Student Activeness through Think Talk Write (TTW) Model

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Abstract: This study aims to analyze the influence of Think Talk Write (TTW) learning model on the activeness and learning outcomes of grade 4 primary school students. The type of research conducted is experimental research with non equivalent control group design research design. The instrument used in this research is the observation sheet liveliness of student learning and grain of learning result. The data of activity of activeness show t_{count} $(21,179)>t_{table}$ (1.682), this means there is difference of student activeness. After the treatment was held and posttest, the activeness of the experimental class was higher than the control class. So, there is influence of learning model of TTW to student's learning activeness. While for testing of second hypothesis, data of student learning result (pre-test) with t_{count} $(0,015)<t_{table}$ (1.682) it shows no difference of learning ability. And implemented post-test then data result of research result of student learning (posttest) shows t_{count} value $(4,200)>t_{table}$ (1.682) this means that there is difference of ability of result of student learning. After given treatment and implemented posttest, result of student study in experiment class higher than the control class. Thus, there is an influence of the TTW learning model on student learning outcomes. Based on the results of data analysis it can be concluded that cooperative learning model type TTW affect student activeness and learning outcomes significantly.

INTRODUCTION

Education prepares human beings to thrive on the life of today and the future. Education will greatly determine the quality of one's self in social life of society. Dewey states that education is a process of formation of fundamental basic capabilities whether it concerns one's intellectual, intellectual or emotional. We can know that education is an effort that is formed through learning in developing intellectual coaching child's personality.

Education is an effort made in a conscious and planned to realize the atmosphere and the learning process so that, learners are actively able to develop the potential that exists within him to have spiritual strength, good personality, self-noble self-control, intelligence and skills required by himself and society (national education system law No. 20 of 2003).

One of the subjects that is contained in education is social science. Social knowledge plays an important role in everyday life. Social science has a role in developing

the critical thinking skills of students. According to Somantri (Sapriya, 2009) social science is the simplification or adaptation of the disciplines of social sciences and humanities as well as basic human activities are organized and presented scientifically and Pedagogical/psychological for educational purposes.

Teachers should plan an active and meaningful learning for the students, so that, they are able to understand what is learned and eager in the process of teaching and learning in the classroom. Teachers can develop their learning by using methods or models of active and innovative learning, so that, students will be more encouraged and excited when the process of teaching and learning is taking place in the classroom.

There needs to be an innovative condition in the classroom to support interesting, fun and fun learning as well as the need for renewal and improvement in learning where the teacher as a facilitator and motivator in making changes and improvements in social study process. In this research researchers offer solution by using cooperative learning model of TTW type. Because this model requires students to think more independently and discuss and cooperative learning this type of TTW can train students to improve liveliness in the learning process.

Think Talk Write (TTW) is a careful planning and action of learning activities that is through thinking activity, thinking activity can be seen from the process of reading a reading text, a learning material then make a record of what has been read. In this stage individual students think of possible answers (settlement strategies), making notes of what they have read, whether they are what they know or the steps of completion in their own language. After the stage think is don then followed by the next stage of talk that is communicating by using words and language they understand. The communication phase (talk) on this strategy allows students to be skilled at speaking and is a means of expressing and reflecting on the minds of students.

The formulation of the problem in this research are; Is there any difference of student activeness given by using cooperative model of TTW type and conventional learning in elementary school?; How is the influence of TTW type cooperative learning model on the primary school student's learning outcomes? In general, the results of this study are expected to be used to develop and provide information on how TTW cooperative learning model (Think Talk Write) is used in the learning process in primary school.

Coneptual framwork
TTW (Think Talk Write) type learning model: Think Talk Write (TTW) is one model of cooperative learning that can stimulate learners to become more active in constructing or building their understanding independently. The TTW model is also known for individual learning in groups.

