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# The Effect of Using Cooking Academy Game towards Students' Writing Ability

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Abstract: This study is an experimental research that discussed the impact of the use of cooking academy game in teaching writing on the students' ability in writing procedure text at class VII Junior Secondary School I Pangkalan Baru Lima Puluh Kota. This study was aimed to determine the effects of the use of cooking academy game towards the student's ability in writing procedure text. In this study, the population is the students of class VII, while sample are two classes: one class for the experimental class and another class for control. Samples were drawn randomly. Data were collected by giving pre-test and posttest on the sample. Data were, then, analyzed applying t-test formula. The results showed that students who were taught to write text using the procedure of cooking academy game has the ability to write higher than students who are not taught by using games cooking academy.

Keywords: Cooking academic game, writing ability, English text

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#### INTRODUCTION

Writing activity is not as simply as putting words into sentences or arranging sentences into paragraph. Learning to write effectively involves many different areas of knowledge and skill. These include the ability to generate suitable content, to organize that content coherently, to construct syntactically and semantically correct sentences, and to link those sentences to form coherent text. Above all, the one that is very important is the ability to select appropriate content and language to suit communicative purpose.

Teaching writing is a process of giving skills to students how to communicate and express their thought, feelings, and

opinions in a written language. Harmer (2008) states that teaching writing is used as a practical tool to help students practice and work with language they have been studied. In teaching writing, students are taught to create grammatical written productions like sentences, paragraphs, essays or long texts in a coherent and cohesive construction. There are several activities which can be done in teaching writing like; defining a topic to developing a topic into main idea, write. elaborating main idea into paragraphs, writing a story, rewriting a story, arranging words into sentences, arranging sentences into texts or essays, and completing paragraphs. So, based on the explanation above the writing becomes the difficult skill to be taught in the school, especially for Junior High School students.

Junior High School students can be considered as young learners where they tend to learn as children. Realizing this fact, a teacher should pay much attention with the characteristics of young learner in learning. First, characteristic of young learner is an active learner. They like the activity that involves the physical movement. If there is no interesting activity in the classroom, students will not pay attention. Therefore, they often miss the important part when the teacher explains the lesson, especially in learning writing it will become difficult for them if they miss one steps in the process of writing. Second, students learn by doing. They like to do challenging activities and be the center of activities in teaching and learning process. So, they can remember the lesson in their long term memory if they involve actively in learning. However, the fact in the field that the teacher tends to teach the lesson by explaining the text book in the class time. Third, they like playing while learning. Most of them get higher motivation and interested in learning when the teacher applies some game activities in the classroom as the technique in teaching with entertain and enjoyable situation. In this case, the teacher should pay attention in choosing the game. It should has the education value for students and do not waste much time in learning process.

aspect that should Another considered in teaching and learning is teacher itself. Teacher is one of important element in learning process. Therefore, teacher should find media that is really suitable with student's development and create interesting atmosphere in the classroom. Learning media was a methodology or instrument made for learning activities in order to enhance the educational skills of learners, consistent with assigned curriculum. Currently, teachers performed more significant role to be a knowledge director, who planed, selected and developed learning media effectively corresponding to their lesson contents (Somnuek, 2014).

Yu and Branddenburg (2011) noted that for the past few decades, there has been a significant proliferation of digital media. The growth of the internet and the development of streaming-video technologies have increased to educators' ability execute teaching strategies to meet multiplicity of student learning style. (Yu & Brandenburg, 2011) In line with this, Warren, et. al. states that the number of games, simulations, and multi-user virtual environments designed to promote learning, engagement with subject matter, or intended to contextualize learning has been steadily increasing over the past decade (Warren, Stein, Dondlinger, & Barab, 2009).

However, the fact that is found in the field based on the interview of Junior High School teacher in Pangkalan Koto Baru the teacher gets difficulties in using or applying the media because of the lack of facilities at school. The school does not provide teacher with teaching facilities such as language laboratory and multimedia. Furthermore, the teachers themselves are also lack of creativity in designing their own media in the classroom.

Based on the characteristics of the students and the problems that are faced by teacher above, the writer suggests applying games in teaching English, especially teaching writing in procedure text at Junior High School students by using Cooking Academy game. These game shows the steps how to make foods, so this media is appropriate in teaching procedure text. Therefore, the researcher is interested to conduct a research about teaching technique; especially, procedure text by using *Cooking* Academy game.

