Statistical Insights of the Effectiveness Using Serial Cartoon Pictures and Learning Motivation among Eighth Students' Speaking Skills

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Abstract
One of the important skills students need to be learned English is speaking skills because it is complex skills. In learning speaking skills students learn how to write, read, and listen at once indirectly which is important for language communication. But the problem arises when the students feel that English is difficult and the learning method that use are not enjoyable. This research aims to change students' mindset about learning English and of course improve students' speaking skills. Also, this research aims to see the effect of using Serial Cartoon Pictures and Learning Motivation on students' speaking skills. This research was experimental. There are 56 students as samples who have been selected using a simple random sampling technique, half of whom taught using Serial Cartoon Pictures and guided with learning motivation and the rest as comparisons. A questionnaire and speaking test were used to collect the data. The result showed that Using Serial Cartoon Pictures as a media and learning motivation as a reference for guidance can improve students' speaking skills; as shown by the calculation analysis data result of 2 rater, most students reached more than half the maximum score of speaking rubric. Also, statistical result revealed that the calculation of p-output was lower than 0.05.

Keywords: *Speaking Skills, Serial Cartoon Pictures, Learning Motivation*

1. INTRODUCTION

Learning English is one of the principals at this moment. In learning English there are four skills that must be mastered, one of them is speaking. According to Mega & Sugiarto (2020), speaking is called a functional ability and it produces communication. Through speaking project, students can increase their language, experience and be more expressive. Baidawi (2016) said that teaching English is not only talking about make students conveyed their emotion, belief, and thoughts by speaking but also elaborate the context of each word to many topics and time in social knowledge. Also, in teaching speaking, teachers need to give students motivation to build up their confidence. Because in speaking, students want to deliver their words orally and in front of their friends. Based on the Gopalan et al., (2017), motivation brings the aims for person to behave and reach their needs. It can be said that, while speaking, students require inspiration and support that can aid them to comprehend how speaking begin. Then, for break the problem that can be appeared the teacher can used media to teach and guide students to speak. There are so many media that can teachers use, here we talk about Serial Cartoon Pictures to help students improve and develop the topic that will be coveyed.

Based on the observation that researcher did in one school, there are many problems about speaking class that appeared. Starting from less of students interested in learning, lack of variety medium to delevop the topic in sepaking, and less of confidence. According to the problems above the researcher aims to conduct the research to solve the problem and did the experiment by using media (Serial Cartoon Pictures) then encourage students' motivation in learning to see the results. In specific, the objective of this research is to see the significant difference in speaking skills between high and low learning motivation students who were taught by using Serial Cartoon Pictures and those who were not.

There are some previous studies which become the source of the reference examples for this research. First, become from Rahmiati (2022), talk about the Serial Pictures improving the students' speaking skills and it can be seen in the results and she concluded that using Serial Pictures make good students' speaking skills. Second, Gaspersz & Uktolseja (2020), in their paper they said that utilization Serial Pictures increase English speaking ability based on the result and they decide that Serial Pictures is acceptable for increasing students English speaking ability. And the last from Hadryanti & Narius (2016), that created the research about teaching speaking using short cartoon and the result show that students develop their self confidence to speak and not feel bored when learning English. These researches above are still relatively new and can be developed by combining serial pictures and short cartoon Serial Cartoon Pictures.

As mentioned in previous studies, Serial Cartoon Pictures and students' learning motivation is quite crucial to build up students' speaking skills. There is a close connection between Serial Cartoon Pictures and learning motivation to encourage students to achieve certain goals of English speaking skills.

2. RESEARCH METHODOLOGY

This research was an experimental research in quantitative method. In t of this research, the researcher used experimental research to see the effect of certain variables on other variables. According to Creswell (2012), experimental research investigates the connection among variables by testing objective assumption.

The research was conducted at SMP Negeri 2 Sungai Pinang started from September – October 2023 with the total of meetings was ten included pre and post test. The meeting was twice a week with 90 minutes in each meaning (or two hours meeting in the school).

