test - Pre Test	Negative Ranks	0a	.00	.00
	Positive Ranks	27b	14.00	378.00
	Ties	0c		
	Total	27		

a. Post Test < Pre Test
b. Post Test > Pre Test
c. Post Test = Pre Test

Table 4.1.8 The Significance of Students' Listening Skills

Test Statistics ^a	
	Post Test - Pre Test
Z	-4.583b
Asymp. Sig. (2-tailed)	<,001

a. Wilcoxon Signed Ranks Test
b. Based on negative ranks.

Table 4.1.8 shows that the listening skill scores in the pre-test and post-test results have significant differences, which can be seen from the result, Asymp. Sig. (2-tailed) shows the number <001, so it can be said that the hypothesis (H_1) is accepted while the null hypothesis (H_0) is rejected.

Discussion

After applying the digital storytelling application to improve the listening skill of students at SMP Negeri 6 Tondano and having passed the research stage by obtaining data showing that using the digital storytelling application as a learning media it is very effective to improve students' listening skill.

After conducting research using pre-experimental research with a research design of "one group pretest posttest" the results obtained from pre test classified as bad was 16 (59%) students, fair was 9 (33%) students, good was 2 (8%) students. While the results obtained in post test classified as fair was 14 (52%) students, good was 9 (29%) students, very good was 4 (15%) students, excellent was 1 (4%) student. The post-test got a mean score of 72.40, while the pre-test only got 57.66 so that it can be seen in the percentage increase of 25.56%, so it can be said that there is an increase in applying digital storytelling for learning media in this case to improve students' listening skill. According to Bouchrika (2021), Storytelling has long been used and studied as a method for teaching and learning. In this study, the researcher also tested the hypothesis by using the Wilcoxon test where the data showed that, Asymp. Sig. (2-tailed) shows the number <001, so it can be said that the hypothesis (H_1) is accepted while the null hypothesis (H_0) is rejected, in other words that the application of digital storytelling is effective in Improving students' listening skill.

REFERENCES

- Adam H. 2021. "Wilcoxon Test" URL:<https://www.investopedia.com/terms/w/wilcoxon-test.asp>. Accessed on 23 July 2022, 11.45.
- Adawiyah, A. (2017). *the Effectiveness of Popular Songs in Improving Students' Listening Skill*.
- Alen, M. (2017). *The SAGE Encyclopedia of Communication Research Methods*. SAGE Encyclopedia of Communication Research Methods.
- Frey, B. B. (2018). *The SAGE Encyclopedia of Educational Research, Measurement, and Evaluation*. <https://doi.org/10.4135/9781506326139>

- Imed B. 2021. Digital Storytelling: Benefits, Examples, Tools & Tips. URL: <https://research.com/education/digital-storytelling>. Accessed on 23 July 2022.
- Jaikumar, M. 2018. Pre-Experimental Design. URL: <https://www.slideshare.net/maheswarijaikumar/pre-experimental-design-108088765>. Accessed on 13 August 2022.
- Jeremy, W. (2021). AV Terms Defined: What Does Audio Visual Mean? URL: <https://www.aspencustomelectronics.com/post/audio-visual-definition>. Accessed on 30 May 2022.
- Lengkoan, F., Andries, F. A., & Tatipang, D. P. (2022). A Study on Listening Problems Faced by Students of Higher Education. *Globish: An English-Indonesian Journal for English, Education, and Culture*, 11(1), 41-50.
- Liando, N. V., Sahetapy, R. J., & Maru, M. G. (2018). English Major Students' Perceptions Towards Watching English Movies in Listening and Speaking Skills Development. *Advances in Social Sciences Research Journal*, 5(6), 1–16. <https://doi.org/10.14738/assrj.56.4627>
- Olii, S. T. (2021). The Use of Songs as Teaching Media to Improve Students' Pronunciation Fluency. In *International Journal of Applied Business and International Management* (Vol. 6, Issue 1). <https://doi.org/10.32535/ijabim.v6i1.1087>
- Posumah, J., Teppa, R. R., & Rorimpandey, R. (2022). *Improving Students' Listening Skill By Using Songs' Lyrics a Study Conducted At Sman 1 Melonguane*. 1(4), 488–501.
- Rong, L. P., & Noor, N. M. (2019). Digital storytelling as a creative teaching method in promoting secondary school students' writing skills. *International Journal of Interactive Mobile Technologies*, 13(7), 117–128. <https://doi.org/10.3991/ijim.v13i07.10798>
- Rorimpandey, R. (2019). Youtube Videos In Teaching Basic Listening. *Journal of English Language and Literature Teaching*, 4(1), 43–52. <https://doi.org/10.36412/jellt.v4i1.942>
- Rorintulus, O. A., Singal, Y., Batunan, D. A., & Mamentu, C. (2021) Writing Project In EFL Class: From Design To Recommendation: A Systematic Review.
- Syafryadin, S. (2020). Effective English Teaching for Young Learners Classrooms. *Yavana Bhasha: Journal of English Language Education*, 3(2), 79. <https://doi.org/10.25078/yb.v3i2.17>.