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# Animated Stories: It's Effect on Students' Scores in Reading Comprehension Scores

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#### ABSTRACT

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Teaching English through animated stories bears much potential for effective and meaningful language instruction as animated stories can help to contextualize the new language by providing auditory and visual presentation material. This study investigates the effect of animated stories on students' reading comprehension skills of narrative texts across different personalities. This quasi-experimental design study involved 63 junior high school students, 32 for the experimental and 31 for the control classes, who were randomly selected. This study employed four authentic animated stories as the theme to teach the narrative text. The treatment was carried out in four meetings, and subsequent to the treatment, the reading comprehension test was conducted. The main data was collected from the post-test and questionnaire. The test is in the form of multiple choice with 20 items and four options. The data analysis result showed a significant effect of animated stories on the student's reading comprehension skills of narrative texts. The experimental class's mean score was higher than the control class's mean score. Students in the animated stories group achieved higher scores than those in the control group, with a mean difference of 11.431. This finding confirms the theory that multimedia, particularly animated stories, effectively improves students' reading comprehension.

Keywords: animated stories; multimedia; reading comprehension; student score

#### **INTRODUCTION**

In Indonesia, English learning has been introduced to children since elementary school. English has a privileged position in Indonesia as it is important for Indonesian students to learn English due to the status of English that has become an international language which is very important in the global era (*PERATURAN PEMERINTAH REPUBLIK INDONESIA*, n.d.). Yet, Indonesian students find English still difficult and quite challenging. There are some possible reasons why students think that English is challenging. Firstly, it derives from students' internal factors in learning English. Many students are scared to learn English (Juhana, 2012, p. 100). They are afraid of making mistakes in the classroom. They also feel shy, and anxious and lack confidence and motivation. Secondly, it can be provoked by the teachers' method of teaching English. Teachers at junior high schools use a method that makes students become passive learners (Khalidiyah, n.d., p. 58). This condition makes students turn to be

uninterested in learning English. Students find English classes at school boring; therefore, it is a tough task to learn (Hays, 2015). Finally, using teaching media to deliver the material to the students is ineffective. Some teachers are still confused in finding the appropriate media to be applied in the classroom (Khalidiyah, n.d., p. 59).

Teachers must implement interesting and creative techniques to overcome these hurdles to motivate students to learn English. Multimedia are a powerful tool that possibly makes students more interested in following the learning process enthusiastically. The use of multimedia in the classroom was majorly recommended by many scholars (Mayer, 2014; Plass & Jones, 2005; Zhang, 2009). Moreover, multimedia is proven to improve student language skills and motivate students to learn English in the EFL setting (Amine et al., 2012; Gilakjani, 2012; Sianipar, 2017; Parlindungan & Pd, 2017).

Since the introduction of multimedia in education, learning theory has expanded. Multimedia Learning Cognitive theory is the most widely known introduced by Mayer, a psychologist from California. People learn more deeply from words and pictures than from words alone (Mayer, 2014). Further, students will get a better understanding by mixing words and pictures depending on designing multimedia instructional messages in ways that are consistent with how people learn. One of the principle concepts of multimedia learning theory is based on the dual channel assumption (Mayer, 2014). Humans possess separate information processing systems for visual/pictorial presented materials (picture, animation, maps, etc.) and auditory/verbal presented materials (narration, audio, spoken words).

Animated stories as one of multimedia tool can be used in English language teaching and learning. The use of visual aids, such as animated video, functions as a medium to convey the message or the information in the study (Sadiman, 2018; Valli, 2016). It is expected to improve students' motivation to read, understand the concept and then improve their learning outcome. Moreover, the animation is a source of attraction due to the colourful characters and catchy visual presentation accompanied by enjoyable sounds and songs. They are accepted to be more likely to capture attention than static messages due to the innate tendency of humans to respond to things that move (Schwartz, 2003). Animated stories provided highly strong visual support and extra audio stimuli. In animated stories, characters of the stories which appear as a single picture in magazines or as picture series in comic strips come alive because of their moving figures and audible voices (Cahyono, Hidayati, & Zen, 2014).

Based on the studies that investigated sixth-grade students showed significant results on reading comprehension of narrative text using animation (Jaffer Ouda & Soliman Keshta Ibraheam El Astal, n.d.). Also, cram school students improved their reading comprehension skills using animated cartoons (Su & Liang, 2015). Moreover, animation film is effective for pre-intermediate EFL learners on reading comprehension (Torabian & Tajadini, 2017). Therefore, this study aims to investigate the effectiveness of animated stories on students reading narrative text comprehension.

Therefore, this study aims to investigate the effectiveness of animated stories on students' reading comprehension of narrative text. This study mainly investigates the

effect of animated stories compared to printed text stories on the junior high school students' reading comprehension skills of narrative texts.

### **METHOD**

The study employed quasi-experimental in which two classes were utilized as the experimental and controlled groups through random selection. The study's subject was ninth-grade Junior High School students in Banjarmasin in South Kalimantan in Indonesia. Prior to the treatment, the test on the homogeneity of variance through employing Levene's Test of SPSS 24.00 was carried out to see whether the students in the experimental and controlled groups were homogenous in terms of their skills in the English language. The homogeneity test of the two classes was measured by using the students' English scores in the first semester. The analysis revealed that the obtained significance level was .491, greater than the alpha value (p = .491 > a = .05). It indicated that the classes were homogenous in English language skills.

