



ISSN: 0976-3031

Available Online at <http://www.recentscientific.com>

CODEN: IJRSFP (USA)

International Journal of Recent Scientific Research
Vol. 8, Issue, 4, pp. 16550-16554, April, 2017

**International Journal of
Recent Scientific
Research**

DOI: 10.24327/IJRSR

Research Article

PROBLEM BASED LEARNING (PBL) TO INCREASE ACTIVITY AND STUDENT LEARNING ACHIEVEMENT IN THE TAXATION SUBJECT

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DOI: <http://dx.doi.org/10.24327/ijrsr.2017.0804.0169>

ARTICLE INFO

Article History:

Received 15th January, 2017
Received in revised form 25th
February, 2017
Accepted 23rd March, 2017
Published online 28th April, 2017

Key Words:

Problem Based Learning, Activity,
Student Achievement

ABSTRACT

Education is a very important factor and cannot be separated from one's life, whether in the family, community and nation. The level of educational success determines the progress of a nation.

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INTRODUCTION

Education is a very important factor and cannot be separated from one's life, whether in the family, community and nation. The level of educational success determines the progress of a nation. Educational success will be achieved when a nation is no attempt to improve the quality of education of the nation itself. Education is a conscious effort to grow the potential of human resources (HR). In the life of a nation, education plays a very important to ensure the survival of the state and nation, because with education can improve and develop quality human resources. Education is a means of preparing the present generations and future at the same time.

One of the factors that influence the success of a student is the learning process itself. Practically, the factors that affect the learning process of launch are less of a concern of students to instructional materials provided. However, it is understood that the source of the error lies not only in the students themselves. In the process of learning educators tend to apply the model of teacher centered learning with consideration of time can be fully controlled by the lecturers to pursue the completion target of teaching materials. Educators are less aware of the main purpose of granting extant formation of critical thinking skills, self-learning training, the establishment penchant and skills, and live the values of life.

Competencies that will be produced after going through the course Taxation was able to explain about taxation and can calculate taxes owed. From year to year, that tax increase and member larger share in State revenue. Proceeds from the tax sector is always said to be excellent in the National Development fund. It is expected that students are able to calculate the tax. When the researchers conducted in class learning experience that the researchers got the material presented results have not shown significant progress the students are still not optimally active in all the learning activities of students even passive so much critical thinking ability has not been reached.

One model of learning that can be used in teaching and learning is Problem Based Learning. Through problem based learning, the students will be more creative and courageous in discussing the material provided. This learning model provides the opportunity for students to develop their learning ability so that the learning process becomes more active. With this model is expected to improve student-learning outcomes.

Theoretical Framework

Education can not be separated from the system, which consists of various components such as: (a) raw inputs are students, (b) teachers as instrumental input, administrative personnel, infrastructure, methods, curriculum, the financial, laboratory, (c) the community as environmental input and the surrounding

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environment, (d) the process of transformation of education and (e) output or graduates (Salamah, 2006). Broadly speaking, the components are divided into three parts: input, process and output. So it is with learning achievement is supported by several factors that affect the students, teachers / instructors, methods or strategies and competence. Selection of a method of learning is always motivated by the methods used by teachers / instructors before, learning outcomes and student activity on previous learning. The reason could be justified because the most important factor in learning is the teacher (Bhargava & Phati, 2011). However, when used as a reason for choosing PBL method is more appropriate, hence the reason it is very weak. Problem based learning (PBL) is not the only methods that engage students actively. However, by using PBL can to improve the knowledge and understanding of students to a learning material that can ultimately improve student learning outcomes, Woolfolk (2007), Santrock (2011), and Slavin (2011).

PBL is an instructional learning model where students learn through problem solving and reflection from his own experience, in PBL teachers act as facilitators, thus facilitating the construction of the collaboration of students' knowledge (Silver and Barrows, 2006). PBL is one of learning models used roommates contextual problems as a context for students to learn about problem solving thinking Scholastic (2014). The aim of PBL learning model is to help students develop thinking skills and problem solving skills (Ibrahim, 2002).

PBL method has been used in the field of education one engineering (Erdogan and Senemoglu, 2014), as well as the education of mechanical engineering and automotive engineering. PBL method supports the competency appropriate psychomotor or performance expression Savery & Dufy (2001) that "we sought to provide a clear link between theory and practice. Some of the features of the PBL environment are that the learners are Actively engaged in working at tasks and activities roommates are authentic to the environment in which they should be used. The focus in on learners as constructors of Reviews their own knowledge in a context similar to the which is the context the which is similar to the context in the which they would apply that knowledge. PBL focuses on presenting a problem (real or simulated) to the students, then the students were asked to find a solution through a series of research and investigation based on theories, concepts, principles learned from a variety of disciplines (multiple perspective). The essence of PBL or PBM is a real-world problem with the aim of honing the skills to think critically and gain the knowledge to conceptualize lessons learned.

