Combination of PBL and I CARE Learning Models in Increasing Student Learning Activities

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Abstract
Learning activities were important in achieving learning objectives, therefore, it must be carried out effectively. Learning activities in 2013 Curriculum were designed with a student-centered learning approach, that could be observed through student learning activities. To achieve this, a scientific approach was implemented in various learning models. This study aims to determine the role of the combination of problem-based learning (PBL) and the Introduction, Connect, Apply, Reflect, Extend (I CARE) learning models in increasing learning activities of SMAN 16 Makassar students in accounting sujects. The populations of this study were 126 students of Class XII IPS SMAN 16 Makassar consisting of four classes, while the study sample was 33 student of Class XII IPS 1, which were selected by purposive sampling. Data collection was done by non-participative observation that carried out in learning process using PBL model (as pre-test) and in learning process using PBL-ICARE model (as post-test). The application of PBL-ICARE model was carried out for eight times learning processes. Data were analyzed using descriptive methods. The results showed that the combination of PBL and I CARE could increase student learning activities, especially in: (1) listening and paying attention to teacher explanations and friends' opinions with interest, and reading books calmly (listening, visual, emotional activity); (2) record the material explained and work on the practice questions (writing activities), and (3) dare to ask, express opinions, answer questions, and make conclusions (oral, mental, emotional activity).
Keywords: Learning Model, PBL, I CARE, learning activity.

Introduction

Learning activities were important in achieving learning objectives. Through learning activities, students could obtain knowledge, attitudes, and skills in accordance with the learning objectives, therefore, learning activities must be carried out effectively so that learning objectives could be achieved as expected.

Learning activities in 2013 Curriculumwere designed with student-centered learning approaches that emphasize interactive, networking, active-seeking, group-based, multimedia-based, student-based, and critical learning activities. To achieve this, in the learning activities the 2013 Curriculum was used a scientific approach, which was intended for students to know, understand, and build knowledge through scientific methods (Abduh, 2018). The scientific approach was designed with steps/ways in accordance with the general steps of scientific activities, starting from observing, asking, reasoning, associating, and communicating (Bintari et al., 2014). Based on the description, a scientific approach in learning activities focus on student learning activities.

Student learning activities were activities carried out/undertaken by students in learning activities (Wahab, 2015:25; Hamalik, 2015:179) in the form of physical activities and mental activities (Darmawang et al., 2008:51). Both physical activities and mental activities in learning activities must

always be related (Sardiman, 2016:100) so that optimal learning was created (Nasution, 2011:89). Activities such as listening, discussing, producing something, compiling reports, solving problems, etc. were a number of physical activities that could be directly observed. While the activities of listening to thinking, remembering, understanding, feeling, analyzing, synthesizing, etc. were mental activities that cannot be observed (Djamarah, 2010:350). Learning activities includes: (1) visual activities; (2) oral activities; (3) listening activities; (4) writing activities; (5) mental activities, and (6) emotional activities (Paul B. Diedrich in Hamalik, 2015:172-173).

Viewed from the teacher's perspective, learning activities were influenced by: (1) teacher's ability; (2) teacher's professionalism, and (3) teacher's educational background and teaching experience (Djamarah, 2010:352-355). Teacher's ability in the learning process was closely related to the way the teacher implements learning planning, which includes the ability to apply basic teaching skills and developing various up-to-date learning methods skills. Based on the description, the learning models used in learning activities had an important role in student learning activities.

One learning model in the scientific approach was a problem-based learning (PBL). PBL was a learning model that requires students to actively think, search and process data, communicate, and deduce subject matter; and it was not expected that learning was based on the process of simply listening, taking notes, then memorizing the subject matter (Qodry et al., 2016). In addition, the learning model that could be used in the scientific approach was a learning model with activities that include:introduction, connection, apply, reflect, and extend (I CARE). I CAREwas an approach that makes students easy to apply the knowledge have learned in real life. Based on this description, the PBL learning model and the I CARE learning model place students as active parties in learning activities, which could be seen from student learning activities. Thus, the application of PBL and I CARE learning models in learning activities would affect student learning activities.

SMAN 16 Makassar was one of the high schools that apply the 2013 Curriculum. One of the subjects for students of Class XII IPS was Economic Subjects which includes material on accounting. Accounting material in general includes material that was theoretical and practical in nature. Thus, the PBL and I CARE learning models were suitable to be applied in learning activities on accounting.

