

IMPLEMENTATION OF COOPERATIVE LEARNING MODEL TYPE STAD WITH MIND MAP TO IMPROVE ACCOUNTING LEARNING ACTIVITIES

IMPLEMENTASI MODEL PEMBELAJARAN KOOPERATIF TIPE STAD BERBANTU MIND MAP UNTUK MENINGKATKAN AKTIVITAS BELAJAR AKUNTANSI

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Abstract

This research aimed to improve Accounting Learning Activities in the Class XI AK 4 Students of SMKN 2 Purworejo Academic Year 2016/2017 with the implementation of Cooperative Learning Model Type STAD With Mind Map. This research was a Class Action Research that implemented the past two cycles. Data collection techniques were the observation, field note, and documentation. Data analysis technique was quantitative data analysis with a percentage. This analysis was done by processing the score accounting learning activities, calculate the percentage of each indicator and average overall indicators, presents the data, and draw conclusions. The results showed that scores on each of the indicators of Accounting Learning Activities increased from the cycle I to cycle II, average score of Accounting Learning Activities increased from the cycle I of 72,44% to 90,63% in cycle II, or increased by 18,19%.

Keywords: STAD, Mind Map, Accounting Learning Activities

Abstrak

Penelitian ini bertujuan untuk meningkatkan Aktivitas Belajar Akuntansi Siswa Kelas XI AK 4 SMKN 2 Purworejo Tahun Ajaran 2016/2017 melalui implementasi Model Pembelajaran Kooperatif Tipe STAD Berbantu Mind Map. Penelitian ini merupakan Penelitian Tindakan Kelas yang dilaksanakan selama dua siklus. Teknik pengumpulan data yang digunakan adalah observasi, catatan lapangan, dan dokumentasi. Teknik analisis data yang digunakan adalah analisis data kuantitatif dengan persentase. Analisis ini dilakukan dengan cara mengolah skor aktivitas belajar akuntansi, menghitung persentase masing-masing indikator dan rata-rata keseluruhan indikator, menyajikan data, dan menarik kesimpulan. Hasil penelitian menunjukkan bahwa skor masing-masing indikator Aktivitas Belajar Akuntansi meningkat dari siklus I ke siklus II, skor rata-rata Aktivitas Belajar Akuntansi meningkat dari siklus I sebesar 72,44% menjadi 90,63% pada siklus II atau meningkat sebesar 18,19%.

Kata kunci: STAD, Mind Map, Aktivitas Belajar Akuntansi

INTRODUCTION

The one that affects a national development is education. Education that goes well and evenly for the population sector in the country will produce a superior employee and a highly competitive power. The development process is expected to be running well by the presence of qualified human resources in thinking and take action. The expected education is certainly capable of improving the quality and potential of the person. Education in Indonesia is aiming for the intellectual life of the nation, as mandated in the *UUD (Undang-Undang Dasar)* year 1945.

Education emphasis on a process namely the learning process. The learning process aimed at developing aspects of cognitive (knowledge), affective (attitude), and psychomotor (skills). According to Sugihartono, et al (2012: 81) learning is an effort that was done on purpose by educators to convey knowledge, organize, and create a system environment with a variety of methods so that students can undertake learning activities effectively and efficiently with optimal results. As a process, then learning requires the existence of an activity carried out by educators and students. There is no learning if no learning activities.

Learning activities in the process of learning is done by educators and students. In

this case the student act to learn while the teachers act to teach. Learning activities composed of mental activity and physical activity. Examples of mental activity are given, solve problems, make decisions, and others. While the examples of physical activity are doing exercise, make a note of the lessons, presentations in front of the class, and others. Students are required to actively follow the learning process, the liveliness of students will make it easier for students receiving the content and will also help students to obtain maximum learning result (Sardiman, 2011: 100).

Learning activities are influenced by two factors, namely the internal factors and external factors. The internal factor is the factor on which the individual include maturity/growth, intelligence, training, and motivation. While the external factor is the factor that comes from outside individuals include family factors, and how teachers teach, tools lesson, and social motivations (Purwanto, 2010: 102-106).

