

The Use of Digital Storytelling to Enhance the Students' Speaking Ability

Errika Wafa Puteria^{a,*}, Nur Chakim^b

^{a, b} *Universitas Negeri Surabaya, Indonesia*

*Corresponding author. E-mail address: errikawafer@gmail.com

ABSTRACT

This study aims to identify whether digital storytelling can enhance students' speaking ability in learning English. The research was conducted using a descriptive quantitative method of pretest-posttest control group design for 8th-grade junior high school students in Surabaya, Indonesia. A total of 40 students who were divided equally into the control and experimental groups participated in this study. Students in the experimental group were given treatment by learning English using digital storytelling, while students in the control group were not given this treatment. The results of statistical analysis of the pre-test and post-test scores conducted on the two groups of students show a significant difference in the post-test results of the two groups. The average score of the group of students who were not given treatment only increased by 17.02%, while the group of students who received treatment increased by 26.79%. The independent samples t-test using the Mann-Whitney method at a significance level of 95% ($\alpha = 0.05$) also showed that the t value was $109.500 < t \text{ table } 127.000$ and the p-value was $0.009 < 0.05$. It means that there is a significant difference in post-test results between the group that was given the treatment of digital storytelling and the group that was not given the treatment. Finally, it can be concluded that using digital storytelling can enhance students' speaking ability in learning English.

Keywords: speaking ability, English language, digital storytelling, students.

ABSTRAK

Penelitian ini bertujuan untuk mengidentifikasi apakah penggunaan digital storytelling dapat meningkatkan kemampuan berbicara siswa dalam pembelajaran bahasa Inggris. Penelitian dilakukan dengan metode deskriptif kuantitatif pretest-posttest control group design terhadap siswa SMP kelas 8 di SMP Muhammadiyah 9 Surabaya, Indonesia. Sejumlah 40 siswa yang dibagi rata ke dalam kelompok kontrol dan kelompok eksperimen berpartisipasi dalam penelitian ini. Siswa yang masuk ke dalam kelompok eksperimen diberikan perlakuan pola pengajaran bahasa Inggris menggunakan digital storytelling sedangkan siswa yang tergabung dalam kelompok kontrol tidak diberikan perlakuan tersebut. Berdasarkan hasil analisis statistika terhadap skor prates dan pascates yang dilakukan kepada kedua kelompok siswa tersebut menunjukkan bahwa terdapat perbedaan yang signifikan pada hasil pascates keduanya. Nilai rata-rata kelompok siswa yang tidak diberikan perlakuan hanya meningkat 17.02% sedangkan kelompok siswa yang mendapatkan perlakuan meningkat 26.79%. Hasil uji t sampel independen

dengan metode Mann-Whitney pada taraf signifikansi 95% ($\alpha = 0.05$) juga menunjukkan bahwa nilai t hitung $109.500 < t$ tabel 127.000 dan nilai p sebesar $0.009 < 0.05$. Ini berarti bahwa terdapat perbedaan hasil pascates yang signifikan antara kelompok yang diberikan perlakuan berupa storytelling digital dan kelompok yang tidak diberikan perlakuan tersebut, sehingga dapat dikatakan bahwa penggunaan digital storytelling dapat meningkatkan kemampuan berbicara siswa dalam pembelajaran Bahasa Inggris.

Kata kunci: kemampuan berbicara, bahasa Inggris, digital storytelling, siswa.

INTRODUCTION

Speaking is the earliest way to interact with others in the social community. Moreover, a person's success in learning a language is from their ability to speak. According to Harmer as cited in Putra (2017), besides needing knowledge about language features, speaking fluently also requires the ability to process information and the language. After that, someone's ability to make social contact is determined by their ability to communicate. Speaking is important to meet all human needs (Holmes, 2001). The need to improve speaking skills will bring many benefits to the English learning process, particularly when it comes to speaking abilities. Also, English is one of the hardest foreign languages to speak by beginners. There are several reasons underlying the difficulties experienced by students in speaking, namely, lack of engaging teaching methods that can encourage them to speak, lack of ideas to share, lack of vocabulary to explain the idea, and lack of opportunity to speak. In addition, as a country that uses English as a foreign language, English is only used when English subjects are taught. This, of course, makes the student's use to speaking in English very limited. Speaking English fluently is very challenging in this country. Indonesia ranks 34th out of 44 countries in terms of English proficiency, according to world education institutions EF (English First). Those are countries where English is spoken as a foreign language (Mulyadi, 2011).

