The Effect of Teaching English Using Digital Storytelling on Students' Writing Skill at the Second Grade of SMP Negeri 1 Kampar

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Abstract

Based on this preliminary research, it was found that second grade students of SMP Negeri 1 Kampar got difficulties on their writing skill such as did not understanding how to start writing a story and cannot developing the ideas. This research aimed to know the effect of teaching English using digital storytelling on students' writing skill especially in writing narrative text at the second grade of SMP Negeri 1 Kampar. The design of this research was a quasi-experimental. Therefore, this research used two class; control class and experimental class. The population of the research was second grade of SMP Negeri 1 Kampar. The object of this research was the effect of teaching English using digital storytelling on students' writing skill. In this research, 59 students from 212 students were chooses as samples. To analyze the data, the researcher used independent sample t-test by using SPSS 20 version and effect size formula. Based on the data analysis, it was proved by finding of effect size formula was 0.13. It was categorized as moderate effect. It means that there was a significant effect of teaching English using digital storytelling on students' writing skill at SMP Negeri 1 Kampar.

Keywords: *digital storytelling, writing skill, narrative text*

Introduction

Human communication takes many forms, including writing. Myles (2002), writing is English skill that requires work and a lot of practice in terms of generating, developing, and analyzing ideas (Riyan and Zuhri, p.1). Grammar, vocabulary, and pronunciation are all important aspects of writing. A good sentence is one that is properly written with some important factors in mind, such as content, structure, vocabulary, language usage, and mechanics (Sa'adiyah Sy, 2019, p.8). Writing is very important because writing can

facilitate to remember, writing facilitates to think, and writing helps to communicate. Grenvile states writing has purpose to entertain the reader, gives information, and writing to persuade readers.

Richard and Renandya (2010) state that writing process as approval activity may be broadly seen as comprising four main stages: planning, drafting, revising, and editing. Before starting to write a paragraph there are some steps: pre-writing, drafting, revising, and editing those steps will help to make a better writing (Nurrahmah, 2018, p.18).

There are several types of writing, such as recount text, narrative text, explanation text, persuasive text, and descriptive text. Pardiyono (2007) and Dadang and Anggrani (2008), they are described that narrative textual content is a sort of textual content has feature to amuse, entertain and address real or vicarious enjoy in exceptional ways. Dumais (1998) stated that narrative is a sort of writing which inform a tale – a sequence of related incident, or an action-manner of an action. Pardiyono (2007) narrative textual content has generic structures, such as orientation (sets the scene and introduce the participants), complication (a crisis arises), resolution (the crisis is resolved, for better or worse) (Nurrahmah, 2019, p.28-30). Apriliani (2018), there are four types of narrative text, legend, fable, fairytale, and science fictions.

Writing is a crucial ability, but it is difficult to master, many students feel bored and disinterested in it, making it difficult to learn and improve. According to Trismanto (2017), in general, there are four problems faced by novice writers, namely being afraid to start, not knowing when to start, organizing, and language. There are a variety of things that teachers may do to make learning more engaging and students more interested in mastering writing abilities. Story telling is one of the techniques that can be used by the teacher in teaching and learning process. People continue to tell stories using new digital media platforms even now. There is a general consensus that digital storytelling tells a story electronically (Zakaria and Aziz, 2019, p.322).

Digital Storytelling Association (2002), states digital storytelling refers to telling a story using a variety of multimedia elements such as images, music, and voice to create a stronger, more authentic, and more effective story (Balaman, 2018, p.203). Abdel-Hack and Helwa (2014) also said digital storytelling helped to strengthen narrative writing and critical thinking skills (Zakaria and Aziz, 2019, p.320). This is a creative way to engage students in their language skills through the process of reading, planning, writing, revising and telling their stories (BBC Capture Wales, 2008). Language learning itself, an art, can be enhanced by digital storytelling devices that require creativity and language skills (Nassim, 2018, p.15).