Problems related to learning activities in a field that is often occurring, are students less active in follow the learning process. This occurs because the teachers are still using the old ways in teaching. Teachers as parties who organized the teaching is still using conventional methods in teaching, so that students are less active and feel quickly

bored. In addition, teachers also are not yet using a varied media in teaching, so that students are less interested in following the learning. The use of conventional method and media that haven't varied in learning will be troublesome students to receive a lesson as a whole.

The expected learning nowadays is learning that uses multimedode and multimedia. Currently, many models of learning that teachers can use to convey the content of learning. To solve the problems of the less active students in following such learning, teachers can use the others model for example cooperative learning model. According to Slavin (2005: 8) in the cooperative learning students formed in small groups consisting of 4-5 students to cooperate in mastering the material that was provided to teachers. According to Artzt & Newman in Trianto (2009: 56) in cooperative learning students learn together as a team in completing the tasks of the group to achieve a common goal. Cooperative learning objectives are to give learners the knowledge, concepts, skills, and an understanding that they need so that learners can become a happy community and give a contribution (Slavin, 2005: 33).

Teachers should consider to media used in delivering learning content. During this time the teachers use media only in the form of printed books or using powerpoint, so the information received by students is

insufficient. To convey the content of the lesson the teacher should choose the appropriate media with content in order to attract the attention of students and stimulate the students' active power. The media can be a print and electronic media. Print media can be in the form of books, magazines, newspapers, and others. While the electronic media can use laptops, televisions, radios, speakers, and more. The use of media that vary in learning in order to make students interested and not quickly bored in following the instruction. One of the media that can be used the teacher in presenting learning accounting is the accounting mind map. Mind Map or often called with a concept map are a tool of great organizational thinking which is also the easiest way to put information into the brain and take that information when needed.

SMK Negeri 2 Purworejo is one of vocational schools in Purworejo that is located at Jalan Krajan 1, Semawungdaleman, Kutoarjo, Purworejo. The school has 5 programs, including: Office Administration, Accounting, Hotel Accommodation, Marketing, and Multimedia. Students at this school are dominated by female students.

Based on observation conducted during PPL (*Praktik Pengalaman Lapangan*) and information from some students at Class XI AK 4 SMKN 2 Purworejo obtained some of the information related to the learning

process. Teacher are still using conventional methods in teaching students in the class. In addition the media used by the teacher in the learning process has not been varied, teacher using the books and sometimes used powerpoint media in presenting the content. The learning process impressed less monotonous and not attract the attention of students to conduct learning activities. Only 13 of the 32 students or 40,63% seen active in paying attention to the explanations from the teacher, answering questions from the teacher, and asked the teacher. The other students were doing other activities outside of the learning activities such as chatting with friends a number of 6 students or 18,75%, learn another lesson that is not scheduling a number of 5 students or 15,63%, 3 students or 9,36% lay down on the bench table, and busy with himself a number of 5 students or 15,63%. Learning to be not conducive and effective time and students also lose out because of the content delivered by the teachers is less acceptable to the maximum.

Based on the above problem the learning process needs to use other learning model that considered more effective and also a varied media in order to attract the attention of students to learn. Teacher can apply the cooperative learning model, one type of cooperative learning that can be used is type STAD (Student Team Achievement Divisions). According to Isjoni (2010: 74) Cooperative Learning Model Type STAD is

one type of cooperative that emphasized the existence of activity and interaction among students to motivate each other and help each other in mastering the subject matter in order to achieve maximum achievement. The advantages obtained by using cooperative learning model type STAD this is students will become active and receptive to the content that is submitted by the teacher. To make it easier to convey the lessons with this model the teacher should use the interesting media, the teacher can choose the accounting mind map for easy in teaching.

Based on the explanation above about cooperative learning model type STAD and mind map, accounting learning felt the need to apply the cooperative learning model with mind map. The existence of such implementations is expected to provide a positive impact in improving accounting learning activities of students and gave impact on the results. Therefore, based on the description that has been described above, researcher will conduct research, entitled "Implementation of Cooperative Learning Model Type STAD with Mind Map to Improve Accounting Learning Activities of Class XI AK 4 Students of SMKN 2 Purworejo Academic Year 2016/2017."

RESEARCH METHOD

Research Design

This research is Class Action Research (CAR). The research on each cycle consisting of a planning, action, observation, and reflection. According to Suhardjono (2008: 75), there are no provisions about how many times the cycle must be performed since the number of cycles depends on the researcher's own satisfaction, but preferably not less than two cycles.