Those research studies indicate some conditions are still unsatisfactory for students' speaking skills. During the learning cycle, many learners were unmotivated to bear their speech in classroom events. When they had to speak, the students appeared hesitant to express their ideas. (Faulin & Sofendi, 2014). Looking at those difficulties, it is crucial to use the right method to get the students involved in the speaking exercise and have them create a discussion around the topic they have been given. Theoretically, storytelling is one of the classroom strategies for learning a foreign language. Preparing students for speaking activities is an essential procedure (Somdee and Suppasetsee, 2012). This is also an excellent verbal exercise for boosting speaking abilities while assisting students in imagining and building stories (Reinders, 2011). Akhyak & Indramawan (2013) provide evidence in support of this claim by demonstrating that narrative has a significant influence on motivating language learners to talk. In addition, certain language skills can be combined with storytelling techniques (Atta-Alla, 2012). To storytellers, it teaches them to use their language creatively to engage the audience's imagination, while they must relate the story with their experiences imaginatively to the audience.

Storytelling is rearranging stories written about or heard by storytellers and retold according to the storyteller's interpretation using the storyteller's own words. Storytelling, according to Zaro and Saberri in Akhyak and Indramawan (2013), is an activity that involves interaction between the narrator and the audience, or at a certain level between a person and the listener, while Safdarian in Zuhriyah (2017) defines storytelling as the students' way of recounting

stories in a different word structure after the teacher tells the stories.

Storytelling is quite interesting for younger children. However, combining technology with storytelling will make a fairly effective media for teaching among young people. Therefore, the instrument selected in this study is "Digital Storytelling" which is believed to impact students' learning and speaking skills positively. Digital Storytelling is described as the antique art that combines images, music, narration, and sound into a powerful creation (Bernajean, 2004). Brown (2005) stated that Digital Storytelling had become a vital instrument for the classroom, teacher, and student. Ohler (2007) supported this claim by proving that Digital Storytelling has gained much traction and is a new medium used in the classroom. Ellis (2005) has pointed out that technology has influenced relationships between students and how they interact, ultimately affecting learning opportunities in the classroom. The development of technology must be put to good use in the education field. One of the best technology developments helpful in education is Digital Storytelling. Digital storytelling has been shown to motivate, engage, and interest learners in the learning process. (Davis, 2004). This is because Burmark (2004) discovered that combining visual graphics with textual material might improve and speed up students' comprehension.

Some educational research has been done on storytelling, such by Atta-Alla (2012), and Agustina (2015) & Ono (2014). Those research studies attempted to use storytelling to improve EFL students' speaking abilities and language skills. Some research projects, however, have considered storytelling as a primary goal. These research initiatives aimed to incorporate storytelling as a tool to develop the language competencies of English learners. However, most of the previous studies done by Atta-Alla (2012), Agustina (2015), & Ono (2014) only used storytelling as a medium for speaking.

Along with it, none of this research addresses digital storytelling, which may improve the speaking skills of middle school students. That research was mainly studied at a higher level of education, whereas low-level students also face similar problems. Therefore, media is needed to support and improve students' speaking ability. Considering all the advantages of digital storytelling, such as increasing students' motivation to speak etc., teachers can use digital storytelling as a learning medium to improve students' speaking skills. Hence, this study aims to determine whether students who are taught by using digital storytelling achieve better in speaking ability than those who are not taught by digital storytelling.

METHOD

This study used a quantitative method. According to Creswell (2003), the quantitative research approach is characterized by the collecting of numerical data and the researcher's inclination to use mathematical models for data interpretation. Quantitative research, according to Creswell (2003), is the collection of data so that information may be evaluated and statistically analyzed to support or refute "alternative knowledge assertions." In this study, the researcher used quasi-experimental methods to determine the impact of digital storytelling on students' speaking skills. The experimental design was a randomized pre-test–post-test design with a control group. As seen in Figure 1, the participants of the experiment were measured before and after the treatment was provided in order to compare the individuals of the control group with the experimental group.

Pre-test	Treatment	Posttest
Experiment group	T1-----X-----T2	
Control group	T3-----T4	

Figure 1. Pretest-posttest control group design

The study participants were 8th-grade middle school students in SMP Muhammadiyah 9 Surabaya, located in Surabaya, Indonesia. The participants consisted of 40 students from 8A and 8B classes. This research used the descriptive text material of semester II in 8th grade. The descriptive text material was chosen because the telling story about family was the main activity in this research.