In this research, there are 85 eighth grade students who were be the population and 56 students choose to be the sample by using simple random sampling then divided into experimental and control group. Simple random sampling is a procedure of sampling where in taking sampling each population

has the same chance of being selected Tajik & Golzar (2022). This research was done in ten meeting with 4 topics of Serial Cartoon Picture there are Upin Ipin in two episodes and Spongebob in two episodes. In conducted the research, the researcher has the lesson plan to be used as a reference in teaching and learning process. There are some steps of teaching and learning in the class. First, teacher show the Serial Cartoon Pictures and ask students about their knowledge of story. Second, teacher gets students focus by ask them to tell the story simultaneously orally. Third, students make the group to discuss more about the story and make conversation (students can ask the teacher abou difficult word or the way to arrange the sentences).

Fourth, students practiced the conversation by themselves in a group before speak in front of the class. Fifth, teacher gives the example clearly how to have a good conversation (sentence structures, vocabulary choices, intonation comprehension, pronounciation, and fluency). Then, students speak in front of the class with their group practice the conversation that their already made based on the story and teachers' example. After that, students get the feedback from the teacher about their performance. And the last, teacher asks students opinion and the problem about the lesson. According to the procedure above, in each step of learning procedure, students and teacher are collaborate ectively in teaching and learning process. The relationships which arise are from teacher to students also students to students.

The Instruments of the Research

The data was collected in this research by using speaking test consist of the direction for the students to make the conversation and motivation questionnaire to see the level of students' motivation. And both of the instruments were analyzed the reliability and validity. To check the reliability the researcher was used inter-rater reliability for the speaking test and Cronbach's Alpha for the motivation questionnaire and the result was reliable. Then, to check the validity the researcher used construct validity to speaking rubric to check the speaking test students, content validity (likert scale) and face validity was used to check the motivation questionnaire. Both, the results of speaking test and motivation questionnaire were valid. Speaking test of the students will be calculated based on the speaking rubric adapted from Brown (2001).

Table 2.1 Speaking Rubric

No	Elements of Speaking	Score	Criteria
1.	Grammar	1	Grammar errors are frequent, but the speaker can be understood by a native speaker.
		2	Can usually handle basic constructions quite accurately but does not have

			thorough or confident control of the grammar
		3	Grammar control is good, able to speak the language with the necessary structural accuracy to participate effectively.
		4	Able to use the language accurately on all levels normally. Grammar errors are quite rare.
		5	Similar to that of an educated native speaker.
2.	Vocabulary	1	Speaking vocabulary is necessary to express anything but the most basic needs.
		2	Has speaking vocabulary sufficient to express himself simply with some repetition.
		3	Able to speak the language with sufficient vocabulary to participate effectively. Vocabulary is broad enough that he rarely has to grope for a word.
		4	Can understand and participate in conversation within the range of his experience.
		5	Speech on all levels is fully accepted by educated native speakers.
3.	Comprehension	1	Within the scope of his very limited language experience, can understand simple questions and statements if delivered with slowed speech.
		2	Can get the core of most conversations on non-technical subjects.
		3	Comprehension is quite complete at a normal rate of speech.
		4	Can understand any conversation within the range of his experience.
		5	Similar to that of an educated native speaker.
4.	Fluency	1	No specific fluency description. Refers to the other four language areas for implied level of fluency.
		2	Can handle with confidence but not with facility most social situations, including introductions and casual conversations about current events, as well as work, and family.
		3	Can discuss particular interests of the topic with reasonable ease.

			Rarely has to grope for words.
		4	Able to use the language fluently on all levels normally relevant to learning needs. Can participate in any conversation within the range of this experience with a high degree of fluency.
		5	Has complete fluency in the language such that his speech is fully completed by an educated native speaker.
5.	Pronunciation	1	Errors in pronunciation are frequent but can be understood by a native speaker.
		2	The accent is good even though it's still often wrong
		3	Errors that do not affect understanding and the correct way to pronounce. The accent may be obviously foreign.
		4	Errors in pronunciation are quite rare.
		5	Similar to and fully accepted by native speakers.

