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The Influence of Quantum Teaching Method and Cooperative Integrated Reading and Composition Method on Descriptive Writing Skill of Elementary Student

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Abstract

This research aimed at finding out the influence of quantum teaching (QT) method and cooperative integrated reading composition (CIRC) method on elementary students' descriptive writing skill. This research used quantitative method with quasi experiment technique. This research used non-equivalent control group pretest-postest design. The population in this research was all the students at grade 5 in SD Muhammadiyah 1 Alternatif Kota Magelang. The data analysis techniques used in this research were paired sample t-test and analysis of variance (anova). The result showed that: (1) there was positive influence on the use of quantum teaching (QT) method on descriptive writing skill of grade 5 students in SD Muhammadiyah 1 Alternatif Kota Magelang, (2) there was positive influence on the use of cooperative integrated reading composition (CIRC) method on descriptive writing skill at grade 5 students in SD Muhammadiyah 1 Alternatif Kota Magelang, and (3) there was different influence on the use of quantum teaching (QT) method and cooperative integrated reading (CIRC) method on descriptive writing skill at grade 5 students in SD Muhammadiyah 1 Alternatif Kota Magelang.

Keywords: Quantum Teaching; Cooperative Integrated Reading and Composition; Descriptive Writing Skill

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1. Introduction

Writing is a language aspect which could be categorized as the most difficult one compared to other language aspects (speaking, listening and reading). Generally, writing is an activity to convey messages and/or expressing ideas in the form of writing. Writing activity is not as easy as imagined. In order to write well, practices and ideas are needed. Therefore, writing becomes one of the main subject being taught in elementary school level. Reading, writing and arithmetic (3Rs) are the main subjects for the new students in elementary school. Those subjects are the main program by the government to introduce students about the importance of Language and Mathematics.

Writing, although generally is an activity of expressing ideas in the form of writing, has different styles. One of the styles is descriptive writing. Sadhono (2014:159) states that description is a style of writing which describes or depicts something based on impressions coming from observation, experience, and feeling of the writer. Descriptive writing should not only be able to convey impression or observation from the writer, but also be able to put the readers feel the same feeling as the writer does. In order to make readers feel what the writer feels is not an easy task specially to grade five students. Based on the observation result, students' descriptive skill at grade five in SD Muhammadiyah 1 Alternatif Kota Magelang is categorized as low. There were some other causes of students' low score in descriptive writing, some of them were (1) the use of rote learning by the teacher which caused students became uninterested to follow the lesson, (2) the teacher was not fully optimal to use the facilities so that students' activities were restricted only inside the classroom, (3) the teacher was not fully able to handle the students which caused unconducive teaching and learning situation. As the effect, the teaching conveyed by the teacher was ineffective.

There are many learning methods which can be used in language learning. However, not all of the methods are appropriate to be implemented to teach descriptive writing. Quantum teaching (QT) method and cooperative integrated reading and composition (CIRC) method are two methods which can answer the aforementioned problems. QT method is a method which emphasis on the fun learning interaction, manipulating learning activities to be fun and cheerful. Consequently, as the result of that manipulation, students indirectly like the lesson being taught. QT method is not a special method in language learning, but its flexibility makes it able to be implemented in almost all lessons. Besides, QT method is easier to be implemented by the teachers since teachers can utilize all the facilities at school as the source of learning. Apart from QT, cooperative integrated reading and composition (CIRC) is a special method in language learning. This method emphasis on the cooperative aspect, solving the problem together and reading the text as the main source of information. In the reading activities, the students are hoped to grasp information as many as possible. With CIRC method, teachers are able to more utilize books and context as the main media in learning. Although this method is so flexible, this method is appropriate to be used in the learning of descriptive writing.

By using those two methods, it is hoped that not only the problems faced by the teachers can be solved, but also can give positive influence on the descriptive writing skill at grade five students in SD Muhammadiyah 1 Alternatif Kota Magelang.

2. Literature Review

A research done by Hanik Yuli Alifah (2009) about the use of CIRC (cooperative integrated reading and comprehension) method to improve language skill. The result on that research showed that students' language skill improved through cooperative integrated reading and composition learning model with the steps of teacher presentation, team practice, independent practice peer pre-assessment, additional practice and testing as well as other activities which were the elements of CIRC learning model such as (1) mutual story telling among friends in the group, (2) concluding story, (3) story listening, (4) re telling story in the form of oral and written, (5) role playing, (6) writing, editing, revising, and publishing poem with friends in the group.

