THE EFFECT OF *THINK TALK WRITE* (TTW) LEARNING METHOD ON THE CREATIVE THINKING ABILITY OF THE STUDENTS AT PRIMARY SCHOOL (SD) NO. 060856 MEDAN, INDONESIA

Wirda[1,2], Deny Setiawan[3], Hidayat[3]

[1]Master Student at State University of Medan (Unimed), Medan, Indonesia
[2]Headmaster/teacher at SD 060856 Medan City, Indonesia
[3]Lecturer at State University of Medan (Unimed), Medan, Indonesia

ABSTRACT: *Think Talk Write (TTW) is developed and built through the activities of thinking, talking and writing involve a problem solving in small groups. This method helps the students to actively participate, think critically, and work together and provide the opportunities for the students to work alone and cooperate with others. Many factors can affect the students' creative thinking ability. These factors can be grouped into two major parts, namely internal factors and external factors. The internal factors are factors that come from within the students namely the ability, intelligence, attitude, motivation, interests and others. Students at Primary School (SD) No. 060856 Medan gets TTW method is 80,67 and on the conventional class score average is 68,97. Thus the implementation of TTW and conventional learning methods affect the students' ability in thinking creatively. The students' ability in thinking creatively has a t_{count} (4,506)> t_{table} (1,671) and sig.2-tailed (0,000)> α=0,05 so H_0 is rejected. Based on the results of these calculations, it can be put forward the conclusion that the two classes have the different average ability of thinking creatively.*

KEYWORDS: Think Talk Write, Creative Thinking, Primary School, Conventional Class

INTRODUCTION

In the process of teaching and learning, the ability to think creatively and the students' activities should be a factor to be considered. In the selection and use of learning methods, they must be able to improve the ability to think creatively and students' activities during the implementation of learning in the classroom. So the implementation of the right learning method is the most important thing to stimulate the emergence of new ideas. One of the learning methods that can be chosen and applied is Think Talk Write (TTW). TTW method which is developed and built through the activities of thinking, talking and writing involve a problem solving in small groups. This method helps the students to actively participate, think critically, and work together and provide the opportunities for the students to work alone and cooperate with others (Isjoni, 2012: 113).

Yamin and Ansari (2009: 78) state that an expected method to grow the problem-solving ability is TTW. The flow of the TTW method begins with the involvement of the students in thinking or dialogue with themselves after reading, then talking and sharing the ideas with their friends before writing. This atmosphere is more effective if it is done in heterogeneous groups with 3-5 students. In this group, the students are asked to read, take notes, explain, listen and share ideas with friends and then express them through writing.

LITERATURE REVIEW

Learning Methods of Think Talk Write (TTW)

Teachers act as a medium in learning as well as the learning actors. The teachers are the key to successful learning in the classroom. In addition, the teachers should also have strategies and understand the effective methods when teaching. According to Ahmad (2007: 52) method of learning is knowledge of the teaching ways used by the teachers or the instructors. Another understanding says that method of learning is a presentation technique that is mastered by the teacher to teach or present the learning materials to the students in the classroom, either individually or in groups so that the lesson can be absorbed, understood and used well by the students. Meanwhile, according to Gagne, Briggs, and Wagner in Winataputra (2008: 119) argue that learning method is a series of activities designed to enable the learning process in students.

Based on the above description, it can be concluded that the intended learning method is the way taken by the teacher to deliver the learning materials so that teh learning objectives can be achieved. An expected method of learning to cultivate students' reasoning abilities is the TTW Method which is then shortened to TTW. Yamin (2008: 265), states the TTW method is "a learning method that is expected to cultivate the ability of students' understanding and communication". This method was first introduced by Huinker and Laughlin. The flow of progress of the TTW Method begins with the involvement of the students in thinking or dialogue within themselves after the process of writing, speaking and sharing ideas with friends before writing. This method is effective when it is done in small groups (heterogeneous) to 3-5 students in each group. Yamin and Ansari say there are several stages in carrying out TTW activities, they are:

1. 'Think' is interpreted as thinking. In this stage the students individually write the text of the reading that has been provided. Each student is given an opportunity to understand the contents of the text and try to make the possible settlement of the problems presented along with the supporting reasons and put it in the form of a small note.