Gakhar and Thompson (2007) point out that digital storytelling presents students with possibilities to write creatively and arrange mind in coherent ways, with the aid of using designing and generating practical artifacts. They additionally exhibit that digital storytelling can enhance students' writing skills, critical thinking skills, and media literacy. A digital story may be regarded as a merger among traditional storytelling and the usage of multimedia technology (Nurrahmah, 2018, p.32).

Abdel-Hack & Helwa (2004), states digital storytelling enables students to display their writing skill in using compound sentences, ideas, and opinions (Cuesta, Beltran, Solano, Cueva, Torres, 2021, p.145). Digital storytelling decreases the lack of students on the issues such as spelling, punctuation and handwriting. According to Xin (2013), digital storytelling also increases the number of total words, exact sentences and correct words (Yamac and Ulusoy, 2016, p.61-62).

Junior High School 1 Kampar is one of the junior high schools in Kampar, Riau that uses the 2013 curriculum. The teacher teaches English as one of the national content subjects. Writing is one of the most difficult skills to master. Internal and external factors contribute to the difficulty in mastering this skill. The internal factors are the student's ability which at the time is limited, low motivations, either from self-motivation, motivation from family, friends or the environment. Other internal factors are they don't know how to begin writing. The student's vocabulary remains deficient, lack of understanding grammatical structures, student's ability to arrange words into sentences, and there are no topics to write about. While the external factors are English which is foreign language and also the teacher's teaching style, which appears monotonous and lacks variation in teaching techniques, many students find difficult to learn and master this skill.

After saw the problems in SMP Negeri 1 Kampar, this research can be solution to students and teacher how make fun learning in class, because many teachers and students still do not know advantages from digital storytelling and how large the effect of teaching English using digital storytelling. Thus, this research attempts to know how the students' writing skill is taught by using digital storytelling at SMP Negeri 1 Kampar, to know how the students' writing skills is taught without using digital storytelling at SMP Negeri 1 Kampar, to know there is significant difference of students' writing skill taught by using and without using digital storytelling at the second grade of SMP Negeri 1 Kampar, to know how large is the effect of using digital storytelling on students' writing skill at the second grade of SMP Negeri 1 Kampar.

Methodology
This study applied quantitative method and used Quasi Experimental design. The researcher chooses quantitative research in this study because the data would need to be calculated statistically. Furthermore, the researcher utilized experimental design as a method because in the chosen courses, the researcher explored a new technique for teaching writing utilizing digital storytelling. The researcher utilized a quasi-experimental design.

Creswell (2012) confirms that quantitative research consists in using investigative strategies such as experimental and data collection in predetermined instruments that provide statistical data. Venderstoep and Johnston (2009) defined that Quasi Experimental is a look at that takes in actual life-placing as a substitute then in laboratory placing, they're regularly taken into consideration now no longer absolutely experimental research, however as substitute correlation research, which entails figuring out statistical among variables as a substitute then informal relationship (Nurrahmah, 2018, p.46).

In this research, there are two class; experimental class and control class, with 59 students (30 students in experimental class and 29 students in control class) from 212 students were chooses as samples. To find the research sample, the researcher used the lottery by handing out small rolls of paper marked with the class's sequence name. The first paper that comes out of the bottle was the experimental class and the second was the control class.

The instrument that researcher used was test, Braun et al conjecture testing as the process of measuring single or multiple concepts, under a set of predetermined conditions. They are used to measure the level of students' learning (Adom, et. al, 2020). In this research, first, researcher did pre-test to saw the ability of students. Then, the researcher taught in several meeting, in experimental group, researcher used the media for teaching and learning process. After that, researcher gave some test for two classes to saw the development of students. Last, the researcher processed the data to saw the results of the research conducted.

The function of the test was to measure the writing ability of students in a narrative text. The assessment of students' writing skills were content, organization, vocabulary, mechanics, and language use. Finally, the researcher collected the score of the experimental class and of the control class which calculated.

The researcher used T-test for data analysis. T-test was only used if the measurements consist of interval data (such as score). To analyze the data the researcher used score of post-test of experimental class and control class. These scores analyzed by using statistical analysis. Then, the data analyzed by using T-test (Independent sample t-test) from SPSS 20 version to saw the differences between score of post-test in experimental class and control class. Before the researcher used independent sample t-test, the researcher must ensure that the data to be processed is normal. The researcher also used SPSS for checking the data, it is normal or not. After that, the researcher used independent sample t-test to show there is significant difference or not.