Place and Time of Research

This research have been conducted in SMK Negeri 2 Purworejo that is located at Jalan Krajan 1, Semawungdaleman, Kutoarjo, Purworejo. This research consists of three stages, namely of preparation, implementation, and reporting. The preparation started in November 2016, implementation of the research in February, 2017, and the preparation of the report in March-April 2017.

Subject and Object of Research

The subject of this research is Class XI AK 4 Students of SMK Negeri 2 Purworejo Academic Year 2016/2017, which consist of 32 students. The object of this research is Accounting Learning Activities of Class XI AK 4 Students of SMK Negeri 2 Purworejo Academic Year 2016/2017.

Research Procedures

This research was conducted for two cycles. In this research, researcher acting as a teacher. Here are the stages of research:

1. Cycle I

a. Planning

At this stage the researcher prepares a variety of things as follows: devised a RPP (*Rencana Pelaksanaan Pembelajaran*), preparing the subject matter, made the observation sheets, compose the students worksheets (question of discussion, pre- test and post-test along with key answer), prepare a blank paper and color pencils, and also compiled a group, a class divided into 8 groups.

b. Action

In this step the teacher implements the learning that has been compiled in accordance with the RPP (*Rencana Pelaksanaan Pembelajaran*). The activities in this stage consist of preliminary activities, main activity, and Closing.

c. Observation

Observation made during the learning process by using the observation sheets that have been prepared and recorded the events that occurred during the learning process by using the field note. Observations made by two observers, each observer responsible for observing 16 students.

d. Reflection

The researcher conducted a reflection to determine weakness and disadvantages that occurred during the execution of the cycle I. After knowing weakness on cycle I, the researcher devised a solution to improve the activities that have not been fullest in cycle I.

2. Cycle II

Cycle II was drawn up after the cycle I done, cycle II fixes the disadvantages of the cycle I. Cycle phase of the cycle II equal to the cycle I include planning, action, observation, and reflection.

Instrument and Techniques

1. Data Collection Techniques

Data collection techniques that used in this research were observation, field note, and documentation. The observation that have been conducted by researcher is a participatory observation. Field note used to record all the events during the process of research. The documentation used in this research in the form of written documents that already exist and support in the learning process includes data about students

2. Research Instruments

The instruments used in this research were observation sheet, field note, and documentation. Observation sheet

contains some indicators that describe the learning activities of students. Field note are used to record the events/activities that support the collection of research data.

3. Data Analysis Technique

Data analysis technique was a quantitative data with a percentage with the step as follows:

- a. Define the criteria for granting score for each indicator on every aspect of the activity is observed.
- b. Add the score for each aspect of the activity is observed.
- c. Calculate score on every aspect of activity observed with the specific formula.

FINDING AND DISCUSSION

This class action research conducted in two cycles. The stages of each cycle consist of planning, action, observation, and reflection. Cycle I conducted on February 3, 2017 while the cycle II conducted on February 10, 2017 with the subject matter of bond payable and repayment of bond payable.

Implementation of class action research in cycle I start with step of introduction and continue with main activity and the last closing. In the main activity the teacher distributed the handout, explain the subject matter, give assignments, discussed the matter of the discussion, and also asking

to students and provides an opportunity for asking to students. For closing teacher gave a post-test quiz, teacher also instruct the students to make notes about the lesson in the form of mind map, after that teacher and students concludes lesson, and then the teacher closed the class with regards.

Average score of accounting learning activities in cycle I is 72,44%. In the cycle I there are three indicators that have not reached the criteria of a minimum of 75%. The third indicator is an indicator of ask the teacher or a friend in the process of learning and discussion with the result of the percentage of 69,23%, indicator of answer the questions asked by teacher or friends in the process of learning and discussion with the result of the percentage of 61,54%, and indicator of students suggested opinion when discussion with the result of the percentage of 57,69%. Based on the results in the cycle I, the reparation is needed to get the maximum score in the cycle II.

In the cycle II each indicator has reached the predetermined minimal criteria (75%). Overall also obtained a score of accounting learning activities that go beyond the minimum criteria where the obtained score an avergae of 90,63%. The increased of accounting learning activities of students from the cycle I to cycle II can be seen at table 1.

