

Powtoon as the Implementation of Edutainment for Young Learners

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ABSTRACT

Combining education and entertainment or edutainment is a new and trending idea in teaching young learners. Edutainment may enhance fun, interesting, creative, innovative, and meaningful learning. Edutainment in this study was teaching using Powtoon. Powtoon was used to support the teaching and learning process in the experimental class. The purposes of this study were to investigate the effectiveness of Powtoon in a classroom where fifth-grade students learn English as a foreign language (EFL) and their responses to the teaching-learning process. This study utilized mixed-method research with an explanatory design. The finding of the independent sample t-test showed a significant difference between the post-test scores of the experimental and control groups. As the result, this study has found that a combination of education in teaching English for young EFL students and entertainment by using interesting Powtoon, showed positive effect on the students' comprehension and gained positive responses from the students. The implication of the study showed that edutainment learning can be applied by primary school English foreign language teachers to improve students' comprehension and engagement.

Keywords: Edutainment, Powtoon, English Language Teaching

1. INTRODUCTION

In Education and Culture Ministerial Regulation no 22 year 2016 [1], it is stated that the education process should be carried out based on the graduate competency and content standards. Students should be more active, change the paradigm of learning from passive learning into active learning. Students should also find the information from any sources, not rely only on the information given by the teacher. They need to involve the use of technology. The last but not least, they need to have balance hard skills and soft skills, and balance applicative skills between physical and mental skills.

The interaction of teachers, students, and learning resources in a learning environment is expected to enhance the mastery of knowledge, skills, and attitude. Besides the interactive, the process of learning at school should also be fun, inspiring, challenging, and motivating students to be active during the learning process. By doing so, students' creativity and independence may arise based on their interests, talents, psychological and physical development.

Another principle of education based on graduate competency and content standards is the process of education that takes place anywhere and anytime[2]. The learning process is conducted at school, in the family, and community, and considered as a long life education. Students develop their creativity, build their interest, and perform a good attitude while learning in any place. With the support of technology, learning can be done anytime. The students may repeat the recording, may pause, and play anytime they want. The flexibility requires time management, self-motivation, and students' independence.

The learning process is shifted from teacher-centered to student-centered learning. Although the student's participation and activeness are prioritized, the teacher still plays an important role. The teacher is expected to know the nature of students, the character of each student including their abilities and talent, to make the learning process matches with the students' needs [3]. The teacher should be able to create fun and meaningful learning, trigger students' motivation and interest to increase knowledge and skill, and master competencies. The teacher should create a pleasant learning atmosphere

without any physical or psychological pressure. In addition, teachers must design creative learning environments and activities, make students be active in exploring the environment to understand learning material through a series of play activities that will lead to increase intelligence (cognitive), character (affection), and play skills in producing works and activities (psychomotor) [4].

1.1. Related Work

1.1.1. Edutainment

Creating fun and meaningful learning can be done by combining entertainment and education. The combination of education and entertainment, which is called edutainment is a new and trending idea in teaching that provides entertainment that is able to educate and excite [5,6]. The concept of edutainment supports the concept of student-centered learning, in which students are more active, directly involved in activities or games, have experience through simulation with fellow students who have certain interests or age, relate the learning to real life, and passionate about the learning process [7]. The entertainment that can be used as lessons in the classroom, for example, television shows, videos, video games, films, music, websites, social media, and others. Edutainment may enhance fun, interesting, creative, innovative, and meaningful learning. Edutainment is learning games and animations that can improve students' vocabulary mastery [6]. Edutainment by playing equipped with teaching aids inside and outside the classroom is fun and appropriate for the kindergarten students [8,9].

1.1.2. Powtoon

One type of animated video that is quite well known in the digital era is Powtoon [10]. Powtoon contains animated characters, cartoons, objects, images, and music that will surely be enjoyed by and challenge students, especially elementary school children. It is a tool in which operation is similar to PowerPoint, Impress, or even Prezi which combine the appearance of PowerPoint Presentations with comic books. Powtoon uses slides that can add text, images, animations, sound, or music backgrounds, which are available in the same application or from external sources [11].