Think Talk Write (TTW) is the first model introduced by Huinker and Laughlin, TTW is basically built through thinking, speaking and writing. The flow of TTW strategy progress starts from the involvement of students in thinking or dialogue with themselves after the reading process. Next, talk and share ideas with friends before writing. This kind of atmosphere is more effective if done in heterogeneous groups with 3-5 students. In this group, students are asked to read, make small notes, explain, listen and share ideas with friends then express it through writing. Huinker and Laughlin states that "The think-talk-write strategy builds in time for thought and reflection and for the organization of ideas and the testing of those ideas before students are expected to write. The flow of communication progress from the student engaging in thougth or reflective dialogue, discussing and sharing ideas with one another to writing".

The Think Talk Write (TTW) learning model builds thinking, reflecting and organizing ideas then testing those ideas before learners are expected to write. The flow of the Think Talk Write (TTW) learning model starts from the student's involvement in thinking or dialogue with himself after the reading process. Next, talk and share ideas with friends before writing. Think Talk Write (TTW) as a learning strategy has three important stages to be developed and done in learning, three important phases described by Huinker and Laughlin that is:

Thinking stages (Think): According to Huinker and Laughin "Thinking and talking are important steps in the process of bringing meaning into student's writing". The point is that thinking and talking/discussing are important in the process of bringing understanding into student's writing. Thinking activity can be seen from the process of reading a reading text, a learning material then making a note of what has been read. At this stage, individual students think of possible answers (settlement strategies), making notes of what they have read, whether they are what they know or their resolution steps in their own language.

Stage talk (speaking): After the think phase is over, followed by the next stage of talk that is communicating using words and languages that they understand, the communication phase (talk) on this strategy allows students to be skilled at speaking. Communication process is learned by students through their lives as individuals who interact with their social environment. Naturally and easily, the communication process can be built in class and utilized the tool before writing. Understanding is built

through its interaction in the discussion. Discussion is expected to produce a solution or a given problem. Discussion on this talk phase is a means to express and reflect student's minds. In the talk stage, the teacher's job is as a facilitator and a motivator. As a facilitator, teachers should always give direction and guidance to groups that have difficulty, especially in terms of material, whether requested or not asked. As a motivator, teachers always give encouragement to students Yang Feel less confident about the results of their work and or groups of students who get stuck to find an answer. Teachers should also be able to motivate students who in the discussion activity is less active or even very passive. Teachers should encourage the students concerned that the ongoing discussion is important to live in, so that, they can understand for themselves.

Purba states that communicating in a discussion can help collaborate and enhance learning activities. This may happen because when students are given the opportunity to bomb at the same time they also think how to reveal it in writing.

Write stage (write): Both Wila and Wisnowska state that "writing can help students make their tacit knowledge and thoughts more explicit, so that, they can look at and reflect on, their knowledge and thoughts". Meaning, writing can help students to express knowledge and saved ideas to better see how their knowledge and ideas are.

The write phase is the phase of writing out the results of the discussions on the worksheets provided. Writing activity means constructing ideas because after discussing friends and then expressing them through writing. Writing activities will assist students in making connections and also allow teachers to see the development of student concepts. Student writing activities for teachers can monitor student misconceptions, misconceptions and conceptions of the same idea.

Activeness: Activeness is a principle that is very important in the interaction of teaching and learning because in principle learning is doing is doing to change the behavior into activities. A learning process essentially to develop the activity and creativity of students through various interactions and learning experiences gained. Sadirman (2006) states activity is physical and mental that is doing and thinking, the relationship between the two will result in active learning in the optimal.

According Sarofah learning activities are very important for students because it provides an opportunity for students to come into contact with the object being studied as widely as possible because then the process of knowledge construction will happen better. Children can

be active because of the motivation, the task as an educator is providing conditions for students to develop talent and potential him. Basically learners who have activeness do and must have their own activeness.