Talking about writing, it is one of difficult skills to be taught by many teachers in the classroom. A teacher does not only prepare the techniques and the material to teach but also involve in the activity as well. A good teacher not only teaches and gives

task, but they should guide and give feedback to the students' work. These steps will develop the students' skill in writing. Comments and revisions on the student's writing will increase the students' ability in writing. That is why teaching writing is very difficult to be done by many teachers. It needs many tasks to do for teachers in revising the students' papers. Rass (2010) explains that writing is a difficult skill for native speakers and nonnative speakers alike, because writers must balance multiple issues such as content, organization, purpose, audience, vocabulary, punctuation, spelling, and mechanics such capitalization.

Writing is one of daily activities and serves a range of function in everyday life. Brown (1994) notes there are three types of writing that a second language writer might produce in daily life, within and beyond the requirements of a curriculum. First, write for academic writing (papers, essays, journal and etc.). Second, write for job-related writing (memos, repots, manuals, schedule and etc.). Third, write for personal writing (shopping lists, letters notes and etc).

Similarly, Nunan (2003) proposes that there are three functions of written language in daily life. First, function as primarily for action such as public signs, for social contact, and personal correspondence. Second, function as primarily for information such as newspapers, current affair magazines and etc. Then, function as primarily for entertainment.

Furthermore, writing is a kind of mental process. Here, a writer thinks about the idea that will be delivered through written message. Boardman and Frydenberg (2002) define writing as a continuous process of thinking and organizing, rethinking, and recognizing. Next, O'Malley and Pierce (1996) say that writing is a personal act in which writer takes ideas or prompt and transform them into "self-initiated" topic. In other words, writer will draw something based on his/her background knowledge and complex mental process in developing new insight.

To sum up, there are so many definitions of writing which are proposed by the experts. They have different focus on defining what writing is. Although the focus on defining this skill is different for one to another, it can be concluded that writing is the process of combining words into meaningful message contains of ideas, feeling and information about something. It uses a media to convey the message to the reader.

Furthermore, there are several genres of texts; one of them is procedure text. Procedure text is a text that tells about how to do, to make, or to use something. It will give us a systematic guide, so that student can achieve the specific goals. In line with this, Gerot and Wignel (1994) state that procedure text is a kind of text for describing how something is accomplished. It is supported by Derewianka (1990) who proposes procedure text is a text which tells how something is accomplished through a sequence of actions or steps. It has a goal, material, and steps as its generic structure. The Lexicogrammatical marked features are by focusing generalized human agent, using of simple present tense, using temporal conjunction and mainly of material processes. Therefore, the procedure text can be a set of instruction. It is begun by outlining an aim or Sometimes, there is a list of materials and equipments needed.

Based on the theories above, it can be concluded that Procedure Text is a kind of text that has purpose to achieve a goal or outcome through a sequence of steps. It can be oral and written, depend on the goal stated. Besides that, procedure text is essential to help people to do, to operate and to make something. In teaching procedure text, one of techniques that can be applied is using game. In learning process, the important thing for the students is to feel deeply involved in the lesson. Using games are one of the best ways of achieving this. Students might not realize that playing games, they are learning something about language. In this case the teacher should be careful enough to make the game become interesting. Some language items are learned. In addition, a good game is effective to break the routine of the class.

Furthermore, a game is a structured activity and usually suppose for enjoyment and sometimes it can be used as an educational tool. According to Ersoz (2000), games can help the teacher to construct contexts and makes the language learning become more useful and meaningful for students. It means that games especially language games are not only function as time filling activities but also they can bring some educational values that enable the students to learn the languages. So, games can make the students feel deeply involved in the lesson and also feel happy and concentrate.

Furthermore, Kim (1995) states that there are many advantages of using games in language classroom: (1) games are a welcome break from the usual routine of the language class, (2) they are motivating and challenging, (3) learning a language requires a great deal of effort, (4) games provide language practice in the various skills- speaking, writing, listening and reading, (5) they encourage students to interact and communicate, and (6) they create a meaningful context for language use.