The animated video Powtoon was created by Ilya Spitalnik and Daniel Zaturansky in 2012 [12], has been able to have a positive influence on children's learning, especially their interest, concentration, and reduces bad behavior in learning. There are several benefits offered by Powtoon video presentation: (1) allow the students to view and share a topic of interest, (2) a well-designed Powtoon video may attract the attention of students, (3) promote students' active learning, Powtoon video

requires students to read and synthesize information then be able to present it, (4) Powtoon make students achieve a greater understanding of information, (5) Powtoon makes learning interesting because of the integration of visual, auditory and motion, (6) currently, most basic versions are free or offered at very low costs, and (7) generally compatible with multiple operating systems.

The use of Powtoon has been investigated by previous researchers[11][12]. The studies show positive results not only on the motivational aspect, but also on its contribution in learning new content and developing ICT-related abilities, improve the English reading ability of students who have problems in understanding reading concepts, and able to increase their interest in learning.

Adnyani, Mahayanti, & Suprianti [10] have designed edutainment learning in the form of animated video Powtoon, teaching media for fifth-grade elementary students. The quality of the videos is very good. However, the effectiveness of those media in teaching has not yet been investigated. Concerning that learning must be done with fun and meaningful activities and the use of animated video Powtoon that support the implementation of edutainment learning, it is necessary to conduct research on the effectiveness of Powtoon-based animated video that has been developed for fifth-grade students.

This study was conducted on English subjects in English as a Foreign Language elementary schools by applying Edutainment learning using animated video Powtoon. The purposes of this study were to find out whether the application of edutainment using Powtoon was able to make a significant difference to students' English competence, and how students respond to the teaching and learning process.

1.2. Our Contribution

This paper gives a contribution to the theory of English language teaching and learning using video animated media. The animated Powtoon video is used to teach fifth-grade English foreign language students. This paper is intended to prove Powtoon as an effective teaching medium. Moreover, we believe students respond positively to the implementation of Powtoon based video in the classroom.

1.3. Paper Structure

The rest of the paper is organized as follows. Section 2 introduces how research is conducted. Section 3 present the finding and discussion, and section 4 for the conclusion of this paper.

2. METHOD

This study was a mixed-methods sequential explanatory design, in which quantitative data collection was carried out first through post-test to find out whether the use of edutainment using animated video Powtoon give significant difference on English comprehension and then continued by qualitative data collection by conducting an interview and observation to find out students' response. The fifth-grade students of SD Negeri 3 Banjar Jawa were the population of the study. By cluster random sampling and lottery, the fifth A class was the experimental group that was taught by using Powtoon based video, while the fifth B class was the control group, taught by a conventional method. They were both normal and homogenous. The post-test was analyzed descriptively and inferentially, while the results of observation and interview were analyzed through data collection, data reduction, data display, and conclusion drawing.

3. FINDING AND DISCUSSION

This study investigated the effect of edutainment using animated video Powtoon on fifth-grade elementary students' English comprehension and students' responses on the implementation of it. There were 4 topics given to both experimental and control groups, namely animal, food and drink, clothes, and public area. Each topic was taught in one meeting. The meeting was started by watching a video and continued by mentioning the vocabularies learned from the video and expanded to the

other vocabularies that did not appear in the video. After vocabulary discussion, the next step was making simple sentences using those vocabularies. The difference in the treatment was in the last session. The control group was given a quiz through WhatsApp and sent the answer to the teacher, while the experimental group was given a quiz with animated video Powtoon through the Zoom web meeting application.

The post-test was conducted after 4 topics were taught. The result was analyzed descriptively and inferentially by using SPSS 24. Descriptive statistical analysis showed that the mean score of the experimental group taught by using the Powtoon video was 80.13 and the mean score of the control group was 68.13. It could be seen that the students in the experimental group had a higher mean score than the control group. The median of the experimental group was 80.00 and the median of the control group was 68.00. The experimental group had a higher median score than the control group. The mode score of the experimental group was 96 and the control group mode score was 72. The variance from the post-test for the experimental group was 206.383, meanwhile, the variance of the control group was 124.249. The standard deviation of the experimental group was 14.366 and the standard deviation of the control group was 11.147. From the post-test results that have been given, the highest score of the experimental group is 100 and the lowest score is 56. Thus, the experimental group's range is 44. Meanwhile, the control group's highest score is 88 and the lowest score is 48. So that the range of the control group was 40.

