THE USE OF DIGITAL STORY TELLING TO IMPROVE STUDENTS LISTENING ABILITY AT SMP N 1 TONDANO

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Abstract: The goal of this study was to employ Digital Storytelling to help ninth-grade students at SMP Negeri 1 Tondano enhance their listening skills. Pre-experimental research with a quantitative approach and a one group pretest posttest design were used to collect data for this study from the students' hearing exams. This study's sample included 21 pupils from SMP Negeri 1 Tondano. The post-test outperformed the pre-test. The mean post-test value is = 8 9.05, and the standard deviation is = 93.5. The mean value of the pre test is 71.7, and the standard deviation is 75.25. Because the post-test findings outperform the pre-test results, it can be inferred that employing digital storytelling is helpful for developing the listening skills of ninth grade students at SMP Negeri 1 Tondano. Suggestions include teachers paying greater attention to how to educate students properly, so that students are readily engaged in learning and listening to English through the use of media or technologies.

INTRODUCTION

The utilization of English for understudies in Indonesia as an unknown dialect which has capabilities for of correspondence where understudies can cooperate to support worldwide correspondence as well as satisfying the standards for language schooling for specific purposes. This is built up by the assessment of Liando (2014) who says exactly the same thing, in particular "a more extensive language of correspondence" which assumes an undeniably essential part in advanced education, particularly in science and innovation. Individuals can impart, however they don't necessarily convey well. Great correspondence is the means by which to pass on messages without equivocalness. The truth of the matter is that when vacationers visit

this country, the locals can't convey as expected on the grounds that the inhabitants don't grasp the language.

Correspondence needs in English from every understudy has various varieties, for this situation the correspondence needs being referred to are the capacity to impart in view of the skill they have, this is shown by the capacity to tune in and answer through correspondence, capacity to peruse, capacity to compose and all it in a coordinated way frames interrelated connections in order to help the development of suitable and right English authority.

Liando & Lumettu (2017); Lumentut & Lengkoan (2021); Nur et al., (2023) expressed that in dominating an English language comprises of useful abilities in particular talking and composing, as well as responsive abilities which perusing and tuning in, these four fundamental abilities are something that should work in the understudies' own feeling of English capability explicitly in listening is an expertise that permits individuals to utilize them hearing to hear and grasp the importance of the speaker. The method involved with paying attention to and understanding the message passed on by the speakers, and the movement of handling the data got from the speaker, is called listening cognizance. This is the primary phase of human correspondence prior to talking, perusing and composing. In as well as tuning in, perusing and composing, there are additionally a few viewpoints used to help them, like syntax and jargon.

What's more, advanced story media is utilized to make it simpler for students to master listening understanding in the objective language (Lengkoan & Olii, 2020); (Lester and Elliott, 2002). Computerized story media is a medium that consolidates the specialty of narrating with an assortment of computerized sight and sound like pictures, sound, and video (Liando et al., 2023); (Andries & Lengkoan, 2023). The method involved with recounting a story is called computerized narrating. These media are options in contrast to showing understudies' listening abilities. Computerized Narrating can be one of good learning system to Established Learning Climate More Appealing (Arenseth, 2008).

Consequently, this is major areas of strength for a why specialists pick computerized narrating as a medium to further develop middle school understudies' listening abilities to turn out to be essential for the execution of discovering that uses

innovation and follow existing techniques in view of understudies' advantage in innovation, particularly things that are computerized itself.

RESEARCH METHOD

As per Ellis and Brewster (2016), narrating procedure can propel understudies to foster uplifting outlooks towards the unknown dialect and language learning. In each story, there will be an ethical message can be taken, whether it is negative or positive. The significance of narrating is about perception, so narrating intellectually invigorates understudies as they normally envision and figure out the story while they tune in.

Computerized Narrating is an innovation application that is strategically set up to exploit client contributed content and to assist educators with conquering a portion of the snags to beneficially involving innovation in their homerooms (Liando et al., 2022); (Coelho, 2007). Computerized Narrating is the advanced articulation of the antiquated specialty of narrating. Computerized Narrating is definitely not a novel thought despite the fact that the ongoing accentuation on sight and sound innovation.