2. 'Talk' is defined as speaking. In this stage the students discuss with friends in their respective groups, exchange ideas, to understand the text and to solve the problems presented. In this activity the students must use logical reason why they proposed such idea and why they agree or disagree with their friends. Yamin and Ansari, (2008: 231) suggest that 'Talk' is important because: (1) whether it is writing, picture, gesture or conversation, it is an intermediary of expression as a human language, (2) understanding is built through interactions and conversations between the individualswhich is a meaningful social activity, (3) the main way of communication participation is through talk. Students use language to present ideas to their friends, build shared theories, share solution methods and make definitions, (4) formation of ideas through the process of talking, (5) internalizing ideas, and (6) improving and assessing the quality of thinking.

3. 'Write; is defined as writing, in this stage of student activity are as follows: (1) construct new knowledge in a language they understand; (2) write a solution to a given problem including calculation by always giving reasons that support the answer every step by step; (3) correcting all work so that there is no work left; (4) to ensure that the work is complete, easy to read and assured of its authenticity.

Citizenship Education

In reality, Citizenship Education (PKn) is the education that recognize and appreciate the rights of citizens (civil right) with the aim that every student will be able to realize the fundamental rights, the protection guaranteed by law and can arise the empathy in the students where the awareness that other people as fellow citizens or fellow human beings are persons with the same rights that should also be respected.

Citizenship Education is intended to form the students to be persons who have a sense of nationalism and patriotism, (Act No. 23 of 2003). Sumantri (2001: 101) summed PKn as educational programs with a core of expanded political democracy with sources of knowledge, the positive effects of school, community and parents, all of which are processed in order to train the students to think critically, creatively, analytically, to behave, and to act of democracy in preparation for democratic life based on Pancasila and the 1945 Constitution.

In Curriculum Education Unit Year 2006 the subject of PKn aims to make the students have the ability to: (1) think critically, rationally, and creatively in responding to the issue of citizenship; (2) participate actively and responsibly, and act intelligently in a community, nation, and state and anti-corruption; (3) develop positively and to establish a democratic self based on the characters of Indonesian society in order to live together with other nations; and (4) interact with other nations in the world indirectly by utilizing the technology of information and the communication.

A successful Citizenship Education will lead to a mental attitude which is accompanied by behavior of: (1) faith and fear of God and understand the philosophy values of the nation; (2) The noble character, discipline in the society, in the nation and in the state; (3) rational, dynamic, and aware of their rights and obligations as citizens; and (4) are imbued with professional awareness to defend the state (Khan et al, 2002: 128). Pkn is one of the most important subjects to be taught at the primary school level. Ruminiati (2007: 15) states that Citizenship Education is one of the subjects that are directly related to people's lives and tend to affective education. But in the implementation of the learning, there are few people who misinterpret that PKN and PKn are the same thing. In fact both have a different definition and function in learning.

This is in accordance with the opinion of Soemantri that PKn (*Pendidikan Kewarganegaraan*) is the civic education of the country, which is the social subject that aims at forming good citizens, that citizens who know, who want and be able to do good deeds, while PKn (*Pendidikan Kewarganegaraan*) is a civic education, education concerning the formal status of citizens state that all about citizenship, naturalization or acquisition of the status of the regulation as a citizen (Ruminiati, 2007: 25).

Based on Permendiknas 22 year 2006 about the National Curriculum Content Standards, the subject of Citizenship Education at SD/MI is intended that the learners have the following capabilities:

1. Think critically, rationally, and creative in responding to the issue of citizenship.

2. Participate actively and responsibly, and act intelligently in the society, nation and state, as well as anti-corruption.