Learning is an activity that can be done physiologically or psychologically, psychological activity that is activity which is mental process for example activity thinking, comprehending, concluding, listening, studying, comparing, differentiating, expressing, analyzing and so on. While activities that are physiological, i.e., activities that are the process of application or practice such as conducting experiments or experiments, exercises, practical activities, making product work, appreciation and so forth.

Active in Big Indonesian dictionary means enterprising (working, working). Activenes interpreted as a state where learners can do active which means active to construct the ability in learning process. McKeachie points out that the principle of individual liveliness is "an active, inquisitive learning human being" and Thorndike expresses student learning activeness in learning by law "law of exercise" stating that learning requires practice (Dimyati and Mudjiono, 2010).

All knowledge must be gained by self-observation, self-experience, self-inquiry by self-employment with self-created facilities, spiritually and technically. In the journal Kennedy states that "Students learn more effectively by actively analyzing, discussing and applying content in meaningful ways rather than by passively absorbing information". Can be interpreted that students learn more effectively by actively analyzing, discussing and apply the concepts that have been taught, not passive students when absorbing information.

Active students during the teaching and learning process is one indicator of the desire or motivation of students to learn, students are said to have a liveliness if found behavioral traits often ask the teacher or other students, willing to do the task given by the teacher, able to answer questions, Learning tasks and so forth. So all the characteristics of these behaviors can basically be reviewed from two aspects namely the process and in terms of results. Widodo states that the presence or absence of learning is reflected in the presence or absence of activity in the absence of activity, learning is not possible. So in the interaction of teaching and learning activities is an important principle.

From the description above can be concluded that the activeness is a series of physical activities non-physical or in a lesson that emphasizes the learners as implementers in the learning process to move actively aimed at obtaining cognitive, affective and psychomotor information to achieve maximum results in the learning process activities. And the activity of students is very

supportive of the implementation of teaching and learning activities can run smoothly and the achievement of educational goals.

MATERIALS AND METHODS

Research design: This type of research is included in the type of quantitative research that aims to measure the influence of independent variables that is the use of Think Talk Write (X) learning model on the dependent variable that is learning activeness (Y1) and learning outcome (Y2).

The research design used was experiments that had a purpose to reveal the causal relationships among variables. Population determination was not done randomly based on the ability of the child. With non-equivalent control group design research technique that has two groups: control group and experimental group. This control group will be the comparison of the experimental group, the experimental group will be given treatment, so that, the results will be obtained that will be compared with the control group.

The research design will be used by quasi experimental design, so, after the control group and experimental group determined the data collection was done by giving pretest to both groups which was done at the beginning before the treatment was given to the experimental group to know the initial ability of both groups and to posttest the two groups after the experimental group was given treatment to know the effect of giving treatment to student learning outcomes.

Data collection technique: Data collection techniques are the means used to collect data. In this study, researchers used data collection techniques as follows:

Observation: Observations are observations made by taking into account psychic symptoms for data recording. The use of this observation technique is carried out while the on-going teaching-learning process is in the classroom. The usefulness of this technique is to observe student's activeness in the learning process in the classroom. Activeness observed are visual activities, oral activities, listening activities, writing activities, mental activities and emotional activities.

Test: This technique is used by researchers to measure student learning outcomes. In this study, researchers will use data collection techniques in the form of objective tests. The objective test used will be given to the control group and experimental group for two times, namely pretest and posttest. For pretest will be given before giving treatment to the experimental group to know the

data or the initial knowledge of both groups and of course will be found the data in the form of learning result value from two groups. Posttest was given to both groups after experimental group was given treatment by using TTW type cooperative learning model (Think Talk Write) in order to know the final condition of both groups. From this test will be obtained student learning outcomes of the two groups will be compared, so, it can be known how is the effect of treatment applied to experimental groups on student learning outcomes.

Documentation: This technique is used by researchers to support verification of validity in the implementation of research.