Based on observations in Class XII IPS 1 of SMAN 16 Makassar, Economics Subject teachers in learning activities use PBL learning model by giving explanations (lectures), question and answer, and group discussions. In general, students participate in learning activities well. However, there were still many student were not focused on participating in learning activities, telling friends, opening cellphones to see things that were not related to learning material, and only a small number of students dare to express their opinions in question and answer and discussion.

Based on this, efforts were needed to overcome the situation. One such effort was to apply the PBL learning model in combination with the I CARE learning model. With this application, student learning activities were expected to made students more focused and more courageous in expressing opinions.

Literature Review

Learning Activity

Learning activity was an activity undertaken in the teaching and learning process takes place (Wahab, 2015:25).Learning activities include: (1) visual activities, which include activities to pay attention to teacher explanations and read books; (2) oral activities, which include asking questions, issuing opinions, answering, and discussing; (3) listening activities, which include listening to the teacher's explanation and listening to friends' opinions; (4) writing activities, which include the activity of recording the material explained and working on the problem; (5) mental activity, which includes activities to solve problems, makes conclusions, and focus on lessons; (6) emotional

activities, which include bold, calm, and attraction activities (Paul B. Diedrich in Hamalik, 2015:172-173).

Student learning activities could be affected by: (1) teacher's ability, which was closely related to the way the teacher implements learning planning, includes the ability to apply basic teaching skills, and the skills to develop various learning methods that are considered up-to-date; (2) the professionalism of the teacher, who would always strive to achieve the results that have been achieved so that the teacher would always learn to broaden knowledge and improve their skills; (3) teacher education background and teaching experience, which enables teachers to have broad views and insights on learning variables such as understanding of child psychology, understanding of environmental elements and student learning styles, understanding of various models, and learning methods (Djamarah, 2010:352-355). Based on the opinion, the ability of the teacher in learning activity which was realized in the ability to plan, apply teaching skills, and develop various up-to-date learning methods have had important role in student learning activities.

PBL Learning Model

PBL was a learning approach that presents contextual problems so as to stimulate students to learn (Kurniasih & Sani, 2014:75)characterized by the use of real life problems as something students learn to train and increase critical thinking skills, problem solving, and gain knowledge of important concepts, where the teacher's job must focus on helping students achieve self-directed skills (Hosnan, 2014:295). The steps of the PBL learning model include: (1) orientation of students to problems; (2) organizing students to study; (3) guiding individual and group investigations; (4) developing and presenting work; (5) analyze and evaluate the problem solving process (Kurniasih & Sani, 2014: 79). Based on the description, the application of the PBL learning model, students play an active role in learning activities. Thus, the application of the PBL learning model affects student learning activities. This is in line with Handayani and Sapir (2009) who suggests that the application of PBL could improve student learning activities, student learning outcomes, and student responses.

I CARE Learning Model

The I CARE was a learning model developed by Hoffman & Ritchie 1998 that consists of five stages in learning activities, including: introduction, connection, application, reflection, and extend (abbreviated I CARE). Activities in each of these stages include: (1) Introduction stages: tell students about learning objectives, content, provide prerequisite questions, phenomena, and referral questions; (2) Connect stages: embedding concepts, informing new information about facts, concepts, or processes to students, by demonstrating and providing referral questions, students linking prior knowledge and new knowledge or building new knowledge and conducting experiments directed at guided inquiry; (3) Apply stages: apply information, knowledge or concepts obtained during the connect stage. The teacher gives questions or problems related to daily life; (4) Reflect stages: provide a review of student understanding, conduct discussions and give a short quiz and discuss it; (5) Extend stages: expansion of student knowledge, by giving present applications through images/videos about tools that utilize the principle of content being discussed (Agustini et al., (2015).Based on the description, in applying the I CARE learning model, students play an active role in learning activities. Thus, the application of the I CARE learning model had an effect on student learning activities.