3. Develop a positive way and establish a democratic self based on the characters of Indonesian people to live together with other nations.

4. Interact with other nations in the world arena, directly or indirectly, by utilizing the technology of information and communication.

Thinking

Thinking is a mental activity that a person experiences when he is faced with a problem or situation to be solved. If someone is working on a problem then he cannot be separated from the activity of thinking. Creative thinking is a thinking process that produces a variety of possible answers. In solving the problem when applying creative thinking, he will generate many useful ideas in finding problem solving. To improve the ability of creative thinking requires a learning approach that can motivate the students to develop their way of thinking. Creative thinking is the ability to think creatively (cognitive) with the characteristics of fluency, flexibility, authenticity, and detail of thoughts or ideas, integrated with the creative attitudes (affective) that is senses of curiosity, willing to respond, open to experience, dare to take risks, sensitive to problems, tolerant to ambiguity, and confidence. Creative thinking will produce a new way which is different from the previous way and certainly requires the same ability as solving problems that only requires knowledge and mrely memorizing.

Having high curiosity is always looking for problems, liking challenges, optimistic, delaying decisions, liking to play with imagination, seeing problems like opportunities, seeing problems as interesting, emotionally acceptable problems, great assumptions, persistent and hard work is a necessity which is necessary in creative thinking.

Many factors can affect the students' creative thinking ability. These factors can be grouped into two major parts, namely internal factors and external factors. The internal factors are factors that come from within the students namely the ability, intelligence, attitude, motivation, interests and others. The external factors are factors that come from outside the students that is the family environment, school, community and one of them comes from the teacher such as the selection of models and learning methods. The less precise and less interesting learning method can make the students tend to feel bored when the lesson is delivered by the teacher.

RESEARCH METHOD

Place and Time of Study

This research was conducted in SD Negeri No. 060856 which is located at Jalan Rakyat Lorong Gereja no. 30 Medan Perjuangan District of Medan. The time of the study was conducted in January 2017 (Even Semester) of the academic year 2016/2017.

Population and Sample Research

The population in this study is all the students of class V in SD Negeri No.060856 Medan Perjuangan District of Medan. The total population of the research is 60 students, Class V-A 30 students, and Class V-B 30 students.

The sample in this study is the entire research population (total sampling). Furthermore, the researcher took a draw to determine the experimental class and the control class. The draw was

conducted with the objective of that the sample was homogeneous. In this study the sample was not chosen by willingness but was drawn to obtain the experimental class and the control class. The result of the drawing was then V-A class as the experimental class with TTW and V-B class was used by control learning.

Research Design

This research is an experimental study to apply a method of learning in Citizenship Education subject. The experimental design used in this research is Pretest-Posttest Control Group Design involving two groups of the students. The first group is called the experimental group that gets the learning with the TTW learning method in a small group and the second group is called the control group which gets the learning with the conventional method. The design of this study is described as follows:

Table 1: Research Design

No	Group	Treatment	Test	Observation
1	TTW (Experimental)	X_A	T_1	T_2
2	Conventional (Control)	X_B	T_1	T_2

Note

T_1 = Test of the creative thinking ability of each class

T_2 = Observation of learning activities of each class

X_A = Teaching using TTW

X_B = Teaching using conventional

(Fraenkel and Wallen, 1990: 238).

Research Procedures

The experimental research procedure is conducted through the following stages:

a. Selecting the subject, class V-A as the experimental class by using the TTW learning method.

b. Selecting the subject, class V-B as the control class by using conventional method.

c. Formulating the developed format in the test instrument on the students' creative thinking.

d. Testing the instrument on the upper class (Class VI)

e. Conducting the learning in the experimental class with TTW method and conventional method in the control class

f. Calculating the scores of the students' creative thinking skills and observations on creative thinking and learning activities.

g. Comparing the observation of learning activities and creative thinking from the experimental class with TTW learning method and the control class with conventional learning method.