According to Pallant (2011, p.239-240) an independent sample t-test used when we want to compare the mean score on some continuous variable for two different groups of subjects, to find out whether there is significant difference or there is no significant difference between two or more variables can be analyzed by using independent sample t-test.

After that, the researcher used eta square to saw the effect size from digital storytelling in student narrative skill. Pallant (2011, p.243) mentions the formula of eta square as presented below:

$$\frac{(n^2) \; t^2}{t^2+(n^1+n^2-2)}$$

Where:

n^2	: Eta square
t	: t obtained
n^1	: The number of experimental class
n^2	: The number of control class

and for assessing writing, the researcher adapted from Brown (2007), its included content (30%), organization (20%), grammar (20%), vocabulary (15%), and mechanics (15%).

Results and Discussion

The researcher used test to collect the data, there are two types of tests; pre-test and post-test. The researcher given pre-test to students to shows the ability of students before treatment. The score and mean score of experimental class was higher than control class. The score of experimental class was 1786.34 and mean score was 59.54 while the score of control class was 1722.56 and mean score was 59.39. However, that indicated that those two classes had equal ability in writing narrative text before the treatment was given. In other words, they were not significantly different in writing ability.

After the pre-test was conducted to both classes, the researcher applied the digital storytelling in teaching writing narrative text for experimental class. After the researcher was given treatment in experimental class, the researcher was given post-test for both classes. The researcher gave post-test with same topic like pre-test. The score and mean score of experimental class was higher than control class. The score of experimental class was 2139.95 and mean score was 71.33 while the score of control class was 1868.82 and mean score was 64.44. It was clearly seen there was improvement in students' writing ability especially in writing narrative text of experimental class.

Besides that, the median of experimental class was 72.19 while the median of control class was 65.00. Next was standard deviation between experimental class and control class. Standard deviation of control class was higher than experimental class. Standard deviation of control class was 9.36531 and standard deviation of experimental class was 8.66129. Then was standard error between experimental class and control class. In experimental class, the standard error was 1.58133 while the standard error of control class was 1.73909. After the researcher known about score, mean, and standard deviation of both classes, the researcher moved to minimum and maximum score of both classes. In experimental class, the minimum score was 53.75 and the maximum score was 85.63 while in control class, the minimum score was 50.63 and maximum score was 81.25. For more details can be seen in the following table:

Table 1. *Score Post-test of Experimental Class.*

	Experiment Post Test Score	Standard Error Mean
N Valid	30	
Missing	0	
Mean	71.33	1.58133
Median	72.19	
Std. Deviation	8.66129	
Minimum	53.75	
Maximum	85.63	

Table 2. Score Post-test of Experimental Class.

	Control Post Test Score	Standard Error Mean
N Valid	29	
Missing	0	
Mean	64.44	1.73909
Median	65.00	
Std. Deviation	9.36531	
Minimum	50.63	
Maximum	81.25	

After that, the researcher calculated the significant difference between post-test score of experimental class and post-test score of control class. The researcher used t-test formula especially independent sample t-test to saw there is significant difference or not. Before the researcher used independent sample t-test, the researcher did normality test first to show that the data of both classes were normal.

Table 3. Test of Normality

Tests of Normality							
	Class	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
		Statistic	Df	Sig.	Statistic	Df	Sig.
Result	Experimental Class	.090	30	.200[*]	.963	30	.372
	Control Class	.119	29	.200[*]	.948	29	.163
*. This is a lower bound of the true significance.							
a. Lilliefors Significance Correction							

If sig value > 0.05: Normal
If sig value < 0.05: Not Normal

Based on the table 1, it can be seen that the sig. value >0.05 it means the data is normal, and if sig value < 0.05 it means the data is not normal. It can be seen at the sig value of experimental class 0.200 > 0.05, it means the data of experimental class is normal, and for the control class, the sig value is 0.200 > 0.05, it means the data of control class is normal. Because the data was normal, the researcher moved to next step, it is used independent sample t-test.