Research Methods

This research was a descriptive study that illustrates the application of a combination of PBL and I CARE learning models in increasing accounting learning activities of Class XII students of SMAN 16 Makassar. The type of research was experimental research with pre-post test one group design. The populations of this research were all students of Class XII of SMAN 16 Makassar, while the sample was selected by purposive sampling Class XII IPS 1. Data collection was done by non participativeo bservationthat carried out in learning process using PBL model (as pre-test) and in learning process using PBL-ICARE model (as post-test). The application of PBL-ICARE model was carried aout for

eight times learning processes. Data analysis was performed by comparing student learning activities in acoounting by applying the PBL learning model (as a pre-test data) and by applying a combination learning model in PBL and I CARE learning model (as post-test data).

Results and Discussion

Application of PBL Learning Model

PBL learning model was applied to the first learning activities with basic accounting equation material. Based on the results of observations in the learning activities, it was identified that in general students were quite active. However, there were still many students who did not focus on participating in learning activities, tell their friends, open their cellphones to see things that were not related to learning material, and only a small number of students dare to express their opinions in question and answer in discussion.

Based on the results of these observations, a strategy change in learning activities with a combination of scientific approach and lesson study were conducted with a combination of PBL and I CARE learning models which were expected to made students more focused and more courageous in expressing opinions. The special activity in the lesson study approach was to reflect every time learning activities that could be done at the end or in progress learning activities (if needed). The results of these reflections were used as material in planning more effective learning activities or changing strategies in ongoing learning activities.

Application of the Combination of PBL and I CARE Learning Model

The combination of the PBL and the I CARE learning model was applied starting at the second learning activity. Based on the results of observations in the learning activities, it was identified that students began to focus more on learning activities, but there were still students who disturbed their friends in doing assignments/quizzes because they did not bring the required textbooks. Students who dare to express opinions also begin to increase.

In the third learning activity, based on the results of observations in learning activities identified that students were increasingly focused on participating in learning activities, all students have brought textbooks or photocopies of material to be discussed. Students who dare to express opinions were increasing. Even so, the obstacle faced was that students who only brought photocopies of material for learning activities had difficulty in recalling material from previous learning activities because they were not in the photocopies.

In the fourth learning activity, based on the results of observations in the learning activities, it was identified that all students had brought textbooks, and all students began to dare to express their opinions even though some still needed to be appointed to give these opinions.

In the fifth learning activity held Daily Deuteronomy in the form of the practice of analyzing transactions and recording them in the basic equation of accounting. Based on the results of observations in learning activities, it was identified that almost all students had understood the analysis of transactions and recorded into the basic equation of accounting adequately.

In the sixth learning activity continued Daily Deuteronomy. Based on the results of observations in learning activities, it was identified that **all** students had understood the analysis of transactions and recorded into the basic equation of accounting adequately.

In the seventh learning activity with material of the accounting cycle, especially the recording cycle in general journals. Based on the results of observations in learning activities, it was identified that all students had understood to recorded transactions into the general journals. Even so, some students were still confused in recorded transactions into the general journals using the results of basic equations of accounting that were made, especially in transactions relating to income, expenses, and prizes.

In the eighth learning activity with material the Middle Semester Exam (UTS) question in the form of the practice of analyzing transactions and recording them in general journals. Based on the results of observations in learning activities it was identified that all students had understood to recorded transactions into the general journals.

The Role of Combination of PBL and I CARE Learning Model in Increasing Accounting Learning Activities

Based on the results of the observations outlined above, it could be seen that the application of the PBL learning model of students is quite active. However, there were still many students who did not focus on learning activities, tell their friends, open their cellphones to see things that were not related to learning material, and only a small number of students dare to express their opinions in question and answer and discussion.

To increase student learning activities, the learning activities applied in the combination of PBL and I CARE learning models with the lesson study approach, which emphasizes the presence of reflection in each learning activity. The results of observations on learning activities with the application of the combination could be seen from learning activities to the next learning activities, student learning activities experience improvement in a better direction. Student learning activities were initially still many students who did not focus on participating in learning activities, told their friends, opened their cellphones to see things that were not related to learning material, and only a small number of students dared to express their opinions in questions and discussions which increased where students had focused on participating in learning activities and all students had dared to express their opinions in discussions and question and answer.

Conclusions and Suggestions

Based on the results of observations and discussions, it could be concluded that the application of a combination of PBL and I CARE learning models increases student learning activities in accounting material. Based on these conclusions, suggested to economic subject teachers in learning accounting material to use a combination of PBL and I CARE learning models to increase student learning activities.

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