The research instrument used in this study was document analysis using pre-test and post-test scores of the participants as data collection. The pre-test and post-test scores were taken based on the speaking rubric adopted by Heaton (1988) which intended to answer the research question regarding whether students who are taught by using digital storytelling achieve better in speaking ability than those who are not taught by digital storytelling.

The data collection was carried out during the teaching and learning process for English subjects from the end of October to early November. Each group was treated at the same duration, except for the second week. The first week, both groups did 60 to 90 minutes of activities. In the second week, the activity was done in 45 minutes, but in 3 consecutive days. Activities in the third week have the same duration as the first week, which is 60 to 90 minutes.

Before the researcher started to research the subjects, the researcher asked other people in the education field, in this case, the teacher, to check the validity of the test. This activity was done to fulfill the principle of constructing a test.

The research process was divided into three main parts: pre-test, treatment/teaching process, and post-test. Two groups were examined; in the pre-test, both groups were given the same speaking task on the same topic, which is about family. The questions topics for the speaking test were taken from IETLS speaking test. For instance, 1) How many members of your family do you have? 2) Who is your favorite family member? 3) Do you belong to a big extended family? 4) What do you and your family do together? 5) Why does your family matter to you? Moreover, when conducting the test, the students were not limited to maximum or minimum time restrictions. Finally, the answers and the scores were analyzed and calculated using Heaton's (1988) speaking assessment and scores rubric.

In a week, on the first day, the researcher gave material to both groups on how to do storytelling correctly, that is by 1) determining the backstory or main story, 2) making an outline and developing the story, 3) re-checking and revising until satisfied 4) story tell your work. On the second day, only the experimental group got the treatment. The treatment on the second day given by the researcher was about the use of PowerPoint to help facilitate storytelling. The researcher also gave an example of how to do storytelling with the help of PowerPoint. Then, since almost all of the samples already understood how to make PowerPoint, the researcher only gave a few tutorials to use PowerPoint. The activities on the third day were making PowerPoint slides. These activities were done to see students' understanding of the material given by the researcher on the second day. Making the PowerPoint slides was done in 30 minutes. Two students used fifteen minutes of the remaining time to demonstrate the PowerPoint slides. The two students were chosen randomly, and the given theme differed from the test. The next week, the post-test was conducted similarly to the pre-test. Consequently, the topic alongside the

speaking assessment and scores rubric used are not different, allowing the researcher to analyze the students' speaking skill improvement.

FINDINGS AND DISCUSSION

The descriptive analysis of the participants' pretest-posttest scores, divided into control group and experimental group, are shown in Table 1 below.

Table 1. Descriptive statistics

	Group	Pretest	Posttest
N	Control	20	20
	Experiment	20	20
Mean	Control	2.35	2.75
	Experiment	2.80	3.55
Std. Error Mean	Control	0.221	0.190
	Experiment	0.258	0.198
Median	Control	2.00	3.00
	Experiment	3.00	3.00
Std. Dev.	Control	0.988	0.851
	Experiment	1.15	0.887
Variance	Control	0.976	0.724
	Experiment	1.33	0.787
Minimum	Control	1.00	1.00
	Experiment	1.00	2.00
Maximum	Control	4.00	4.00
	Experiment	5.00	6.00

It is known that all 40 participants in the control and experimental groups had better scores in post-test than pre-test. In the pre-test, the minimum score for the control group was 1.00 and the maximum was 4.00 with the mean of 2.35 while the minimum score for the experimental group was 1.00 and the maximum was 5.00 with the mean of 2.80. In post-test, the minimum score for the control group was 1.00 and the maximum was 4.00 but the mean score increased to 2.75 (+0.40; 17.02%). Meanwhile, the minimum score for the experimental group was 2.00, and the maximum was 6.00, with an increased mean of 3.55 (+0.75; 26.79%). In general, there is a significant increase in the mean value of the experimental group compared to the control group, which indicates that the storytelling method increases the students' speaking ability.

From Table 1 above, there are 20 participants for the control group and experimental group, respectively. Since the participants were only 40 students, the Shapiro-Wilk method was applied for the normality test, as shown in Table 2 below. The normality test results showed that the significance values were 0.132 for pre-test and 0.010 for post-test. Since the significance (p-value) of the post-test results was less than 0.05, it can be said that the sample was not normally distributed, so that the Mann-Whitney nonparametric method will be applied for the independent samples t-test. The homogeneity of variances test in Table 3 showed that p-values for pre-test and post-test were 0.597 and 0.974, respectively. This shows that the significance level is ≥ 0.05 , so

it can be concluded that the data is homogeneous.