Research Variables

The variable in this research consists of 2 types, independent variable and dependent variable, with the explanation as follows:

1) Free variables

Free variables are the variables that influence or cause the change or the incidence of the dependent variable (bound). The free variable in this research is TTW learning method.

2) Bound Variables

Bound (dependent) variable is the variable that is affected or the result is due to the independent variables. The bound variables in this research are the ability of creative thinking and learning activities.

Research Instruments

The instrument of this research is in the form of creative thinking instrument lattice, creative thinking observation sheet and the student activity observation sheet. Creative thinking is linked with the personality traits of the related aptitude traits associated with creativity, which is usually called the characteristics of the ability to think creatively, namely (1) sensitivity to the problem, (2) fluency which includes word fluency, expressional, and ideational; (3) flexibility, which includes spontaneous and adaptive flexibility; (4) originality; (5) elaboration; and (6) redefinition.

Creative thinking instruments are arranged based on predetermined indicators and each indicator is spelled out in several aspects of the assessment compiled using a creative thinking ability test instrument. It is three problems in each indicator. The indicators and instruments of creative thinking ability test can be put forward as follows:

Table 2: Indicators and Instruments of Creative Thinking

No.	Indicator	Assesed Aspect	Test Item
1	The skill of thinking smoothly	1. The student dare to express new ideas 2. The student expresses their responses to the problems that occur 3. The student easily finds questions about new thing	1,2,3
2	The ability to think originally	4. The student likes to think of different ways to do / solve problems 5. The student likes to give unique answer different from other friends 6. The student is easy to do new things different from others	4,5,6
3	Curiosity	7. The student loves when the teacher continues the new theme because the student wants to know many things 8. The student demonstrates his desire through activities that the child self-endeavors 9. The student wants to know a lot about something	7,8,9

4	Being active	10. The student likes to demonstrate new things 11. The student likes to imagine with new things 12. The student loves doing things that other student cannot do	10,11,12
5	Feeling challenged	13. The student loves to solve difficult problems 14. The student likes to carry out the teacher's instructions that not all students can do 15. The student loves to do things that are not previously known	13,14,15
6	Dare to take risks	16. The student dare to reveal the answer even if the student does not know the truth of the answer 17. The student is not afraid of failing to express his ideas, thoughts and feelings 18. The student dare to do a question and answer to the teacher about the learning activities undertaken	16,17,18

The average value analysis technique is based on Arikunto (2002: 216) which states that to know the final grade value in each research questionnaire, the total value obtained is divided by the total score.

$$score = \frac{number\ of\ score\ obtained}{total\ score}$$

The scoring scale used is divided into 2 lever assessment criteria. The assessment criterion is seen from the percentage of average analysis used in determining the feasibility level of the measuring instrument of creative thinking. The assessment criteria are in Table 3.4

Table 3: Assessment Criteria Percentage

Average	Category
51% - 100 %	High
0% - 50%	Low

Table 4: Observation Sheet of the Student's Creative Thinking

No.	Indicator	Assessed Aspect	Answer	
			Y	N
1	The skill of thinking smoothly	1. The student dare to express new ideas 2. The student expresses their responses to the problems that occur 3. The student easily finds questions about new thing		
2	The ability to think originally	4. The student likes to think of different ways to do / solve problems		

		5. The student likes to give unique answer different from other friends		
		6. The student is easy to do new things different from others		
3	Curiosity	7. The student loves when the teacher continues the new theme because the student wants to know many things		
		8. The student demonstrates his desire through activities that the child self-endeavors		
		9. The student wants to know a lot about something		
4	Being active	10. The student likes to demonstrate new things		
		11. The student likes to imagine with new things		
		12. The student loves doing things that other student cannot do		
5	Feeling challenged	13. The student loves to solve difficult problems		
		14. The student likes to carry out the teacher's instructions that not all students can do		
		15. The student loves to do things that are not previously known		
6	Dare to take risks	16. The student dare to reveal the answer even if the student does not know the truth of the answer		
		17. The student is not afraid of failing to express his ideas, thoughts and feelings		
		18. The student dare to do a question and answer to the teacher about the learning activities undertaken		