Table 1. Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	df	Sig.
Experiment	.151	31	.071	.927	31	.036
Control	.120	31	.200*	.965	31	.394

*. This is a lower bound of the true significance.
a. Lilliefors Significance Correction

Table 2. Test of Homogeneity of Variances

Levene Statistic	Score		
	df1	df2	Sig.
3.361	1	60	.072

The data were normally distributed, the significant value of Kolmogorov Smirnov exceeds 0.05, and they were homogeneous, the value of both experiment and

control group exceeds 0.05 as well. Since the data were normal and homogeneous, the analysis proceeded to an independent sample t-test. There were two qualifications for determining whether the hypothesis was rejected or not. If the value of the tobs was lower than tcv, the null hypothesis was rejected. Meanwhile, if the tobs was higher than tcv, the null hypothesis fails to reject.

Table 3. Independent Samples Test

		Levene's Test for Equality of Variances		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
Score	Equal variances assumed	3.361	.072	3.674	60	.001	12.00000	3.26582	5.46739	18.53261
	Equal variances not assumed			3.674	56.513	.001	12.00000	3.26582	5.45909	18.54091

Table 3 shows that the value of Sig. (2-tailed) was .001. This value was lower than the level of standard ($\alpha=.05$). This value means that there was a significant difference in the mean score between the experimental and control group. Moreover, to determine the hypothesis, first of all, the value of the tobs and tcv were compared. From the result of the t-test analysis, the value of the tobs was 3.674. Meanwhile, the value of the df was 60. The value of tcv was determined by looking at the df in the t table-distribution value. The tcv for df 60 was 1.671. Therefore, the tobs > tcv , $3.674 > 1.671$. Since the value of tobs was higher than tcv, then the null hypothesis H_0 was rejected and H_a was accepted. It means that there was a significant difference in the implementation of Powtoon media toward the students' English comprehension.

A study on the effectiveness of Powtoon in the classroom where students learn English as a foreign language (EFL) had been conducted [12]. Powtoon can improve the English reading ability of students who have problems in understanding reading concepts, and able to increase their interest in learning. The study of Powtoon in writing achievement had been conducted [13]. She stated that there was a significant effect in the writing achievement of the third-semester students of the English Education Department taught by using Powtoon Audiovisual Media and those who taught by using conventional PowerPoint. Powtoon helps students' independence, motivation, and creativity. In addition, a study on the use of Powtoon shows positive results, not only on the motivational aspect but also about its contribution in learning new content and developing skills in the ICT field [11]. The last one, in terms of cognitive aspect, there are significant differences in learning outcomes of the cognitive aspect of recall (C1), understanding (C2), and applying (C3) between students learning by using Powtoon media and students learning by using Microsoft PowerPoint. The interesting design, picture, animation in Powtoon make students easier remember the material, understand the concept, and motivate them to apply it in their real life.

Based on the interview and observation about the response of the students toward the implementation of animated video Powtoon, it was found that the students enjoyed and more enthusiastic about learning English using Powtoon based video because the learning process was easy, attractive, and interesting. Besides, the students understood better the material, mastered the vocabulary introduced in the Powtoon video, improved their reading comprehension, become more interested in learning English.

These results were in line with the study that stated a well-designed Powtoon can attract students' attention [14], make them achieve a better understanding and memorize the information displayed. Powtoon media can have a positive influence on children's learning, especially interest, concentration, and reduce bad behavior in learning[12].

4. CONCLUSION

Edutainment or a combination of entertainment in the form of animation video and education, in this case, English comprehension of young EFL students is effective. Animated video Powtoon gives a significant difference in English comprehension of fifth-grade English as Foreign Language students. The use of Powtoon makes students more interested in learning English and motivated to be active in the learning process. They enjoy learning, can understand the information displayed, master the vocabularies.

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