The researcher position in this case is different than the previous research, in that this research uses two methods those are quantum teaching and cooperative integrated reading and comprehension on one language skill, that is descriptive writing. The way to analyse is also different in that the data being analysed were data to determine whether the applied method gave positive influence on the students' descriptive writing skill. The data analysis technique is also different, in that this research uses paired sample t-test and analysis of variance (anova) analysis technique.

2.1. Descriptive writing skill

Margaret (2010:1) states that "writing is communicating, planning, thinking, imagining, remembering, collecting information, or storing ideas in memory". Tarigan (2008:3) states that writing is a language skill used to communicate indirectly, without directly facing other person. Sadhono (2014:159) states that description is a text or writing which describes or pictures something based on the impression from observation, experience and feeling of the writer. The target is to create readers' imagination as if the readers really see, experience and feel what is experienced by the writer.Dalman (2014:94) states that description is a text which describes or pictures certain object or event with clear and detailed words so that the readers feels as if they directly experience what is being described by the writer. Keraf (1981:93) explains that the target that should be achieved by the descriptive text writer is to create or to enable the creationof imagination of the readers, as if the readers directly see the object being described completely the same as what is experienced by the writer physically.

From the above definitions, it can be concluded that descriptive writing is a skill to describe or picture certain object or event using writing in order to make the readers as if they feel what is felt by the writer.

2.2. Quantum teaching method

Deporter (1999:5) explains that "Quantum: Interactions that transform energy into radiance. Quantum teaching, therefore, is the orchestration of the variety of interactions that exist in and around the moment of learning. These interactions include elements for effective learning that affect student success. These interactions transform the students' natural talents and abilities into radiance that benefit themselves and others." That opinion means that quantum is an interaction which changes energy becomes lights. Energy is defined as learning environment and lights is defined as student's success or achievement. Therefore, quantum teaching could be defined as an orchestration of many interactions in and on the student's learning moment. Miftahul (2011:21) explains that the word quantum means an interaction which transform energy to lights. Thus, quantum teaching creates an effective learning environment by using elements exist on students and their learning environment through the interaction happening in the classroom. Based on the above statements, it can be said that quantum teaching is a learning method which changes everything around the student's environment to become effective with fun interactions to obtain optimal learning outcomes.

2.3. Cooperative integrated reading and composition method

Slavin (2008:200) states Cooperative Integrated Reading and Composition is a comprehensive program to teach reading, writing and language art at the higher class in elementary school. This method could be categorized as an integrated learning method because it combines two or more language skills through cooperation with other people. Suyatni (2009:68) states that cooperative type of CIRC (Cooperative Integrated Reading and Composition) from the language perspective could be understood as cooperative learning model which integrates a text completely then change it into important parts. In the cooperative integrated reading and composition, each student is responsible on the task of the group. Each group member express ideas to each other to understand a concept and to solve a task, therefore a good learning experience and understanding could be created. From that opinion, it can be concluded that cooperative integrated reading and composition is a method which give emphasis on the cooperation activities

to solve problems and also emphasis on the reading text activity as the main information source in the learning activity.

3. Material & Methodology

This research uses quantitative approach of type of quasi experiment with non-equivalent control group design pretest-posttest design. The population in this study is all the 5th graders of Muhammadiyah 1 Alternative School of Magelang are 108 students consisting of four classes. The data collected in this research is the result of writing essay description of 5th grade students of SD Muhammadiyah 1 Alternative Kota Magelang. Data were collected using a test type written test technique. Here is the result of the student description.

DATA	Group 1 QT		Group 2 CIRC		Group Konv	
	Pretest	Posttest	Pretest	Posttest	Pretest	Posttest
Mean	65,84	71,74	66,27	72,63	64,43	66,89
Max Score	84	90	89	89	84	82
Min Score	44	55	45	53	50	51
Std Dev	8,55608	7,19707	10,01958	8,52969	7,41584	6,67965

The data collected further in the analysis to test the hypothesis. But before testing the hypothesis, prerequisite test is applied. This prerequisite test is applied to determine the method used to analyze the data. There are three prerequisite tests in this study among others are equality test, homogeneity test and normality test. Equality tests are used to test whether all groups are of the same capability. This test uses the homogeneity test of the variant, but the data used is the prestest data of all groups. Here is the equality test in this study:

Test of Homogeneity of Variances			
Levene Statistic	df1	df2	Sig.
1,246	2	89	,293

From the table above, can be seen the significance is 0.293. That way the significance of 0.293 is greater than 0.05. So it can be concluded that equality test the ability to write student descriptions of each group before being given treatment is the same. The next prerequisite test is homogeneity. This test to find out whether the data obtained homogeny or not. Here are the results of homogeneity test.