Table 2. Normality test (Shapiro-Wilk)

	W	Sig. (2-tailed)
Pre-test	0.957	0.132
Posttest	0.923	0.010

Table 3. Homogeneity test (Levene's)

	F	Sig. (2-tailed)
Pre-test	0.284	0.597
Posttest	0.001	0.974

Table 4. Independent samples t-test (Mann-Whitney)

	t	Sig. (2-tailed)
Pre-test	157.500	0.236
Posttest	109.500	0.009

Using the Mann-Whitney technique and a t-test on independent samples, the difference between the findings of the control and experimental groups was determined. Based on the findings of the independent samples t-test between the pre-tests of the control group and experimental group in Table 4, the t-value was 157.500 and the significance level (p-value) was more than 0.05. It can be shown that there is no statistically significant difference between the pre-test results of the control group and the experimental group; hence, both groups are equivalent prior to treatment. In contrast, the posttest results of the control group and experimental group yielded a t-value of 109.500, whereas the t-table ($\alpha = 0.05$) for N_1 (control group) = N_2 (experimental group) = 20 is 127.000 with a significance level (p-value) of 0.009, thus rejecting the null hypothesis H_0 and accepting the null hypothesis H_1 (t-value 127.000; p-value Conclusion: there is a substantial difference between the post-tests of the control group and the experimental group, indicating that the storytelling approach as a therapy for the experimental group is successful in enhancing students' speaking abilities.

DISCUSSION

Since the t-value is less than the t-table and the p-value is less than 0.05 (significance level 95%) for 20 participants in the control group and experiment group, the alternative hypothesis (H_1) is accepted. It can be said that learning English through digital storytelling can enhance the English speaking ability of the 20 junior high school students of SMP Muhammadiyah 9 Surabaya as participants of the experimental group of the study.

The positive effect of the usage of digital storytelling in learning English to improve students' speaking ability is in line with several previous research conducted by Atta-Alla (2012), Somdee & Suppasetserree (2012), Zuana (2018), Wahyuni et al. (2018) and Kurniawan (2021). However, there are differences in the subject and the location of the study. However, students at each grade require a different approach to teaching methods, including how students grasp what is conveyed through digital storytelling (Smeda et al., 2014). This does not reduce the benefits of digital storytelling itself in improving students' speaking ability in learning English.

Considering the significant difference seen in the post-test result between the control group and the experiment group further signified the argument proposed by Somdee & Suppasetseree (2012), who believe that preparation conducted for the learners before speaking exercises is a crucial element. In addition, this research focuses on preparing the learners with digital storytelling presented with the help of PowerPoint presentations. The use of this practice, which resulted in significant improvement in students' speaking ability, is aligned with the argument stated by Reinders (2011), who believe that storytelling, which is a prominent verbal practice, supports the students' visualization, plot-construction, and speaking skill. Furthermore, it is important to note that the enhancement in speaking ability found by this research partly because the significant influence storytelling has on strengthening the motivation of learners to talk as mentioned by Akhyak & Indramawan (2013). Motivation is a vital issue in speaking practice, in which the learners became unconfident when expression their thought into words (Faulin & Sofendi, 2014).

In conclusion, the post-test results showed that there was a substantial difference between the two groups. The score of experimental group statistically showed that digital storytelling media may be altered way to enhance students' speaking ability and motivate them in speaking activity. However, apart from advantages, digital storytelling also has disadvantages. Students need a long time to figure out the main topic and to make the PowerPoint. The process before students could do the storytelling was quite long and complicated.

CONCLUSION

Based on the findings and discussion, it is possible to infer that employing digital storytelling may assist students improve their public speaking skills. The experimental group's mean post-test value is significantly higher than the pre-test value, indicating an improvement in students' speaking skills after digital storytelling therapy. Furthermore, statistical testing revealed a substantial rise in the experimental group's post-test outcomes as compared to the control group. Although the research findings show that employing digital storytelling in English instruction had a favorable influence on students' speaking abilities, the data utilized in this study were not normally distributed, therefore the sample used could not completely reflect the population. This problem may be overcome by enlarging the sample, conducting a more comprehensive initial study to determine participants in both groups so that the equality of students' current abilities can be more guaranteed and minimizing research bias. In addition, the application of different methods by comparing different treatments is also possible in future studies. For future researcher, this study can be used as extra data. Potential researchers may undertake related topics with different texts, instruments, or student level