One of the games that can be used in teaching procedure text is Cooking Academy games. Cooking Academy game is a game that shows the steps of how to make foods. In this case, the writer tries to emphasize the use of the food recipes in cooking academy games helping the students get to understanding and comprehension related to the text that will be taught. In cooking academy games, there are shown the process to make a recipe of foods from all the words. The students can see the picture of foods, the explanation of food, the material needed, and the steps. So, cooking academy game is appropriate to be used in teaching procedure text.

Furthermore, there are several advantages of Cooking Academy Game on teaching procedure text:

#### 1. Creating Fresh Atmosphere

In the process of learning, it is important for teacher to create fresh atmosphere to make students interested in studying the subject matter. It can be done by good performance when teacher comes firstly in the classroom. The students feel comfortable and excited in facing the learning process because the impression will determine the next result. Also, showing such of interesting media such as cooking academy games related to the text given that is procedure text to the student will give a great deal contribution to help them in getting the understanding of the material which is taught at that time.

#### 2. Managing the learner

Teacher has big role in achieving the goal of the learning process. Therefore the good management of the classroom should be built. Students as the learners are the core in learning. So, every action from them will influence the process itself and of course the final purpose. Teacher should become a good manager in the classroom, make sure that the students do their homework, neatness in the uniform, and encourage the activeness of the students in learning. Related to this, when teacher shows Cooking Academy game as a media, it will create the activeness from students.

#### 3. Determining the material

It is important for teacher to determine the certain material of learning. Teacher should limit every material that will be presented. Furthermore, the way in explaining the material should be interesting for the learner. It can be done by giving real object, picture, realia, and video.

#### 4. Getting intensive interaction

Students will automatically respond to the topic of the discussion if teacher is successfully in presenting the material clearly. They will put out the ideas, feeling or even argumentation related to the material given. From this activity, teacher will be able to see and monitor how far students understand the material. Furthermore, this activity will help teacher to create students' activeness. In fact, the verbal interaction among them will appear automatically.

#### **METHOD**

The design of this research is experimental research. Gay (2009) states that experimental research is the only type of the research that can test hypothesis to establish causes and effects relationship. Furthermore, he adds that the researcher manipulates at least one independent variable, controls other relevant variables. Then, the researcher observes the effect on dependent variable.

Regarding to the idea above, this research has two independent variables and one dependent variable. Independent variable is using Cooking Academy game. Dependent variable is teaching writing skill. So, during the research, the researchers paid fully attention to the cause and effect made by independent variables. They are the effect of teaching writing using Cooking Academy game.

Moreover, Gay (2009) notes that during the research, the researcher should control the independent variables. It means that there is an experimental class and a control class in the research. Experimental class is taught by using Cooking Academy game and control class is taught through list of items. In the process of teaching, the differences between experimental class and control class is only about the technique used. The materials and the time allocated of the both classes were the same.

The design of the research can be seen as below:

$O_1$	$X_1$	$O_2$
$O_1$	$X_2$	$O_2$

Note:  $O_1$ : Pre-test

O<sub>2</sub>: Post-test

X<sub>1</sub>: cooking academy game

X<sub>2:</sub> list of items (without using game)

(Gay, L.R & Airasian, 2009)

Furthermore, this research took seventh grade students of SMPN 1 Pangkalan who are registered on 2011/2012 academic year. There are six classes of the seventh grade students at this school. Considering this study needs two classes, one for experimental class and one for control class. So, cluster random sampling is done to select the sample of the research.

Sample of this research are chosen through cluster random sampling. According to Gay (2009) cluster random sampling is the process of selecting the sample based on the groups not individuals. All the members of selected have similar the group characteristics. As stated before that there are six classes of the population of the research, while the study needs two classes. So, in stating which class belongs to experimental class or control class, the researchers used lottery. The researchers wrote number of the classes on pieces of small papers, and then took one of them to the Cooking Academy game class. After that, the researchers took one more paper for the list of the class without using Cooking Academy game.