These days, new age narrating begins with Advanced Narrating which incorporates pictures, music and sound through PC. Computerized Narrating is a cycle that mixes media to enhance and foster communicated in language (Liando & Tatipang, 2023). The normal definition centers around the mix of narrating with sight and sound components like pictures, sounds and recordings. In this way, all computerized stories join advanced designs, sounds, recordings and music to introduce data, and they have a specific subject and perspective as in the customary stories. Be that as it may, Advanced Narrating can possibly work with instructing and growing experience (Dalton and Grisham, 2011).

Dogan (2009) make sense of that the utilization of computerized narrating doesn't just assist the understudies with interfacing super advanced improvement and low-tech schooling system these days, yet additionally gives many advantages that can't be accomplished by the utilization of customary narrating, here a portion of the advantages are:

1. Increasing understudies' inspiration
2. Making another optimal system of feeling individual stories

3. Providing understudies with the capacity to accomplish the 21 century abilities.

4. Encouraging understudies to coordinate and communicate their thoughts and information in significant ways.

There are seven components of computerized narrating as indicated by Robin 2008) which can be considered as the force of advanced narrating. They are perspective which underlines the point of view of the creator, a sensational inquiry which is kept on the crowd's consideration, the profound substance which interface the story to the crowd, the narrator's voice which associates the story to the customize the story to assist the crowds with figuring out the story. The force of soundtrack gives a day to day existence to the story. The economy perspective present an enough happy to be told to the crowd without over-burdening the view. The last components is pacing which controls the how gradually or rapidly it advances.

In conducting this study, the author exclusively employed quantitative research via post-test with experimental and control groups. A post-test will be provided to pupils to determine their degree of listening. The post-test was taught in test following treatment, and the pre-test was taught using the traditional technique. So there were two tests: X1 is a post-test and X2 is a pre-test. The Treatment is symbolized by the letter X. The following is the design presentation:

Experimental group	Treatment	Control group
X1	X	X2

There are various processes involved in gathering the data for this study.

1. Obtaining permission from the School Headmaster to do research.

2. Confirm with the home-teacher that you will be teaching English for the research project.

3. Create a lesson plan during the teaching and learning process.

4. Give the pre-test before presenting the content.

5. Analyze the pre-test data in order to design the students' therapy.

6. Use digital narrative telling to deliver the therapy.

7. Administer the post-test.

8. Arrange the data in a table.

9. Analyze the data.

The researcher will use the Mean Score formula and Standard Deviation to analyze the data, as follows:

$$Me = \frac{\sum x\,i}{n}$$

Where:

Me = The mean score of students

$\sum x\,i$ = The total number of students score

n = The total number of students

(Sugiyono, 2010;49)

Standard deviation

$$S = \sqrt{\frac{\sum (xi - \bar{x})^2}{(n-1)}}$$

Where :

S = Standard deviation

n = Number of samples

Σ = Epsilon / total (number, amount)

x = Mean

xi = Sample Score

A standard deviation is a measure of how distributed the data is in reference to the mean. A low standard deviation suggests that data are grouped around the mean, whereas a large standard deviation shows that data are more spread out. (Sugiyono, 2010;57).

FINDINGS AND DISCUSSION

The study question was previously described in Chapter 1. The problem was resolved using a pre-experimental design with just a post-test. "Improving Students' Listening Skill Through Digital Story Telling" was the hypothesis. This study only used one class: a pre-test and post-test class of 21 students. The post-test was taught utilizing digital story telling, whereas the pre-test was taught using traditional

methods. Data from pre-test and post-test were collected in order to assess the pupils' progress following therapy.