Adapted from Teaching by Principles (Brown, 2001)

Statistical Hypothesis

The hypothesis was tested through the table of the criteria of the value of t-table. The result was significant because it's lower than α = 0.05. Then, alternative hypothesis (H_a) was accepted and the null hypothesis (H_o) was rejected. Or can be said that, Serial Cartoon Pictures and Learning Motivation are effective to apply in eighth students' speaking skills at SMP Negeri 2 Sungai Pinang.

3. RESULT AND DISCUSSION

Result of Questionnaire

As mentioned above, the researcher use questionnaire to check students learning motivation in English specially in speaking lesson. The teacher give a questionnaire to the students, then the student checklist the questionnaire based on their experience of learning speaking English. After that, the teacher checked their result by using Likert Scale from 1-5 point and calculated it to know students learning motivation score. The students who got 1-69 included in low learning motivation students and the students who got 70 and above is considered in high learning motivation students. And the result was 14 students are in low learning motivation and 14 students are in high learning motivation in each group (experimental and control). According to Usman et al., (2021), high and low students' learning motivation result is from questionnaire test that was given to the students before treatment.

Result of Speaking Test

In experimental process, there were ten meetings including pre and post tests to see the effect of using Serial Cartoon Pictures and learning motivation in students' speaking skills. In the first meeting students get the pre test to know their speaking skills and they learning motivation and the result was is in lower one. For the second up to nine meeting there was a treatment by using Serial Cartoon Pictures and teacher guidance for the learning motivation. During the treatment, students enjoyed and saw improvement in speaking skills. And for the tenth meeting, students did the post test and the result was increased from the pre test score, even quite above the minimum score. The case is different with control groups, the score from pre and post test of students' speaking skills are not increased because during eight meeting the students are taught only using the method that their teacher usually used. The finding of pre and post speaking skills test in experimental and control groups sorted from high and low learning motivation and the score was the average from Researcher (Rater 1) and English Teacher (Rater 2) are below;

Table 2.1 Speaking Assessment

No	Experimental Group	Speaking Test Pre	Speaking Test Post	Control Group	Speaking Test Pre	Speaking Test Post
1	P.S	9	15.5	Re.S	9	10.5
2	Am	8.5	16.5	M.Sa.R	10	10.5
3	Ap	11	16.5	R.R	9	10
4	M.R	9	16	B.P	9.5	10
5	N	12	18.5	D.H	10	11
6	M.R.S	8.5	15.5	M.F	9	9
7	R.S	9.5	16.5	S.S	8.5	9
8	A.S	10	16	N.H	10	10
9	R.I	8.5	16.5	U.L	9	9
10	E.P.U	9.5	15	N.A	9.5	11.5
11	S.N	9	16	Ju	8.5	9
12	E.F	10	16	Su	10.5	11
13	R.R.D	9	16	R.M.P	9.5	10.5
14	V.S	10.5	16	F.A	8.5	10
15	R.F	7	14.5	H.N	8	8.5
16	A.I.D	7.5	15	M.I	8	8.5
17	M.J.S	8	16	M.R	8	9
18	Ar	8	16	Ir	7	9
19	R.H	6	13.5	R.A	7	9
20	E.J	5.5	13.5	Ad	8	10
21	R.S	6.5	15	R.An	8	10.5
22	D.F	7.5	14.5	R.A.H	6.5	8
23	M.S	6.5	15	M.A	7.5	9.5

24	H.M.R	6	14.5	A.Pu	7.5	9.5
25	Ro	5.5	15	D.M	8	9
26	R.A.R	7.5	15	E.O	8	9.5
27	Ri.S	6	16	S.Z	7.5	10
28	R.D	8	14.5	A.Sy	8	9.5