Next, the instrument of this research is test. Test is used to collect the data before and after the treatment. In other words, there were pre-test and post-test to collect the data of the research. The criteria of scoring the students' writing are used the criteria suggested by O'Malley and Pierce (1996) as follows:

No		Rubrics	Score
1	Composing	Focuses on central ideas with an organized and elaborate text	4
		Central idea, but not as evenly elaborated and some digressions	3
		Not a focused idea or more than one idea, sketchy elaboration, and many	2
		digressions	
		Not clear idea, little or no elaboration, many digressions	1
2	Style	Purposefully chosen vocabulary, sentence variety, information, and voice to affect	4
		reader	
		Vocabulary less precise and information chosen less purposeful	3
		Vocabulary basic and not purposefully selected; tone flat or inconsistent	2
		Not controlled, tone flat, sentences halted of choppy	1
3	Sentence	Standard word order, no enjambment(run-on sentences), completeness (no sentence	4
	Formation	fragments), standard modifiers and coordinators, and effective transitions	
		Mostly standard word order, some enjambments or sentence fragments	3
		Some non standard word order, enjambment, and word omissions (e.g., verbs)	2
		Frequent non standard word order, enjambment, and word omissions	1
4	Usage	Standard inflection (e.g., plural, possessives, -ed, -ing with verbs, and -ly with	4
		adverbs), subject-verb agreement (we were Vs we was), standard word meaning	
		Mostly standard inflections, agreement, and word meaning	3
		Some error with inflections, agreement, and word meaning	2
		Shifts from one tense to another; errors in conventions (them/those, good/well,	1
		double negatives, etc.)	
5	Mechanics	Effective use of capitalization, punctuation, spelling, and formatting (paragraphs	4
		noted by indenting)	
		Mostly effective use of mechanics; errors do not detract from meaning	3
		Some errors with spelling and punctuation that detract from meaning	2
		Misspells even simple words; little formatting evident	1

From the rubrics above, it can be seen that there are five aspects to be measured on students' writing. Each aspect consists of four categories. Thus, the maximum students' writing score is 20 and the lowest score is 4. The validity of this research is seen from content validity. Gay (2009) mentions that content validity is the degree to which a test measures an intended content area. Related to the subject of this research about the students' writing skill, the material of test is based on the material that has been taught to the students and the researchers consulted to the expert.

The reliability of the test is measured by doing inter rater reliability. According to Brown (1994), reliability of the test is the consistency of the test score. It means that the students' score is rather similar if the test is administered in two different occasions. The instrument of this research is writing test. In order to have reliability of the test score, there are two scorers in scoring the students'

writing test. The result of the two scorers is analyzed to get the correlation of the score.

Furthermore, in order to get the data of this research, the researchers gave pre-test and post-test to the sample taken. The pre-test is held before the treatment done to the sample and the post-test is held after the treatment. The researchers observed the test. So, it is possible to see what happened during the test. In other words, the situation faced by the students during the test was described.

Next, both tests pre and post-test are scored by two scorers. The scorers are the researchers and one of the English teachers of the school. During the scoring, the scorers applied the criteria of scoring which are suggested on the previous section. In order to make easy scoring, the students' writing is copied into two copies. Both scorers scored the students' writing after the test have administered to the students. Then, the score is compared and counted in order to get the data of the research.

Furthermore, the students' mark of pre- test and post- test are compared by using t-test formula. T-test is used to test hypothesis of the research. The formula of t-test followed the formula suggested by Gay (2009) as follows:

$$t = \frac{\overline{x}_{1} - \overline{x}_{2}}{\sqrt{\left(\frac{SS_{1} + SS_{2}}{n_{1} + n_{2} - 2}\right)\left(\frac{1}{n_{1}} + \frac{1}{n_{2}}\right)}}$$

Note:

t: the value of t-calculated

 $\overline{X_1}$ : Average Mark of experimental class

 $X_2$ : Average Mark control class

 $S_1^2$ : Standard deviation experimental

Class

 $S_2^2$ : Standard deviation control class

 $n_1$ : Number of students of experimental

Class

 $n_2$ : Number of students of control class

Then, the t-calculated is compared to the t-table with the level of significance 0.01 and the degree of freedom (df) is  $(n_1 + n_2 - 2)$ .

#### **RESULT AND DISCUSSION**

In this research, the data taken from the pre test and post test writing were analyzed by using t-test. The purpose was to see the level of ability between experimental and control group were same or not after the treatment was given. The significant differences of the two groups could be observed statistically. This research wanted to compare between the score of experimental group and control group. To get the value of t observed to be compared with t table the tformula was used. Meanwhile t-table was 1.671 with degree of freedom (df) 60 and p < 0.05.

