

The Difference of Learning Model Think-Talk -Write (TTW) and Conventional Learning Model in Improving Students Critical Thinking Skills in Sociology Subject

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Abstract -- In the beginning there are some conditions of students at SMAN 10 Bandung in learning activities in sociology subject, in teaching and learning activities is still the teacher centered, the use of learning models are less varied, there are some learners who have low ability in think critically. The researchers conducting this study is to know the difference between learning model Think -Talk -Write with the conventional learning model to improve critical thinking skills of students in class XI at sociology subject. This research used a quasi-experimental, research patterns is using Nonequivalent Control Group Design, the results are processed using the short method. The results showed that there is no the differences in improving the critical thinking skills by using learning model Think, Talk and Written and conventional methods in sociology subject through pretest-post test with 7 degrees of freedom, a significance level 1% and arithmetic t is 3,499, However there is an increase in visits from the processed.

Keywords -- Think -Talk -Write, Conventional Learning Model, Critical thinking

I. INTRODUCTION

Learning is the attempt to discover something new, attempts to master means the real learning activities and something new is the result of the learning activities. As a result of learning the new changes can be encapsulated in dimensions from not knowing being couldn't know, from being able to, of not willing to be willing, and from unusual became accustomed. In fact, the school as a social system that focuses on the system of education is a place that has a climate that is conducive to support the teaching and learning process in achieving the national education goals. But in fact, when the process of teaching and learning educators just convey, transforming the knowledge to learners in the class or prefer the educator as a center of learning (teacher centered learning). As a result students have less sensitivity, liveliness against social event or phenomenon that exists surrounding up to lose the chance posited opinion and defend his position when confronted with issues, social phenomena that occur.

The problem faced at this time with regard to teaching and learning activities that are less effective against the level of critical thinking ability learners. Seen from the large number of educators in teaching and learning practices are still using models or methods of learning are less creative, giving rise to Burnout to learners. The learning model

used educator at the moment most are lectures so that less emphasis upon the learning process. The liveliness of the learners that are less visible than the absence of inquiry while teaching and learning activities. Problems of the study of sociology at SMAN 10 Bandung in General that third class who researched there is a similar problem that is there is still a level of learners the critical thinking ability of low seen in educators pose social problems to be analyzed is less responsive to learners, give you an idea or ideas when faced with a problem, don't ask questions.

Based on existing problems in class XI IPS SMAN 10 Bandung, alternative problem solving is the most important driving factor to determine a successful teaching and learning in the classroom. Therefore the educator is required to enhance the roles and competencies, competent educators will be better able to create an effective learning environment and will be better able to manage its class so that student learning outcomes are at the optimal level. One of the ways that can be used in order to obtain optimal results as desired-based model is giving problem in the learning process. This can be done by choosing the right learning model by comparing model learning Think - Talk - Write and conventional Learning in increasing the ability of critical thinking.

II. THEORY

Own learning models are usually arranged by a variety of principles as well as learning theory as a basis for the establishment of the learning model. This is in line with the opinion of the Joyce & Weil (Rusman 2012, pp. 132) that "the experts compiled the study based on the principles of learning, psychological theories, sociological, systems analysis, or other theories that support." So, the learning model are arranged with attention to the directional variety theory point of view up to the principle of learning, so that learning model created in accordance with the development of cognitive learners even able to improve the ability of good attitude or skills or knowledge. Therefore, with the creation of the learning model can help educators in realizing learners character through the learning process with the results of changes in self learners from not knowing being couldn't know, from being able to, of not willing to be willing, and from unusual became accustomed.

A wide variety of learning models can help the learning process in the classroom to achieve goals in expected. One of them is by giving emphasis on learning activities through the

learning model Think-Talk-Write, this model first introduced by Huniker and Laughin. Think-Talk-Write (in Huda. 2014, PG. 218) States that:

"The strategy that facilitates the practice of speaking in oral and writing that language fluently. The technique of Think-Talk-Write was introduced by Huinker Laughin and is based on the understanding that learning is social behavior. Think-Talk-Write allow learners to influence and manipulate ideas before pouring in the form of writing, this also helps students collect ideas through conversation are structured. "

The learning procedure Think-Talk-Write that in the adduce Huinker and Laughin (Huda. 2014, pp. 218-220) i.e.: 1) Think (Think)-students read the text in the form of the question, at this stage the learners individually thinking of possible answers (the completion strategies), make a small note about the ideas contained on readings and things that cannot be understood by using its own language. 2) Talk (Talk)-learners are given the opportunity to discuss the results of the study on the first stage. At this stage the learners will reflects, compiling, and testing (negotiation, sharing) ideas in the group discussion activities. The advancement of communication students will look of the dialogue in the discussion, both in exchanging ideas with others or their own reflection expressed in others. 3) Write (write)-at this stage the learners jot down ideas that are getting in the activities of the first and second stages. This paper consists of the cornerstone concepts used, the interconnectedness of the settlement, and the solutions are obtained.