Table 4. *Independent Sample T-test*

	Levene's Test for Equality of Varianes		t-test for Equality of Means							
	F	Sig.	T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference		
								Lower	Upper	
Equal variances assumed	.330	.568	2.935	57	.005	6.88960	2.34738	2.18904	11.59015	
Equal variances not assumed			2.931	56.289	.005	6.88960	2.35054	2.18143	11.59777	

Based on the table 2, independent sample t-test shows that sig (2-tailed) value was 0.005. It can be stated that 0.005 < 0.05 hypothesis (Ha) is accepted. It can be concluded that $t_{obtained}$= 2.935, df = 57, mean difference was 6.88960, and standard error difference was 2.34738. It can be interpreted that the null hypothesis (Ho) is rejected and alternative hypothesis (Ha) is accepted. It means that there was significant difference on students' writing skill between who are taught by using digital storytelling and without using digital storytelling at the second grade of SMP Negeri 1 Kampar.

After the researcher known that there was significant difference on students' writing skill, the researcher used eta square formula to saw how large the effect of teaching English using digital storytelling. According to (Pallant, 2011) stated that effect size statistics provides an indication of the magnitude of the differences between your groups. To identify the level of the effect of using digital storytelling on students' writing skill at second grade of SMP negeri 1 Kampar, it was calculated by using eta square formula:
ETA SQUARE:

$$\eta^2 = \frac{t^2}{t^2 + (n_1 + n_2 - 2)}$$

$$\eta^2 = \frac{2.935^2}{2.935^2 + (30 + 29 - 2)}$$

$$\eta^2 = \frac{8.614.225}{8.614.225 + 57}$$

$$\eta^2 = \frac{8.614.225}{65.614.225} = 0.13$$

Pallant (2011) added the guidelines for interpreting this value as follows:

Table 5. *Effect Size*

0.01	Small effect
0.06	Moderate effect
0.14	Large effect

Based on calculating above, eta square was 0.13, referring to the table of effect size guidelines above, the effect of using digital storytelling on students' writing skill was 0.13 categorized as moderate effect.

To find out the percentage of effect, the researcher used the following formula, according to Pallant (Nursyazwani, 2021)

$$=\eta 2 \text{ x } 100\%$$
$$=0.13 \text{ x } 100\%$$
$$=13\%$$

The percentage of coefficient effect was 13%. It means that the effect of using digital storytelling had moderate significant on students' writing skill. The result of the percentage of coefficient effect above, it can be seen that digital storytelling contributed 13% for students' writing skill, it can be concluded that the effect of using digital storytelling on students' writing ability at SMP Negeri 1 Kampar especially in the second grade.

Conclusion

Based on the data analysis, finally, the researcher would like to expose the conclusion:
The score of students' writing skill who taught by using Digital storytelling at SMP Negeri 1 Kampar was getting mean score 71.33. It concluded that the students' writing skill was categorized "Good". The score of students' writing skill who taught without using digital storytelling at SMP N 1 Kampar was getting mean score 64.42. It concluded that the students' writing skill was categorized "Average".

From the analytical formula of Independent Sample T-test, it was found that sig. value for experimental class was 0.005. It can be stated that 0.005>0.05. It means the alternative hypothesis (H_a) was accepted, while the null hypothesis (H_o) was rejected. In other words, there was any significant difference of using Digital Storytelling at SMP Negeri 1 Kampar. From the calculate by using eta square formula to saw effect size of using digital storytelling on students' writing skill, it was found that effect size was 0.13. It can be categorized as moderate effect.

Looking at the finding of this study, it can be concluded that digital storytelling help students achieve better performance in writing narratives. Since the result of the study proved that

digital storytelling has a positive effect on the students' ability in writing narrative text, the researcher is suggested to use digital storytelling in teaching writing. Digital storytelling provides students an interesting and stimulating set of ideas for developing their writing and they will become more responsive and stimulating toward writing instruction which involves visual context.

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