The following table summarizes the result of statistical analysis of pre test score for both groups.

Table 2. Statistical Analysis of Pre-test Score in Experimental and Control Group

	Experimental Group	Control Group	
n	30	31	
Mean $(X)$	1.77	1.72	
SD	0.45	0.55	$t_{observed} =$
Sum $(\sum x)$	53.13	53.46	0.397
Sum $\sum (x)^2$	100.0635	101.2346	
SS	5.97	9.04	

Based on the table above, it could be analyzed that the mean score (x) of the experimental group on the pre test was 1.77 and the mean score (x) of the control group was 1.75. The standard deviation (SD) of the experimental group on the pre test was 0.45. Meanwhile, the standard deviation (SD) of the control group in the pre test was 0.55. From the table, it could be seen that the writing score in pre test between experimental group and control group was different. It could be seen from the coefficient of t-test was 0.397. The t-table for the degree of freedom (df) 60 and p<0.05 was 1.671. By calculating the data

using t-test, the value of  $t_{observed}$  was lower than the value of  $t_{table}$  at the level of significance 0.05 ( $t_{observed} < t_{table} = 0.397 < 1.671$ ). In general, the average scores of experimental group and control group were almost similar. Since  $t_{observed}$  was lower than the value of  $t_{table}$ , it indicated that the experimental and the control group were relatively and statistically similar.

Next, the following table showed the result of statistical analysis of the post test score for both experimental and control group.

	Experimental Group	Control Group	
n _	30	31	
Mean (X)	3.04	2.46	
SD	0.55	0.51	$t_{observed} =$
Sum $(\sum x)$	91.07	76.4	4.296
Sum $\sum (x)^2$	285.1887	196.2352	
SS	8.73	7.946	

Table 3. Statistical Analysis of Post Test Score in Experimental and Control Group

Based on the table above, it could be seen that the mean score (x) of the experimental group on the post test was 3.04 and the mean score (x) of the control group was 2.46. The standard deviation (SD) of the experimental group on the post test was 0.55 and the standard deviation (SD) of control group in the post test was 0.51. From the table, it could be seen that the writing score in post test between experimental group and control group was different. It can be seen from the coefficient of t-test was 4.296. The ttable for the degree of freedom (df) 60 and p<0.05 was 1.671. By calculating the data using t-test, the value of tobserved was higher than the value of  $t_{table}$  at the level of significance 0.05 ( $t_{observed} > t_{table} = 4.296 >$ 1.671). It can be concluded that the two groups have significant difference of writing ability level after the treatment given.

Then, the following table showed the gain of experimental and control group between pre test and post test.

	Experimental Group	Control Group
$n_{\_}$	30	31
Mean $(X)$	1.27	0.74
SD	0.1	-0.04
$(\sum X)$	37.92	22.94
$\sum (x)^2$	185.1252	95.0006
SS	2.76	-1.094

**Table 4**. The Gain of Experimental and Control Group between Pre Test and Post Test

From the table above, it could be seen that the sum difference or gain between the post test score and the pre test score of experimental group was 37.92. The mean of the gain between the post test and the pre test was 1.27 and the gain of standard deviation was 0.1.

Meanwhile, the sum difference or gain between the post test score and the pre test score of the control group was 22.94. The mean of the gain between the post test and the pre test was 0.74 and the gain of standard deviation was -0.04.

Furthermore, from the analysis of the posttest scores previously calculated, it was found that the mean score of experimental group was bigger than the mean score of control group  $(\overline{X}1>\overline{X}2)$ . Moreover, t-test formula was used to statistically test the research hypotheses. The research hypotheses were made in the form of null hypothesis  $(H_0)$ and alternative hypothesis  $(H_1)$  as follow:

There is no significant effect on the students' ability in writing a procedure text between the students who are taught using the cooking academy game than those who do not use cooking academy game.

H<sub>1</sub>: There is a significant effect on students' ability in writing a procedure text between the students who are taught using cooking academy game and those who do not use cooking academy game.