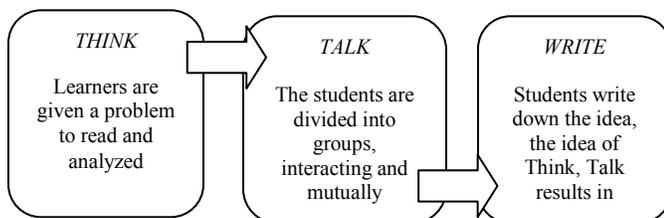


Figure 1. The learning Procedure Think-Talk-Write

According to Huda (2014, PG. 220) to realize the learning that correspond to the above expectations, learning should designed according the following steps: 1) Teachers share a problem that contains a question that has to be done by students as well as hints of its implementation. 2) Students read the text and make a note of the results of the readings are individual (think) to be brought in discussion. 3) Students interact and collaborate with a group of friends to discuss the side of little note (talk). In this activity they use language and their own words to convey ideas in the discussion. In the wake of understanding through interaction, therefore discussions expected to produce solutions to problems that are given. 4) Students construct their own knowledge that

includes an understanding of argumentation in writing (write). last activity 5) learning is creating reflections and conclusions over the material studied. Before that, the chosen one or several groups as representatives to present answers, while the other groups are being asked to provide a response.

According to Martindas (in Wibisono, PG. 3) says that "critical thinking is a mental activity which is carried out to evaluate the truth of a statement. Evaluation generally ends with the verdict to accept, deny, or doubted the truth of the statement in question ". While according to Suryati (Appointed in 2010, PG. 40) posited a "critical thinking skills i.e. the ability to analyze issues that concern on various subjects, giving the argument, the emergence of insight and provide interpretation". So based on the definition above can researchers conclude that critical thinking skills is a directional and clear processes used to deal with social phenomena concerning issues such as subjects, social problems and are required to give the argument as well as being able to solve the problem so that it is able to give a decision and produce a rational solution.

Cognitive theories have the perspective that when learners process the information and lessons learned through its efforts to process, store, and connecting new knowledge with existing knowledge. This is in line with Baharudin and Wahyuni (2008, pp. 87) which States that:

"Cognitive Flow looked that learning activities is not just stimulus and response that is mechanistic, but more than that, learning activities also involve mental activities that exist in the individual that is being studied. Therefore, according to the flow of the cognitive, learning is a mental process that is active to achieve, remember and use knowledge. "

Gestalt theory more emphasis on perception, because according to Gestalt theory proponents is not just a human being who can only react if there is a stimulus that affects. Besides than that, because man is a creature that is spiritually good intact as well as physical. Therefore, at the time of the learners in action on the environment, the individual not only respond but will involve a subjective element, namely the thought process for addressing the environment and thinking ability learners one another differently. While according to Baharudin and Wahyuni (2008, PG. 88) States that:

"Gestalt Theory appears influenced by gestalt psychology with figures such as Max Wertheimer, Wolfgang Kohler, and kurt Koffka. Gestalt theory looks at learning is a process which is based an understanding (insight). Because basically every person's behavior based on cognition, i.e. the Act know or think of a situation where the conduct occurred. "

III. METHOD

Method used in this Research uses quasi experimental research methods. Understanding method of quasi experiment according to Sugiyono (2012:77) is a form of a quasi experiment this is the development of a true experimental design. The purpose of the research experiment is to investigate whether or not there is a causal relationship with a specific way of giving preferential treatment to a group indicated. The selection method was adapted to the purpose to be achieved, i.e. to test the difference in model learning think – talk – write (ttw) and conventional model learning in improving critical thinking ability learners on the subjects of sociology. Research on the design using design nonequivalent control group design in the form of a quasi experiment developed from true experimental design.

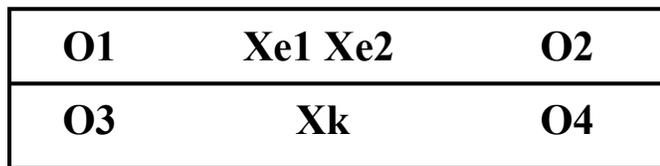


Figure 2: Pattern Research *Nonequivalent Control Group Design*

In this study uses two classes, one class as TTW class. The steps that are used for class wants are the granting of pretest-posttest model of learning – treatment to see results. Quantitative data obtained by the researcher during the research derived from written test pretest and posttest be reserved as many as 25 multiple choice questions with 5 grain option answers every question. Quantitative data processing during research are done manually by researchers without the use of any program or software. The short method used to find out the difference in the success of the application of the learning model. Short method was chosen because according to researchers far more efficiently and using them is not difficult. With the formula:

$$t = \frac{MD}{\sqrt{\frac{\sum d^2}{N(N-1)}}}$$

To find out the difference of success through test t Traffinger then researchers test hypothesis test. The null hypothesis (Ho): there is no difference in improvement of critical thinking ability among the learning model Think-Talk-Write with conventional methods on subjects of sociology. Alternative hypothesis (H1): there is a difference between critical thinking ability increases learning Think-Talk-Write with conventional methods on subjects of sociology.