Table above, there was a significant increase in students' speaking scores in the experimental group, both for the student with initially high and low learning motivation. The speaking score that students got in the post test came from the result of the previous treatment, where the students were use to arrange the words for conversation in the previous Serial Cartoon Pictures. Students also remembered a lot of vocabulary from what they had learned, so during the post test students could develop their ideas to have a good speaking performance. Whereas, in the control group there was in increase score but it was not significant. The score only increased by 1-2 points which did not even reach half of the largerst speaking score. This score also increases because during the learning process students only repeat existing material.

According to the data analysis in post test score of experimental group in high and low learning motivation, also shown that the result was valid in each student based on the descriptive statistics of the post test that already checked. The mean was 32.35, standard error was 0.42, median was 32.00, mode score was 32.00, standard deviation was I.59, the variance score was 2.55, the minimum and maximum score were 30.00 and 37.00. The homogeneity of the test also checked to know the homogenous of the post test score. And the result of significant score was 0.03 and that was lower than 0.05. This result indicated the p-output of the post test score lower than α.

Discussion

The research was well prepared starting from observation about speaking problem in the school, learing media preparation until teaching treatments which were structured in such a way that the objective of the reseaerch could be achieved well. The selected instruments were adjusted to data collection need. Then the instruments were checked before used. Data collection also collected to view research result and continue data analysis.

During the teaching and learning process in experimental group, students are indirectly focused on achieving the 5 elements in the speaking rubric namely grammar, vocabulary, comprehension, fluency, and pronunciation. In eight meeting treatment using Serial Cartoon Pictures, students start by composing sentences to create conversation based on the Serial Cartoon Pictures which emphazised students' understanding in more depth about grammar, vocabulary, and comprehension. Next, students start speaking in front of the class based on the conversation that they made which are adapted to Serial Cartoon Pictures situation. However, the Serial Cartoon

Pictures are familiar to students, thus allowing students understand the situation. In this moment, students learned more about comprehension, fluency and pronounciation.

On the other hand, in applying learning motivation to students, during the teaching and learning process students were guided to complete the assignment well and build pleasant relationship between teacher and students. Besides, students feeling helped while doing their assignments, a good atmosphere can also change students mind about the difficulty of learning English especially in speaking skills. Following the explaination above, Serial Cartoon Pictures are a good medium for teaching and learning English, because this media is interactive and has many benefits in increasing students speaking skills. The pictures were colorful, the story familiarized the students and the activities were enjoyable. Learning Motivation was best partner in teaching and learning to the students focused.

4. CONCLUSION

According to the speaking rubric the higher score is 25 if the students can reach 5 point in 5 elements of the speaking rubric. Based on the speaking assessment table in experimental result, students score in pre test is in the score range 5.5-12 point which has not even reached half of 25 point. However, in post test score, students reached 13.5-18.5 point. This score is included in the qualified score for speaking skills because in 5 elements of speaking rubric, if the students have reached the 3rd point in each element, the students can be said to have mastered speaking skills. In agreement with the discussion, the result shown that using Serial Cartoon Pictures assisted by guidance from the teacher during the learning process is very helpful for improving students' speaking skills, and the result also support this statement. Based on the scores of pre- and post-test in students' speaking skills, it can be answered the objective of the research was that there was a significant effect of using Serial Cartoon Pictures and Learning Motivation in eighth students' speaking skills. It can be seen from the changes in pre- and post-test scores especially in experimental group. Last, the researcher also hoped this research would be useful as a reference for the future science and the future researcher would continue the research development.

AUTHOR CONTRIBUTION STATEMENT

This research involved a team of authors which the first author is credited with primary research work that implementing the research, collecting the data, also analyzing and interpreting the collected data. The second author is as the primary advisor and the third author is as the secondary advisor, both of advisors contributed the guidance and oversight.

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