The t-test formula was employed to compare achievement between the post-test and the pre-test. Shalvelson (1981:424) provided the following formula:

$$t_{\overline{x_1 - x_2}} \, obs \;=\; \frac{\overline{X}_1 - \overline{X}_2}{\sqrt{\left[\dfrac{(n_1 - 1)s_1^2 + (n_2 - 1)s_2^2}{n_1 + n_2 - 2}\right]\left[\dfrac{1}{n_1} + \dfrac{1}{n_2}\right]}}$$

Where:

$\overline{X}_1$ = Mean score of post-test

$\overline{X}_2$ = Mean score of pre-test

n_1 =   Total number of subject of the post-test

n_2 =   Total number of subject of the pre-test

s_1^2 =   Variance of the post-test

s_2^2 =   Variance of the pre-test

In analyzing the data, the writer follows the steps below :

Step 1 : Check in the result of post-test (X_1) and the pre-test (X_2).

Step 2 : Construct frequency distribution of the test achievement (score) of the post-test (X_1) and the pre-test (X_2).

Step 3 : Compute the mean score ($\overline{X}$), standard deviation (s), variance of the pre-test (s²) and post-test.

Step 4 : Compute standard deviation (s) of variance (s²) root the value of variance post-test and pre-test.

Step 5 : Compute t ($\overline{X}_1 - \overline{X}_2$) observed by inserting the value of the Post-test and the Pre-test into t-test formula.

Step 6 : Decided whether to accept or to reject null hypothesis.

a). Reject null hypothesis or H_0if $:t_{obs} \geq t_{crit}$.

b). Do not reject null hypothesis H_0if $:t_{obs} < t_{crit}$.

   Shalvelson (1981:427)

The post-test (X_1) and the pre-test (X_2) was shown on Table 1:

Table 1. Data Matrix of the Experimental Group and Control Group

Subject	Post-test(X_1)	Subject	Pre-test (X_2)
01	75	01	70
02	80	02	70
03	90	03	70
04	85	04	65
05	95	05	80
06	90	06	70
07	100	07	60
08	100	08	70
09	95	09	70
10	80	10	70
11	85	11	75
12	75	12	80
13	85	13	80
14	100	14	65
15	90	15	65
16	80	16	75
17	100	17	70
18	100	18	75
19	85	19	80
20	80	20	70
21	100	21	75
	1870		**1505**

The presentation frequency distribution of the post-test (X1) and pre-test (X2) scores is presented below.

Table 2. Frequency Distribution of the Post-test (X_1)

Value X_1	F_1	F_1 %	CF	CF_1%
100	6	28.57	21	100
95	2	9.52	15	71.43
90	3	14.29	13	61.91
85	4	19.05	10	47.62
80	4	19.05	6	28.57
75	2	9.52	2	9.52

The presentation on table 2 clearly showed that the highest score was 100 (one hundred) obtained by 6 (six) pupils, or in percentage 28.57%. 2 (two) students obtained 95 (ninety-five) or 9.52%, 3 (three) students obtained 90 (ninety) or 14.29%, 4 (four) students obtained 85 (eighty-five) or 19.05%, and 4 (four) students obtained 80 (eighty) or 19.05%, 2 (two) students obtained 75 (seventy-five) or 9.52%as the lowest score.

Table 3. Frequency Distribution of Pre-test (X_2)

Value X_2	F_2	F_2%	CF	CF_2 %
80	4	19.05	21	100
75	4	19.05	17	80.95
70	9	42.86	13	61.9
65	3	14.28	4	19.04
60	1	4.76	1	4.76

The presentation on table 3 above clearly shows that the highest result was 80 (eighty) obtained by 4 (four) pupils, or in percentage 19.05%. 4 (four) obtained 75 (seventy-five) or 19.05%, 9 (nine) students obtained 70 (seventy) or 42.86%, 3 (three) students obtained 65 (sixty-five) or 14.28%, 1 (one) student obtained 60 (sixty) or 4.76%as the lowest score.