In this research, the hypothesis was formulated to accept the alternative hypothesis and to reject the null hypothesis  $(H_0)$ .  $(H_0)$  could be accepted if the value of t-observed is higher than the value of t-table. However, if the value of t-observed is equal or less than the value of t-table, the hypothesis is rejected. Those two kinds of hypothesis are presented as follow:

 $\begin{array}{ll} \left(H_{0}\right) & : t_{\text{observed}} \leq t_{\text{table}} \\ \left(H_{0}\right) & : t_{\text{observed}} > t_{\text{table}} \end{array}$ 

From the analysis of post test above, it found that the mean score of experimental group was bigger than the mean score of control group  $(x_1 > x_2)$ . The mean score of the experimental group was 3.04. Meanwhile, the mean score of the control group was 2.46. Then, the score was calculated by using t-formula. It was obtained that the t-observed of this research was 4.296. It can be concluded that the difference of students' ability in writing a procedure text among the two groups were considerably significant. From the result of t-formula stated above, it was decided that H<sub>0</sub> was rejected while H<sub>1</sub> was accepted. It means that there is a significant effect on students' ability in writing a procedure text between the students who are taught using cooking academy game and those who do not use cooking academy game. Students who are thought by using cooking academy game have good ability in writing procedure texts.

# CONCLUSION AND RECOMMENDATION

Based on the hypothesis testing, the value of t  $_{calculated}$  was bigger than the value of the t  $_{table}$  at the level of significant 0.05 (t  $_{calculated}$  > t  $_{table}$  = 4.296>1.667). It means the difference of students` writing ability in procedure text between the two groups was significant. Based on that result, it was decided that  $H_0$  was rejected and  $H_1$  was accepted. Therefore, it can be concluded that the students who are taught by using cooking academy game in teaching writing skill have better writing ability in producing a procedure text than those who are not.

There were a number of limitations, therefore, for future research, the researchers suggest that the use of the cooking academic game could be implemented to improve students' three other language skills. It is also proposed that researchers expand their research by collecting students' responses on the use of cooking academic game in teaching writing, because their responses can foster teachers in formulating better lesson plans in using this game.

#### REFERENCES

- Abu, R. R. (2010). The new teacher induction programme in Bedouin schools in the Negev, Israel. *Journal of Education for Teaching*, *36*(1), 35–55.
- Broadman, C. A., & Jia, F. (2002). Writing to communicate paragraphs and essay. New York: Longman.
- Brown, H. D. (1994). *Teaching by principles: An interactive approach to learning pedagogy*. Prentice Hall Regents.
- Derewianka, B. (1990). *Exploring how texts work*. Heinemann Educational Books.
- Ersoz, A. (2000). Six games for the EFL/ESL classroom. *The Internet TESL Journal*, 6(6), 22–30.

- Gay, L. R, & Airasian, P. (2009). Educational research: Competencies for analysis and application. Ohio: Prentice-Hall, Inc.
- Harmer, J. (2008). How to teach English. *ELT Journal*, *62*(3), 313–316.
- Kim, L. S. (1995). Creative games for the language class. In *English Teaching Forum* (Vol. 33, pp. 35–36).
- Nunan, D. (2003). The impact of English as a global language on educational policies and practices in the Asia-Pacific Region. *TESOL Quarterly*, 37(4), 589–613.
- O'malley, J. M., & Pierce, L. V. (1996).

  Authentic assessment for English language learners: Practical approaches for teachers. Addison-Wesley Publishing Company Boston.
- Somnuek, P. (2014). The Development of Teaching and Learning Innovation by

- Using Instructional Media for Enhancement Learning of **Tourism** Achievement towards Knowledge **Tourism** Product in Marketing Class. In SHS Web of Conferences (Vol. 12, p. 01040). EDP Sciences.
- Warren, S. J., Stein, R. A., Dondlinger, M. J., & Barab, S. A. (2009). A look inside a MUVE design process: Blending instructional design and game principles to target writing skills. Journal of Educational Computing Research, 40(3), 295–321.
- Wignell, G., & Gerot, L. (1994). *Making Sense of Functional Grammar*.
  Macquuire University, Australia.
- Yu, C., & Brandenburg, T. (2011).

  Multimedia database applications:

  issues and concerns for classroom
  teaching.