Table 1. Increased of Accounting Learning Activities of Students from the Cycle I to Cycle II

No	Indicators	Percentage		Increased
		Cycle I	Cycle II	
1	Pay attention when the teacher explains	80,77%	93,75%	12,98%
2	Read the subject matter	79,49%	98,96%	19,47%
3	Ask the teacher or a friend in the process of learning and discussion	69,23%	89,58%	20,35%
4	Answer the questions asked by teacher or friends in the process of learning and discussion	61,54%	84,38%	22,84%
5	Students suggested opinion when discussion	57,69%	91,67%	33,98%
6	Done the task group given by the teacher	75,64%	96,88%	21,24%
7	Done the quiz individually	76,92%	84,38%	7,46%
8	Noted the subject matter that has been described individually and in a group in the form of mind map	78,21%	85,42%	7,21%
Average of accounting learning activities		72,44%	90,63%	18,19%

Source: Primary Data Processed

Based on table 1, it can be seen that the accounting learning activities increased from the cycle I to cycle II for each indicator. Average of accounting learning activities as a whole also increase from the cycle I to cycle

II, average of accounting learning activities in the cycle I is 72,44% and cycle II is 90,63%. The magnitude of the increase in the average overall accounting learning activities is 18,19%. The following spelled out in detail regarding the improvement of accounting learning activities for each indicator:

Indicator of pay attention when the teacher explains

The increase in the percentage of accounting learning activities on this indicator amounted to 12,98% from cycle I of 80,77% to 93,75% in cycle II. In cycle II students focus more when teacher explain/give a description of the subject matter, the students listen well to what is conveyed by the teacher. This appears to be different from the circumstances in cycle I, there are still students who do play while the teacher explained the lesson. However, in cycle II teacher could resolve the problem by giving direction to the students that the material is important so that students should listen carefully.

Indicator of read the subject matter

The increase in the percentage of accounting learning activities on this indicator amounted 19,47% from the cycle I of 79,49% to 98,96% in cycle II. The activity of reading material on the cycle II increased due to the difficulty level of the studied material is more complex. Students immediately read the subject matter either from the source books or handout given by

the teacher. The students seemed serious and focus to understand the subject matter studied. On cycle I still look for students who have not read the material, it is because the subject matter in the cycle I easier, so that students consider themselves are already familiar with the subject matter. Problems can be resolved on the cycle II by the way teacher instruct students to avid reader so that students gained more knowledge and also make easy for students in doing a quiz or assignment given by the teacher.

Indicator of ask the teacher or a friend in the process of learning and discussion

The increase in the percentage of accounting learning activities on this indicator amounted 20,35% from the cycle I of 69,23% to 89,58% in the cycle II. In cycle II teacher to optimize her role to guide the students in asking questions in the learning process, while in discussion the teacher also insisted if there are things that are not yet understood to be asked also to a friend in one of the group before being asked to the teacher concerned. Material on cycle II is more difficult than the cycle I so that students wan more mastered and understood the material. This cause the students motivated to ask questions related to content not yet understood to the teacher or a friend in one group, the intensity of the students in asking questions also increased or more than one

time in asking questions to the teacher and also friends in one group.

Indicator of answer the questions asked by teacher or friends in the process of learning and discussion

The increase in the percentage of accounting learning activities on this indicator amounted 22,84% from the cycle I of 61,54% to 84,38% in cycle II. The increase in this is concerned with the improvement of the indicator ask the teacher or a friend in the process of learning and discussion. In cycle II, many students asked so many so students that give an answer. Additionally, on the cycle II, when the teacher asks a question, many students initiatives volunteered to answer questions from the teacher. Teacher on the cycle II make a list of questions that a lot more to make students more active in learning, with many questions and answers that appear in learning so students will be more familiar with and understand the material studied. This increase represents the second highest increase after an increase in the indicator of the students suggested opinion when discussion.