Table 4. Variance of Pre-test

SUBJECT	X	$\bar{X}_1$	$X_1 - \bar{X}_1$	$(X_1 - \bar{X}_1)^2$
1	75	89,05	-14,05	197,4025
2	80	89,05	-9,05	81,9025
3	90	89,05	0,95	0,9025
4	85	89,05	-4,05	16,4025
5	95	89,05	5,95	35,4025
6	90	89,05	0,95	0,9025
7	100	89,05	10,95	119,9025
8	100	89,05	10,95	119,9025
9	95	89,05	5,95	35,4025
10	80	89,05	-9,05	81,9025
11	85	89,05	-4,05	16,4025
12	75	89,05	-14,05	197,4025
13	85	89,05	-4,05	16,4025
14	100	89,05	10,95	119,9025
15	90	89,05	0,95	0,9025
16	80	89,05	-9,05	81,9025
17	100	89,05	10,95	119,9025
18	100	89,05	10,95	119,9025
19	85	89,05	-4,05	16,4025
20	80	89,05	-9,05	81,9025
21	100	89,05	10,95	119,9025
Σ	**1870**			**1580,953**

After inserting the individual who deviated from the data presentation on table 4 (experimental group), the next step was to determine Mean (X 1) and Standard Deviation (S12), which were calculated using the following formula:

a.) n_1 = 21

Mean $(\bar{X}_1)$ = $\dfrac{\sum X_1}{n_1}$

$$= \frac{1870}{21}$$

$$= 89.05$$

b.) Standard Deviation (S_1) $= \sqrt{\dfrac{\sum \left(X_1 - \overline{X}_1 \right)^2}{n-1}}$

$$= \sqrt{\dfrac{1870}{21-1}}$$

$$= \sqrt{\dfrac{1870}{20}}$$

$$= \dfrac{\sqrt{93.5}}{}$$

$$= 9.67$$

c.) $S_1^2 = 93.5$

Table 5. Variance of Pre-test

SUBJECT	X_2	$\overline{X}_2$	$X_2 - \overline{X}_2$	$(X_2 - \overline{X}_2)^2$
1	70	71,7	-1,7	2,89
2	70	71,7	-1,7	2,89
3	70	71,7	-1,7	2,89
4	65	71,7	-6,7	44,89
5	80	71,7	8,3	68,89
6	70	71,7	-1,7	2,89
7	60	71,7	-11,7	136,89
8	70	71,7	-1,7	2,89
9	70	71,7	-1,7	2,89
10	70	71,7	-1,7	2,89
11	75	71,7	3,3	10,89
12	80	71,7	8,3	68,89
13	80	71,7	8,3	68,89
14	65	71,7	-6,7	44,89
15	65	71,7	-6,7	44,89

16	75	71,7	3,3	10,89
17	70	71,7	-1,7	2,89
18	75	71,7	3,3	10,89
19	80	71,7	8,3	68,89
20	70	71,7	-1,7	2,89
21	75	71,7	3,3	10,89
Σ	**1505**			**616,69**

After inserting the individual who deviated from the data presentation on table 5 (pre-test), the next step was calculating Mean (X 2) and Standard Deviation (S22) using the following formula:

a.) n_2 = 21

Mean $(\bar{X}_2)$ = $\dfrac{\Sigma X_2}{n_2}$

= $\dfrac{1505}{21}$

= 71.67

b.) Standard Deviation (S_2) = $\sqrt{\dfrac{\Sigma\left(X_2 - \bar{X}_2\right)^2}{n_2 - 1}}$

= $\sqrt{\dfrac{1505}{21 - 1}}$

= $\sqrt{\dfrac{1505}{20}}$

= $\sqrt{75.25}$

= 8.67

c.) S_2^2 = 75.25

In this study, the post-test was predicted to have a higher score than the pre-test. T-test was employed and applied based on table 4 and 5 data to assess if there was a significant difference in accomplishment between these two groups. The following formula summarizes it, where:

$$\bar{X}_1 = 89.05 \qquad n_1 = 21 \qquad S_1^2 = 93.5$$

$$\bar{X}_2 = 71.7 \qquad n_2 = 21 \qquad S_2^2 = 75.25$$

$$t_{\bar{x}_1-\bar{x}_2}\,obs = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{\left[\dfrac{(n_1-1)s_1^2 + (n_2-1)s_2^2}{n_1+n_2-2}\right]\left[\dfrac{1}{n_1}+\dfrac{1}{n_2}\right]}}$$