Note

Y: Yes (Score 1)

N: No (Score 0)

Average: High Score 51% s / d 100%

Low score 0% to 50% (Munandar, 2012, 167)

Table 5: Observation Sheet of the Student's Activity

No	Activity Indicators	Students' Behavior	Score			
			1	2	3	4
1.	*Visual Activities*	19. Paying attention to the teacher explains the learning objectives 20. Students pay attention to the instructions given by the teacher to do the task 21. Pay attention to the picture as the source of media used in the implementation of learning 22. Students pay attention and listen to friends' explanations at the time of discussion.				
2.	*Listening Activities*	23. Students listen to explanations based on material submitted 24. Students listen to friends' explanations during discussion 25. Students listen to answers / opinions of friends 26. Students listen seriously when there is difficult material				
3.	*Motor Activities*	27. Students may provide additional knowledge to complete the assigned task 28. Students can cooperate in an orderly manner 29. Students can provide solutions 30. Students can be responsible with the task of the group				
4.	*Writing Activities*	31. Students record information collected relating to the subject matter 32. Students take note of important matters in the implementation of group discussions and investigations 33. Students make reports of group discussions and investigations 34. Students record things that are difficult to understand				
5.	*Oral Activities*	35. Students ask the teacher if there is anything less understood 36. Students ask friends if there are things that are not understood 37. Students are active in discussing income 38. Students actively answer questions when asked questions				
6.	*Emotional Activities*	39. Students earnestly participate in group discussion and investigation activities 40. Students can take care of their emotions when asking questions 41. Students are courageous in expressing their opinions 42. Students are able to distance themselves from conflict				

7.	*Mental Activities*	43. Students actively respond to friends' explanations during group discussions			
		44. Students reflect on the results of other group discussions			
		45. Students are active in responding to the results of discussions or other group investigations			
		46. Students actively analyze the results of the discussions and investigations they have done.			

Note

(A) Score 4 if 4 descriptors are observed for each type of activity

(B) Score 3 if 3 descriptors are observed for each activity type

(C) Score 2 if 2 descriptors are observed for each activity type

(D) score 1 if 1 descriptor is observed for each activity type

Calculation formula for activity score:

$$\text{\% Student's Activity Score} = \frac{Achievement\ Score}{Maximal\ Score} \, x\, 100\% \quad \text{(Aqib, 2010:67)}$$

Testing of Research Instruments

Validity of Test Instruments

Testing and measuring the validity of the tests is determined by using the Product Moment Correlation formula from Karl Pearson described by Arikunto (2003: 67). The test was conducted to the students who are in grade 6. The test testing criteria is declared as valid if r_{xy} count $> r_{\,table}$ at a significant level of 5%.

$$R_{xy} = \frac{N\Sigma XY - (\Sigma X)(\Sigma Y)}{\sqrt{\{N\Sigma x^2 - (\Sigma X)^2\}\{N\Sigma Y^2 - (\Sigma Y)^2\}}}$$

Note

R_{xy} = Correlation coefficient

$\sum X$ = Score item

$\sum Y$ = Total score

N = Number of subjects

Reliability

Meanwhile for the calculation of the questionnaire reliability of the students' motivation is determined by the formula Alpha coefficient described by Arikunto (2003: 68), namely:

$$r_{11} = \left(\frac{K}{K-1} \right) \left(1 - \frac{\Sigma \sigma b^2}{\sigma t^2} \right)$$

Note:

r_{11} = Test reliability coefficient

K = Number of test items

$\Sigma \sigma b^2$ = Number of variance items (items)