RESULTS AND DISCUSSION

Test of research instrument: Test of research instrument consist of test of validity and reliability. The data used for validity and reliability test in this research is result of early observation learning outcomes and activeness of student learning. Test validity of research instrument using product moment correlation with help of program SPSS 17 for windows.

Test the validity of research instruments conducted by analyzing the relationship between scores of each item with the total score. Test validity questionnaire research described as follows (Table 1).

The result of validity test above shows that significant r count <0.05 then all the items about the variable of student learning activeness a and learning outcomes are declared valid. Thus it can be seen that all statement/indicator on the variable of activity of academic student learning and learning result is valid. The next test is the reliability test, the test is done related to the provisions.

The results of the reliability test on the activeness variables of learning academic students and learning outcomes to produce value of alpha Cronbach's more than 0.60. Thus it can be seen that the variable activeness learning academic students and learning outcomes in this study is reliable (Table 2).

Description of research variable: Student activeness variables measured from 5 (five) indicators and learning outcomes measured from 15 questions where each of these indicators are 5 (five) assessment scales:

Learning outcomes:
- Score 1: Very less = 10-29
- Score 2: Less = 30-49
- Score 3: Fair = 50-69
- Score 4: Good = 70-89
- Score 5: Very good = 90-100

Table 1: Validity test

Indicators	Correlation coefficient (r_{count})	p-values	Information
Academic students learning activeness			
VA	0.712	0.000	Valid
OA	0.714	0.000	Valid
LA	0.660	0.002	Valid
WA	0.845	0.000	Valid
MA	0.687	0.001	Valid
EA	0.863	0.000	Valid
Items			
1	0.698	0.001	Valid
2	0.453	0.045	Valid
3	0.453	0.045	Valid
4	0.553	0.011	Valid
5	0.522	0.018	Valid
6	0.746	0.000	Valid
7	0.453	0.045	Valid
8	0.453	0.045	Valid
9	0.553	0.011	Valid
10	0.746	0.000	Valid
11	0.462	0.040	Valid
12	0.462	0.040	Valid
13	0.615	0.004	Valid
14	0.590	0.006	Valid
15	0.831	0.000	Valid

Table 2: Reliability test of the research variable

Research variables	Alpha cronbach's
Academic students learning activeness	0.828
Learning outcomes of item	0.855

Processed data

Table 3: Academic students learning activeness of the control and experimental group

Group	Activeness		
	Fair	Very high	Total
Control	22	0	22
	100%	0%	100%
Experimental	0	22	220%
	0%	100%	100%
Total	22	22	44
	50.0%	50.0%	100%

Pocessed data

Student activeness:
- Score 1: Very low = 0-19%
- Score 2: Low = 20-39%
- Score 3: Medium = 40-59%
- Score 4: Height = 60-79%
- Score 5: Very high = 80-100%

Descriptive analysis is used to describe the state of the variable itself. This analysis is done by explaining the state of the variable of the activeness of student learning and student learning outcomes (Table 3). The description of the result of the activeness variable as follows.

Difference of the students activeness between the TTP type learning model and the conventional learning model on the learning process: Based on the results of research proved that there is influence the application of

cooperative learning model type TTW (Think Talk Write) on the students activeness on the learning process. The hypothesis proved, reinforced also by the difference of the average value of the controller of 47.12 (Medium) while the average value of experimental class of 92.12 (Very high). The results of this study show that teachers are able to create a learning climate that enables (makes) students enthusiastic so that they are very active in following the learning that will make a the development of student's learning ability. When students are active in the learning process then it will impact with high student learning outcomes in the end. For that it is necessary to have a mature organization of all the existing components in teaching situations. One such component is the learning model, the teacher should be able to choose the learning model which can make the student active in the learning process, both mentally, physically and socially.

The result of this study is in accordance with Rochman Natawijaya's opinion in Depdiknas (2006), active learning is "A teaching and learning system that emphasizes student's physical, intellectual and emotional activity to obtain learning result in the form of combination between cognitive, affective and psychomotor aspects". With the learning process with a good structure, supported by the use of time efficient and effective then the optimal learning outcomes will be achieved. So with the learning using think talk write model will have a positive influence on the liveliness and learning outcomes of student of social study.