$$= \frac{89.05 - 71.7}{\sqrt{\left[\dfrac{(21-1)93.5 + (21-1)75.25}{21+21-2}\right]\left[\dfrac{1}{21}+\dfrac{1}{21}\right]}}$$

$$= \frac{17.35}{\sqrt{\left[\dfrac{(20)93.5 + (20)75.25}{40}\right]\left[\dfrac{2}{21}\right]}}$$

$$= \frac{17.35}{\sqrt{\left[\dfrac{[1870+1505]}{40}\right][0.1]}}$$

$$= \frac{17.35}{\sqrt{\left[\dfrac{3375}{40}\right][0.1]}}$$

$$= \frac{17.35}{\sqrt{[84,37][0.1]}}$$

$$= \frac{17.35}{\sqrt{8.44}}$$

$$= \frac{17.35}{2.90}$$

$$= 5.98$$

To test the hyphothesis there are two criteria given by Shalvelson (1981:427), namely:

Directional (One-Tailed)

a). Reject null hypothesis or H_0 if $:t_{obs} \geq t_{crit}.(a/df)$

b). Do not reject null hypothesis H_0 if $:t_{obs} < t_{crit}.(a/df)$

Where:

       H_o = NullHyphothesis

       tobs   = *t*observed

       tcrit   = *t*critical

       df   = degree of freedom

       α   = alpha (level of significance)

The criteria and the data computation proved that in this study the null hyphothesis was rejected because *t*-observed was higher than the *t*-critical or 5.98> 2.021. It meant that there was a significant differences in students' English achievement between the students who were taught listening through digital story telling and those who were not.

The data analysis comprehensively revealed the following accurate fact: there were twenty-one students taking part in the test, of which twenty-one students were in post-test and pre-test. The writer determined the value of the success of treatment as follows: students who obtained scores in the 65-100 indicated that the treatment was successful, while those who obtained scores less than 65 indicated that the treatment was unsuccessful.

After analysing of the data, the writer discovered that the post-test achievement was higher than the pre-test achievement. The highest post-test score was 100 (one hundred) obtained by 6 (six) pupils, representing a percentage of 28.57%. 2 (two) students obtained 95 (ninety-five) or 9.52%, 3 (three) students obtained 90 (ninety) or 14.29%, 4 (four) students obtained 85 (eighty-five) or 19.05%, and 4 (four) students obtained 80 (eighty) or 19.05%, 2 (two) students obtained 75 (seventy-five) or 9.52% as of the lowest score. Where as, the highest score at the pre-test was 80 (eighty) gained by 4 (four) students or in percentage 19.05%, 4 (four) obtained 75 (seventy-five) or 19.05%, 9 (nine) students obtained 70 (seventy) or 42.86%, 3 (three) students obtained 65 (sixty-five) or 14.28%, 1 (one) student obtained 60 (sixty) or 4.76% as of the lowest score.

The post-test performed better than the pre-test, according to the statistics above. The mean score (X_1 = 89.05) and standard deviation (S_{12} = 93.5) were greater than those from the pre-test, which had mean scores of (X_2 = 71.7) and (S_{22}

= 75.25). It signified that the post-test result outperformed the pre-test. Using digital storytelling to improve students' English listening skills was successful, according to research results.

CONCLUSIONS

According to the data collected, it can be determined that using digital storytelling to improve the listening skills of SMP Negeri 1 Tondano students is beneficial, as evidenced by the two scores the students achieved in the test Check before and after. Additionally, using digital storytelling as a learning tool is a smart concept because children want to learn through new experiences.

Additionally, when presenting digital storytelling videos to students, researchers found that students faced many challenges. These include those that students face when new vocabulary is introduced in the video, making it difficult for students to understand the plot. Despite these difficulties, the researchers still conducted discussions with students who had difficulty understanding the situation due to lack of vocabulary**.**

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