Σt^2 = Total variance

Variances of items are calculated by using the formula:

$$\Sigma \sigma b^2 = \frac{\sum X_i^2 - \dfrac{\left(\sum X_i \right)^2}{N}}{N}$$

The total variance is calculated by using the formula:

$$\Sigma t^2 = \frac{\sum X_i t^2 - \dfrac{\left(\sum X_i t^2 \right)^2}{N}}{N}$$

With the correlation index presented in the Arikunto's book is as follows:

- Between 0.800 to 1.00   = very high

- Between 0.600 to 0.800   = high

- Between 0.400 to 0.600   = enough

- Between .200 to 0.400   = low

- Between 0,000 to 0.200   = very low

Data Analysis

Data obtained from the students' test results were analyzed statistically. Meanwhile the observation result of the students' learning activity is analyzed descriptively and inferentially.

Data processing

1) Scoring the students' answers in accordance with the assessment guidelines.

2) Creating a table of values obtained by the students either pretest, posttest or normalized gain from the experimental class and the control class's ability in thinking creatively, problem solving, and combination of both aspects.

3) Calculating the normalized gain with the formula:

$$\text{Gain Index } (g) = \frac{\text{Posttest Score - Pretest Score}}{\text{Ideal Score - Pretest Score}}, \text{(Meltzer, 2002:112)}$$

The gain index criteria are:

$g > 0,7$ high

$0,3 < g \leq 0,7$ medium

$g \leq 0,3$ low, (Hake in Meltzer, 2002:213).

In this research, the normalized gain is used to determine the students' ability in thinking creatively gain since the absolute gain (the difference of posttest value and pretest value) does not adequately reflect the improvement achieved by the students.

4) Calculating the average value of each value group by the formula:

$$\overline{X} = \frac{\Sigma\, X}{N}, \text{ (Arikunto, 2003:71).}$$

Calculates the standard deviation of each value group by the formula:

$$s = \sqrt{\sum_{i=1}^{k} \frac{(x_i - \overline{x})^2}{n-1}}, \text{ (Arikunto, 2003:71).}$$

6) Testing the normality of each value group by the formula χ^2 ((Chi-square), namely:,

$$\chi^2_{count} = \sum \frac{(f_o - f_e)^2}{f_e}, \text{ (Arikunto, 2003:72).}$$

f_o = Frequency of observation

f_e = Frequency of expectation

Criteria: normally distributed data, if $\chi^2_{count} < \chi^2_{list}$ with $\chi^2_{list} = \chi^2_{(1-\alpha)\,(J-3)}$ for $\alpha = 1\%$ and J represents the number of interval classes. In other cases, the data is not normally distributed.

7) Testing the homogeneity of variance between the experimental class and the control class in the pretest, posttest, and normalized gain data in order to know the homogeneity of the variance of the two classes. This test uses free variant variance test with hypothesis formulation:

H$_o$: $\sigma_1^2 = \sigma_2^2$

H$_a$: $\sigma_1^2 \neq \sigma_2^2$

σ_1^2 = Variance of experiment class values

σ_2^2 = Variance of control class values

The statistical test formula used is:

$$F_{max} = \frac{s_{large}^2}{s_{small}^2} \text{, (Arikunto, 2003:74).}$$

Criteria: H$_o$ is accepted if $F_{maks} < F_{list}$ with $F_{list} = F_{(1-\alpha)(n_1-1)(n_2-1)}$ for $\alpha = 1\%$.

8) Test the hypothesis.

The several hypotheses tested are:

a) The influence of the use of TTW learning method on the students' ability in thinking creatively on Citizenship Education subject in SD Negeri No.060856 Medan City.

b) The influence of the use of TTW learning method on the students' learning activities on Citizenship Education subject in SD Negeri No.060856 Medan City.

c) The influence of the use of TTW method on the students' ability in thinking creatively and the students' activity on Citizenship Education subject in SD Negeri No.060856 Medan City.