From the table above, can be seen the significance is 0.473. That way the significance of 0.473 is greater than 0.05. Then it can be concluded the homogeneity test the ability

Test of Homogeneity of Variances

Levene Statistic	df1	df2	Sig.
,754	2	89	,473

to write the description of the students of each group after being given the treatment is homogeneous. Next is the data normality test. This test is performed to determine whether the data is normally distributed or not. Here are the results of the normality test data.

One-Sample Kolmogorov-Smirnov Test

		Pre_CIRC	Pre_QT	Pre_KONV	Post_CIRC	Post_QT	Post_KONV
N		33	31	28	33	31	28
Normal Parameters[a,b]	Mean	66,2727	65,8387	64,4286	72,5455	71,7419	66,8929
	Std. Deviation	10,01958	8,55608	7,41584	8,52969	7,19707	6,67965
Kolmogorov-Smirnov Z		,648	,750	,633	,594	,656	,726
Asymp. Sig. (2-tailed)		,794	,628	,818	,872	,783	,667

From the table above, can be seen the significance of each experimental group and control both before and after treatment showed a significance value above 0.05. Then it can be concluded that based on the test results of normality of ability to write student description of normal distribution.

4. Results and Discussion

The prerequisite test has been met then the next is data analysis. This data analysis aims to test the hypothesis. The following test results hypothesis research using t-test and analysis of variance. Hypothesis 1, how is the influence of the use of quantum teaching methods on the ability to write the description of the 5th grade students of SD Muhammadiyah 1 Alternative Kota Magelang?

In the table can be seen that the value of significance 0.818 where the value is greater than 0.05 so it can be concluded that the use of quantum teaching method (QT) gives a positive influence on the ability to write the description of 5th grade students of Muhammadiyah 1 Alternative Kota Magelang. Hypothesis 2, how is the influence of the use of cooperative integrated reading and composition method on the ability to write the description of the 5th grade students of SD Muhammadiyah 1 Alternative Kota Magelang?

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Differ-ence	Std. Error Differ-ence	95% Confidence Interval of the Difference	
									Lower	Upper
Nilai	Equal variances assumed	,053	,818	2,674	57	,010	4,849	1,814	1,217	8,481
	Equal variances not assumed			2,684	56,952	,010	4,849	1,807	1,231	8,467

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Differ-ence	Std. Error Differ-ence	95% Confidence Interval of the Difference	
									Lower	Upper
Nilai	Equal variances assumed	1,259	,266	2,843	59	,006	5,653	1,988	1,674	9,631
	Equal variances not assumed			2,900	58,657	,005	5,653	1,949	1,752	9,553

In the table it can be seen that the value of significance of 0.226 where the value is greater than 0.05 so it can be concluded that the use of cooperative integrated reading and composition (CIRC) method positively influence the ability to write the description of 5th grade students of SD Muhammadiyah 1 Alternative Kota Magelang. Hypothesis 3, how is the influence of the use of quantum teaching method (QT) and cooperative integrated reading and composition (CIRC) method of writing the description of 5th grade students of SD Muhammadiyah 1 Alternative Kota Magelang?

In the above table, it can be seen that the significance of the quantum teaching and (QT) and cooperative integrated reading and composition (CIRC) is 0.905 where the decision is if the significance value is more than 0.05 then there is no difference of influence. So from that value can be concluded that there is no significant difference between the use of quantum teaching method (QT) and cooperative integrated reading and composition (CIRC) method to the ability to write the description of 5th grade students of SD Muhammadiyah 1 Alternative Kota Magelang.

<div align="center">TABLE 1</div>

Multiple Comparisons						
(I) Kelas	(J) Kelas	Mean Differ-ence (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
CIRC	QT	,804	1,891	,905	-3,70	5,31
	KONVE	5,653*	1,942	,013	1,02	10,28
QT	CIRC	-,804	1,891	,905	-5,31	3,70
	KONVE	4,849*	1,971	,041	,15	9,55
KONVE	CIRC	-5,653*	1,942	,013	-10,28	-1,02
	QT	-4,849*	1,971	,041	-9,55	-,15

5. Conclusion

The use of quantum teaching method (QT) and cooperative integrated reading and composition (CIRC) method have a positive effect on the ability to write the description of 5th grade students of SD Muhammadiyah 1 Alternative Kota Magelang. There is no significant difference of influence between quantum teaching method (QT) and cooperative integrated reading and composition (CIRC) method for writing skill of class 5 student of Muhammadiyah 1 Alternative Kota Magelang.

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