REFERENCES

- Agustina, L. (2015). Telling a Story from Watching a Movie Potentially Improving Students' Oral Communication. Retrieved January 12, 2016, from <http://ejournal.kopertais4.or.id/index.php/efi/article/view/227>
- Akhyak & Indramawan, A. (2013). Improving the students English speaking competence through storytelling (Study in Pangeran Diponegoro Islamic College (STAI) of Nganjuk, East Java, Indonesia). *International Journal of Language and Literature*, 1(2), 18-24.
- Atta-Alla, M.N. (2012). Integrating language skills through storytelling. *English Language Teaching*, 5(12), 1-13. DOI: 10.5539/elt.v5n12p1
- Burmark, L. (2004). Agustina, L. (2015). Telling a Story from Watching a Movie Potentially Improving Students' Oral Communication. Retrieved January 12, 2016, from <http://ejournal.kopertais4.or.id/index.php/efi/article/view/227>
- Akhyak & Indramawan, A. (2013). Improving the students English speaking competence through storytelling (Study in Pangeran Diponegoro Islamic College (STAI) of Nganjuk, East Java, Indonesia). *International Journal of Language and Literature*, 1(2), 18-24.
- Atta-Alla, M.N. (2012). Integrating language skills through storytelling. *English Language Teaching*, 5(12), 1-13. DOI: 10.5539/elt.v5n12p1
- Burmark, L. (2004). Visual presentations that prompt, flash and transform. *Media and Methods*, 40(6), 4-5.
- Creswell, J. (2003). *Research design: Qualitative, quantitative and mixed methods approaches* (2nd edition). California, USA: SAGE Publications.
- Davis, A. (2004). Co-authoring identity: Digital storytelling in an urban middle school. *Technology, Humanities, Education and Narrative Journal*, 1(1), 1-21.
- Faulin, A., & Sofendi. (2014). *Cooperative group learning strategy*. Palembang, Indonesia: Penerbit Simetri.
- Heaton, J. B. (1988). *Writing English language tests*. New York, USA: Longman.
- Holmes, J. (2001). *An introduction to sociolinguistics*. London, UK: Pearson Education Limited.
- Kurniawan, M. (2021). Digital storytelling: Teachers' guide to attract children's interest and motivation in kindergarten's English language learning. *Satya Widya*, 37(1), 16-24.
- Mulyadi, A. (2011). Kemampuan bahasa Inggris di Indonesia rendah. *Harian Kompas*. Retrieved 30 December 2020 from: <https://ekonomi.kompas.com/read/2011/09/26/21320318/kemampuan.bahasa.inggris.d.i.indonesia.rendah>
- Ono, Y. (2014). Motivational Effects of Digital Storytelling on Japanese EFL Learners. In *CLaSIC 2014*. CLaSIC.
- Putra, A.S. (2017). The correlation between motivation and speaking ability. *Channing: Journal of English Language Education and Literature*, 2(1), 36-57. DOI: 10.30599/channing.v2i1.87
- Reinders, H. (2011). Digital storytelling in the foreign language classroom. *ELT World Online*, 3, 1-9.
- Smeda, N., Dakich, E., & Sharda, N. (2014). The effectiveness of digital storytelling in the classrooms: A comprehensive study. *Smart Learning Environments*, 1(6), 1-21. DOI

Somdee, M., & Suppasetseree, S. (2012). Developing English speaking skills of Thai undergraduate students by digital storytelling through websites. Proceedings of the 2nd International Conference on Foreign Language Learning and Teaching (2011 FLLT). Language Institute of Thammasat University, Thailand.

Wahyuni, Sujoko, & Sarosa, T. (2018). Improving students' speaking skill through project-based learning (digital storytelling). *English Education Journal*, 6(2), 161-168. DOI: 10.20961/eed.v6i2.35943

Zuana, M.M.M. (2018). Digital storytelling: An attractive media to teach narrative text in speaking class. *ALSUNA: Journal of Arabic and English Language*, 1(1), 27-39. DOI: 10.31538/alsuna.v1i1.51

Zuhriyah, M. (2017). Storytelling to improve students' speaking skill. *English Education: Jurnal Tadris Bahasa Inggris*, 10(1), 119-134. DOI: 10.24042/ee-jtbi.v10i1.879