Indicator of students suggested opinion when discussion

The increase in the percentage of accounting learning activities on this indicator amounted 33,98% from the cycle I of 57,69% to 91,67% in cycle II. In cycle II students who suggested when discussion

more time because the matter of discussion more difficult than cycle I. In addition students who suggested not dominated by students who are good at it. In the cycle I students tend to be passive in the following discussion, this is proven by the students thus dwells in the following discussion. But teacher can resolve it, the teacher instructs students that in the process of discussion of all members of the group must contribute and cooperate to give an opinion in the form of advice and also input to resolve a matter of discussion. The increase in this indicator is the highest increase among the increase of 8 indicators.

Indicator of done the task group given by the teacher

The increase in the percentage of accounting learning activities on this indicator amounted 21,24% from the cycle I of 75,64% to 96,88% in cycle II. The increase in this indicator is concerned with the increase in the indicator students suggested opinion when discussion. Each group more seriously in doing the task group in the form of a question of the discussions given by teacher. Each group even wanted to resolve the matter carefully. In cycle II teacher directs students to work on each task group both question discussion or the other with as best as possible, it aims so that students can measure their learning abilities and skills and

also get used to the challenges given the teacher in the learning process.

Indicator of done the quiz individually

The increase in the percentage of accounting learning activities on this indicator amounted 7,46% from the cycle I of 76,92% to 84,38% in cycle II. In cycle I still found the students who not confident in doing quiz question both pre-test and post-test. To resolve the problem in cycle II teacher gives direction and emphases to students to be honest and disciplined in working on the question of the quiz individually. So on cycle II students look more serious and disciplined in doing a quiz question pre-test and post-test. Of the overall students average results pre-test to post-test increased.

Indicator of noted the subject matter that has been described individually and in group in the form of mind map

The increase in the percentage of accounting learning activities on this indicator amounted 7,21% from the cycle I of 78,21% to 85,42% in cycle II. In cycle I when there is additiona; material or material that is important the average students are directly noted in the textbooks that are owned, but there are also students are reluctant to take copius notes. When given the task to take down the material in the form of mind map in a group students more interested in working on it. This activity increases on the cycle II because the material learned more difficult so

that students take note of an important and and material needed by the students. At the time of making the mind map with a group of students were also more eager and excited so that the results of the mind map more variety and also creative. This increase is the lowest increase among the increase of 8 indicators, the increase of this indicator is not as big as other indicators increased.

Increase in activity on each of these indicators in accordance with expressed by Dimiyati and Mudjiono (2009: 63) that one of the ways that can be used to increase the activity of the students is by multimetode and multimedia. Are the multimetode in this research, namely with the implementation of cooperative learning model type STAD, whereas the definition of multimedia is a mind map that made the students in a group. Mind map used to facilitate students in remembering the lessons and take note of the lessons with a concise and beautifully. It is accordingly presented by Buzan (2008: 9), that one of the benefit of a mind map is fun to see, read, learn, and remember. With an increase in learning activities through the implementation of cooperative learning model type STAD with mind map, then the hypothesis of action stated already answered.

CONCLUSIONS AND SUGGESTIONS

Conclusions

Based on the research result and discussion, it can be concluded that the

implementation of Cooperative Learning Model Type STAD With Mind Map can Improve Accounting Learning Activities of Class XI AK 4 Students of SMK Negeri 2 Purworejo Academic Year 2016/2017. This is evidenced by the increased average accounting learning activities and increasing the eight indicators of accounting learning activities. Average of accounting learning activities in cycle I about 72,44% and cycle II has reached the specified minimum criteria of 75% with the results of 90,63%.

Suggestions

1. For Teachers

Teachers can try cooperative learning model type STAD with mind map on other basic competence because proved can improve accounting learning activities of students. Teacher should also provide a challenge to the students in learning activities so that students become active and excited in following the instruction. Teachers also expected can give a fun learning atmosphere.

2. For Students

Students should cultivate their awareness for active in following the process of learning, so that students can receive the subject matter as a whole. Students should increase the activity of reading material, ask a teacher and noting the important subject matter and not yet recorded in books or handout. Each student is also expected to be mutually supportive of each other to be

energetic and active in order to follow the learning process.

3. For the Next Researchers

The next researchers can use and develop a class action research with cooperative learning model type STAD with mind map to improve accounting learning activities of students on subjects of Financial Accounting with other base competence or in other accounting subjects, so that it can resolve the problems in the process of learning in the field.

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