Furthermore, to test each hypothesis, analytical techniques were conducted if the data of both classes are normally distributed and the two variances are homogeneous, the t-test formula used is

$$t_{count} = \frac{\overline{X}_1 - \overline{X}_2}{s\sqrt{\dfrac{1}{n_1} + \dfrac{1}{n_2}}} \text{ with } s^2 = \frac{(n_1-1)s_1^2 + (n_2-1)s_2^2}{n_1 + n_2 - 2}$$

$$\text{or } s = \sqrt{\frac{(n_1-1)s_1^2 + (n_2-1)s_2^2}{n_1 + n_2 - 2}} \text{ (Sudjana, 2002: 239).}$$

Criteria: H_o is accepted if $t_{count} < t_{list}$ dengan $t_{list} = t_{(1-\alpha)(n_1+n_2-2)}$ for $\alpha = 1\%$.

If both groups are normally distributed but the two variances are not homogeneous, the t-test formula is used as follows:

$$t'_{count} = \frac{\overline{X}_1 - \overline{X}_2}{\sqrt{\dfrac{s_1^2}{n_1} + \dfrac{s_2^2}{n_2}}}, \quad \text{(Sudjana, 2002: 241).}$$

DISCUSSION

After conducting the learning, the students' ability in thinking creatively tests are conducted on each class by using TTW and conventional methods. The number of the students who take the TTW class test is 30 people and 30 for conventional class. The ability test results of thinking creatively in each class can be stated below:

Tabel 6: Score Data of Thinking Creatively Skill Test

No	Class Test Score TTW	Frequency	Class Test Score Conventional	Frequency
1.	56-62	2	50-56	2
2.	63-69	3	57-63	6
3.	70-76	5	64-70	10
4.	77-83	10	71-77	6
5.	84-90	5	78-84	4
6.	91-97	3	85-91	2
7.	98-104	2		
	Total	**30**	**Total**	**30**
	$\overline{X}_1$	80,67	$\overline{X}_2$	68,97
	S	124,78	S	77,48
	S^2	11,17	S^2	8,80

From the calculation of hypothesis testing the influence of learning methods on the students' thinking creatively ability is known that the acquisition of average scores on the class using the method of learning TTW that is equal to 80.67 and on the conventional, the average score of the class is 68.97. Thus the implementation of TTW and conventional learning methods affect the students' ability in thinking creatively.

Based on the research results obtained, the average score of the students' ability in thinking creatively taught by using TTW learning method is 80.67, while teaching by conventional method is 68.97. The results of this study prove that the students' ability in thinking creatively taught by using TTW learning method is higher than using conventional learning methods.

The result of hypothesis test proved that both data of the students' ability in thinking creatively by using TTW learning method and the conventional learning method have the score of t_{count} (4,506)> t_{table} (1,671) dan *sig.2-tailed* (0,000) <α=0,05 so that H_0 is rejected. Based on the

results of these calculations, it can be put forward the conclusion that the two classes have the different average ability of thinking creatively.

CONCLUSION

There is an influence of learning method to the student's ability in thinking creatively. From the calculation result of the hypothesis test on the influence of learning method to the students' ability in thinking creatively known that the average score on TTW method is 80,67 and on the conventional class score average is 68,97. Thus the implementation of TTW and conventional learning methods affect the students' ability in thinking creatively. The students' ability in thinking creatively has a t_{count} (4,506)> t_{table} (1,671) and *sig.2-tailed* (0,000)> α=0,05 so H_0 is rejected. Based on the results of these calculations, it can be put forward the conclusion that the two classes have the different average ability of thinking creatively. There is an influence of learning method to the students' learning activity when it is known that average score on TTW method is 90,93 and in the class convention average score is 78,17. The comparison of the two data on the students' learning activity has a t_{count} (4,641) > t_{table} (1,671) and *sig.2-tailed* (0,000) <α=0,05 so that H_0 is rejected. Based on the results of these calculations, it can be raised the conclusion that the two classes have a different average learning activity.

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