The reading comprehension test was developed as the research instrument. The reading comprehension test is in the form of multiple choice and consists of 20 items. Four texts were used, each of which consisted of five items/questions. Each item/questions consist of four options.

The study was conducted in 10 meetings, five meetings for the experimental group and five meetings for the control group. The five meetings were divided into four meeting for the implementation of the treatment for each group and one meeting for the post-test. The animated stories were employed for four meetings for the experimental group, while the control group employed printed text stories. The texts given in the controlled group were transcribed from the animated stories. The study was conducted for almost three weeks, with two weekly meetings.

### FINDINGS AND DISCUSSION

The first analysis is pertinent to the first research objective: to investigate whether or not the students taught using animated stories have higher scores in reading comprehension of narrative texts than those taught using printed text stories. Hence, the mean scores of the experimental and controlled groups were compared. Prior to the comparing the mean scores, it was essential to conduct tests on the statistical assumption, which involved homogeneity and normality testing.

The homogeneity test was conducted to investigate whether the data on the reading comprehension of narrative texts test across different personalities in both experimental and controlled groups was equal and homogenous. To do this, the Levene's test was employed by using SPSS 24.0 version with an alpha value of .05 as the significance level. The analysis revealed that the data on the reading comprehension test in both groups were homogenous since the p-value was .119, which was higher than the significance level .05 (p = .119 > sig. = .05). Meanwhile, the data of the extroverted in both groups and the data of the introverted in both groups

were also homogeneous since the p values were higher than the significance level .05 which was .025 for the extroverted and .369 for the introverted.

The analysis on the normality showed that the p in each group was higher than the significance level .05. The p-value for the reading comprehension scores in the experimental group was .200, whereas the p-value for the comprehension scores in the controlled group was .108. Then, the p-value for the reading comprehension scores of the extroverted in both groups was .200, and the value for the introverted in both groups was .198. Thus, the p values were higher than the significance level .05 displayed that the data were normally distributed.

Referring to the result of the homogeneity and normality test, which showed that the data were homogeneous and normally distributed a parametric t-test was employed to investigate whether or not the difference was significant. The main research question was related to the effect of animated stories in reading comprehension skills of the narrative test compared to printed text stories. Further, when a significant difference is found, the analysis was carried out based on the mean scores of students across different personalities.

Tuble 1. Debenprive Dura of Reading Comprehension Score										
Group	Ν	Range	Minimum	Maximum	Mean	Std. Deviation				
Experimental	31	50.00	40.00	90.00	55.81	11.19				
Controlled	32	60.00	25.00	85.00	44.38	16.00				

Table 1. Descriptive Data of Reading Comprehension Score

The data shown in Table 1 reveals that the score intervals in the experimental group were from 40.00 to 90.00 and the range was 50.00 while the standard deviation was 11.19. In the controlled group, the scores intervals were 25.00 to 85.00, whereas the range and the standard deviation were 60.00 and 16.00, respectively. Further, the result comparing the mean scores is presented in Table 2.

	t-test for Equality of Means									
				Sig.	Maar	Std Emon	95%			
							Confidence			
		t	df	Sig. (2- tailed)	Mean Difference	Std. Error Difference	Interval	of the		
							Difference			
							Lower	Upper		
-	Equal	0.07/	(1.000		11 (01	<b>a</b> 100		10,100		
Score	variances	3.276	61.000	.002	11.431	3.489	4.455	18.408		
	assumed									

Table 2. Result of T-test on the Reading Comprehension Test

As depicted in Table 2, the p-value is .002, which is less than the significance level .05 (p = .002 < sig. = .05). Thus, the statistical analysis revealed a significant difference in the mean reading comprehension scores between the students taught using animated stories and those taught using printed text stories.

The study's finding is relevant to the Cognitive Theory of Multimedia Learning (CTML). According to the theory, students acquire language better from input enhanced by texts and pictures than by texts alone (Mayer, 2014). This means that combining texts and pictures in the material presented to the students in the classroom helps them acquire language better than only presented with text alone. Further, Mayer postulates that multimedia instructional messages designed given how the human mind works are more likely to lead to a meaningful learning than those not (Mayer, 2014, p. 32).

Multimedia instructional messages is a communication that contains words and images supposed to foster learning. The communication can be delivered using any medium, including paper or computer. Words can include printed words (such as texts) or spoken words (such as narration), while pictures can consist of static graphics (such as illustrations or photos) or dynamic graphics (such as animation or video clip). The definition is broad, including a textbook, online lesson containing animation and narration, and interactive simulation. In this study, multimedia instructional messages were applied as animated stories.

The animated stories employed in this study were chosen carefully to match the students' level or grade and the learning material. Furthermore, online readability software measured the texts transcribed from the animated stories. This is in line with the result of research on multimedia learning have some disadvantages, such as the teacher having to carefully select the materials to the students' needs, and it requires earlier preparations by the teachers to avoid inappropriate language that may exist, the use of wrong content, and to match with the student difficulty level (Su & Liang, 2015). Moreover, multimedia learning, if not appropriately and proportionally designed, can cause what is called cognitive load (Brünken et al., 2010; Kirschner, 2002). Cognitive load is mainly concerned with the number of information elements and their interactions that need to be processed simultaneously before meaningful learning can commence.

## CONCLUSION

Based on the statistical analysis, the students taught using animated stories outperformed those taught using printed text stories. This means that there is a significant difference in the mean reading comprehension scores between students taught using animated stories and those taught using printed text stories. Therefore, animated stories is recommended as an alternative strategy to teach reading comprehension of narrative text.

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