The results of this study are in line with the study conducted by Andriatno on "Improving learning activeness through think talk write strategy" which shows the liveliness of learning by using Think Talk Write Model of learning, this improvement includes activating questions to teachers or friends or ideas, the liveliness of writing to create individual notes, work together in group discussions and liveliness on individual tasks and issues. Also reinforced by the results of a study conducted by Sugiarti, etc. which showed an influence on the writing skills of children between classes using the learning model by using think talk write with groups of children using conventional learning model. This is because the experimental group of learning activities is designed to stimulate, learn and invite students to think critically in order to find and find answers independently from the various problems in question. While in the control group that uses conventional learning, students are more focused on teachers who Resulting in students tend to be passive while the teachers are active or in essence more students are given a rote than the application, so that, students do not have much experience learning.

Influence of the cooperative learning model TTW type towards the students learning outcomes: The analysis of research result proves that there is influence of

cooperative learning model type TTW to student learning result fourth grade SDM 020 Kuok on social study subject. Evidently the hypothesis can be seen from when do pre test (preliminary test) to result of learning in control class and experiment there is no difference of result of student study of control and experiment class, this seen with result of independent sample t test obtained sig. 2-tailed equal to 0.988>A0.05. With this can be known there is no difference in student learning outcomes or student's learning abilities the same between the control class and experiment.

Once found and believed that student's learning ability is similar based on pre testtest then it is given treatment (treatment) in experimental class by using cooperative learning model of TTW type and conventional learning in control class. After applying the learning model, the test result of posttest learning to experiment class and control. Analysis of the results on the post test proves that there is a significant difference in learning outcomes between the experimental and control classes this can be seen from the t test results, i.e., -4.200 with a significant level of 0.000. This proves that there are significant differences in learning outcomes or unequal learning abilities after the implementation of cooperative learning model type TTW in the experimental class and conventional learning in the control class with treatment 3 times and 2 h for 1 time meeting. In the case of the ability of the same child at the time of pretest, so that, causes the difference of post test is the treatment (learning TTW), so, it can be concluded cooperative learning model type TTW influence on student learning outcomes in learning.

The results of this study are in line with the study conducted by Andriatno which shows improvement of learning activeness through think talk write strategy in science subject also have a positive impact on student learning outcomes. Also reinforced by the results of a study conducted by Princess who found that the learning model think talk write equipped with snowball drilling effect on student learning outcomes. And reinforced by Refina study which proves that there is influence of learning result by using Think Talk Write (TTW) learning model compared with conventional learning model.

CONCLUSION

Based on the research that has been done and test the difference with the test of independent dependent t test it is concluded that: Student learning activeness of control and experiment class is significant difference it can be seen from t test that is $t_{count} = -21,179$ with significant level (sig) $<5\%$. Thus, it can be concluded that there are significant differences between the types of Think Talk Write (TTW) and the conventional model, so as to affect student activeness.

In the result of analysis of pretest and post test average value of student learning result there are significant difference this can be seen from result of t test that is $t_{count} = -4.200$ with significant level (sig.)$<5\%$. This proves that there is a significant difference in student learning outcomes between control and experimental class groups. So, it can be concluded that cooperative learning model of Think Talk Write (TTW) type has an effect on student learning outcomes.

Based on the conclusions of the study model of cooperative learning type TTW (Think Talk Write) effect on learning outcomes and activeness learning grade 4 students 020 Kuok then the advice for next researchers or the influence of cooperative learning model of type think talk write to student activeness, the researcher can further add with the development of media that can cause student activeness.

For the influence of cooperative learning model of type think talk write to student learning result, researcher can further develop this learning model to determine student's social skill or critical thinking of student.

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