In hypothesis testing is done by comparing the final test results after treatment or posttest between learning model Think-Talk-Write with conventional methods, then

researchers made the guidelines and answer keys (an objective test) the results of which are made into a guideline to calculate results using short posttest method.

IV. RESULT

TABLE I: *MATCHED SUBJECT SKOR POSTTEST EKSPERIMEN 1 DAN KONTROL*

EKSPERIMEN 1			CONTROL		
NO	NAME	SKOR	NO	NAME	SKOR
1	Yusuf M	21	1	M. jafar S	19
2	Teuku A	19	2	Yusron C	19
3	Rhendi R	19	3	Wicaksono	20
4	Yuda D	20	4	Rifki B	19
5	Ratna W	22	5	Dinda A	22
6	Selviana I	20	6	Melia U	19
7	Fanisa	21	7	Haryang M	19
8	Annisa F	20	8	Alia W	19
	RATA-RATA	20,25		RATA-RATA	19,5

Source: Prepared by researchers

TABLE II: *POSTTEST TEST-T WITH SHORT METHOD*

NO	Xk	Xe1	D=(Xk-Xe1)	d=(D-MD)	d²
1	17,5	20	-2,5	-1,5625	2,44140625
2	17,5	17,5	0	0,9375	0,87890625
3	18,75	17,5	1,25	2,1875	4,78515625
4	17,5	18,75	-1,25	-0,3125	0,09765625
5	21,25	21,25	0	0,9375	0,87890625
6	17,5	18,75	-1,25	-0,3125	0,09765625
7	17,5	20	-2,5	-1,5625	2,44140625
8	17,5	18,75	-1,25	-0,3125	0,09765625
	145	152,5	-7,5	0	11,71875

$$MD = \frac{\sum D}{N} = \frac{-7,5}{8} = -0,9375$$

$$t = \frac{MD}{\sqrt{\frac{\sum d^2}{N(N-1)}}} = \frac{-0,9375}{\sqrt{\frac{11,71875}{(8(8-1))}}} = \frac{-0,9375}{\sqrt{\frac{11,71875}{56}}} = \frac{-0,9375}{\sqrt{0,209263}} = \frac{-0,9375}{0,4574} = -2,049$$

Based on the above calculations and tables, then the degrees of freedom for the t-test is the number of the researched sample minus one, or 8-1 = 7. Of the process of the calculation using the short method, obtained the value t calculate registration-2.049. To reject the null hypothesis (Ho), required value of t a count equal to or greater than and less than the 3.499 at 1% significant level and degrees of freedom 7. Because the t-value calculates earned less than and greater than the 3.499 at significant levels of 1%, then the H1 was rejected and Ho is accepted. So, there was no difference in improvement of critical thinking ability among the learning model Think-Talk-Write with conventional methods on subjects of Sociology on the experimental class 1 processed XI IPS 4 and class processed control XI IPS 3.

On the process of implementation of the learning model Think – Talk – Write, an ability which obtained the learners when viewed from the process in addition to enhance the critical thinking ability of knowledge-knowledge that developed during the process of extracting information, improve skills in speaking and suggested. The opinion of researchers in line with cognitive learning theory, if in theory development of Piaget's cognitive development is very influential on the development of the language, then in theory development of language development, UN Bruner great influence in the development of cognitive. In this study, a model of Think, Talk and Written in line with the theory of cognitive development Bruner, where if the students made it through this learning step Besides enhancing language proficiency is also increasing cognitive learners as a result of the granting a problem to discuss.

V. CONCLUSION

Based on table and calculation on classroom learning model with one experiment Think – Talk – Write a control class using the conventional learning model, with the degrees of freedom for the t-test is the number of samples examined minus one, or $8-1 = 7$. Of the process of the calculation using the short method, obtained the value t calculate registration-2.049. To reject the null hypothesis (H_0), the required value of t a count equal to or greater than and less than the 3.499 at 1% significant level and degrees of freedom 7. Because the t-value calculates earned less than and greater than the 3.499-3.499 at significant levels of 1%, then the H_1 was rejected and H_0 is accepted. So, there is no difference between critical thinking ability increase learning Think – Talk – Write by conventional methods on subjects of Sociology on the experimental class 1 processed XI IPS 4 and class processed control XI IPS 3. Even so, the increased critical thinking ability learners cannot be measured from acquisition of learning outcomes in the form of multiple choice tests only, but can be seen from the process of implementation of the learning model Think – Talk – Write. This is in line with the opinion on the cognitive learning theory that is more concerned with process than results improved thinking learners during a learning process using model learning

Think – Talk – Write critical thinking ability learners above 3.00.

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