Characteristics of PBL according to Fogarty (1997) and Tan (2004) include: (1) meet the problem, (2) define the problem, (3) gather the fact, (4) generates the problem, (5) the make hypotheses, (6) rephrase the problem, (7) generating alternatives, and (8) present the solutions, preferably with justifications. While the steps of learning with PBL include: "Generally it has five phases: (a) orienting students to the problems, (b) organizing students for study, (c) assisting independent and group investigation, (d) developing and presenting reports, video, models etc and, (e) analyzing and evaluating the problem solving process. (Sharma, 2012).

To achieve this required an innovative learning model student-centered. There are several innovative learning model student-

centered, among others, problem-based learning. According to Wilkerson and Gijsselaers (1996) states that the "Problem-based learning is Characterized by a student-centered approach, teachers as facilitators rather than disseminators, and open-ended problems (in PBL, These are called " ill-structured ") that serve as the initial stimulus and framework for learning. "The model of problem based learning give problems to students, and students are required to think critically to solve these problems so that learning becomes more meaningful. The role of teachers in problem based learning models are giving problems to the students, asking questions, and facilitate students in learning activities.

In addition there is a problem based learning model of innovative learning model that can enhance the role of students in the classroom is Cooperative Learning. Model Cooperative Learning increase cooperation in a study group. According to Slavin (2009) the core of the cooperative learning students will sit together in groups of four people to master the material presented by the teacher. Further Arends (1997) mentions the four approaches of cooperative learning model as follows: "four approaches that should be part of the beginning teacher's repertoire are Described here: Student Teams Achievement Divisions (STAD), Jigsaw, Group Investigation, and Structural Approach. "The use of cooperative learning model that emphasizes teamwork is expected to increase the activity of students in the classroom. This study uses a model of cooperative learning jigsaw method. In cooperative learning jigsaw method, students learn in groups consisting of the original group and the group of experts to discuss the material provided by the teacher. By using the learning model is expected role of students in higher learning, creating cooperation among students and the achievement of optimal learning can be achieved. Optimal learning achievement is not only supported by internal and external conditions. The interaction between learning models and learning motivation in learning activities has an important role in achieving optimal learning achievement. No matter how good learning model if it is not supported by the high student motivation will not produce optimal learning achievement. The observation on learning accounting indicates that there has not been a good interaction between motivation and learning models.

RESEARCH METHODOLOGY

This study will be carried out in the Taxation Management Department faculty of Economics, University of Muhammadiyah Sumatera Utara. The research was conducted at the Academic Year 2015/2016. The sample in this study is the total sample that is the entire class by the number of students as many as 50 people. Data were collected through a written test. The written test is used to determine the order of measurement and assessment. So the written test used in this study is a written test in the form of a subjective test number 15 items. Tes given to students consists of several categories such as knowledge, understanding, and application.

FINDINGS AND DISCUSSION

Pre-Cycle

Implementation of learning at the pre cycle is a lecturer lesson activity, to prepare a lesson plan that will be used in research actions. Pre-cycle activities include the preparation of lesson

plans, student activities make observations format, create formative tests, making the format of learning activities, schedule study and see the real condition. At this stage the students were divided into groups where one group consists of 5 (five). When this pre-cycle activity and learning achievement of student learning is still in poor condition, it is seen from the activity asks students are lacking, students do not have awareness to write things that are relevant to learning. Percentage activity of students can be seen from the following table:

Table 1 Pre-cycle Learning Activity

No.	Learning Activities	Number of Students	Percentage (%)
1	Active Students	21	60%
2	Students Cooperative	14	40%
3	Students Complete Test	2	5,7%
Average Percentage of Students Learning Activities			35,2 %

When aggregated - learning activeness average student in the learning activities by 35, 2%, as well as the results of learning, many students have not reached KKM (minimum passing grade) indicated on test scores where only 2 students (5.7%) who can complete the test as shown in the following table:

Table 2 Pre-cycle Learning Achievement

Score	Number of Students	Percentage (%)	Achievement
A = 85 - 100	-	-	-
B /A = 80 - 84	-	-	-
B = 75 - 79	2	5,7%	Achieved
C/B = 70 - 74	5	14,2%	Not Achieved
C = 65 - 69	7	20%	Not Achieved
D/C = 60 - 64	13	37,1%	Not Achieved
D = 55 - 59	4	11,4%	Not Achieved
E = < 55	4	11,4%	Not Achieved
Highest Score: 75			
Lowest Score: 50			
Average Score: 61,3			

First Cycle

In the first cycle of four phases researchers conducted the following activities:

Planning

The research team conducted an analysis to determine the curriculum of basic competencies that will be delivered to students using Problem Based Learning to improve the effectiveness of student learning. A basic competency that must be possessed by students related to the topic of this is that students are able to describe the components of the subject of taxation courses.

- Create a learning plan problem Based Learning to improve the effectiveness of the student. Structured lesson plans specifically tailored to the purpose of research.
- Designing instruments used in the observation of classroom action research cycle
- Develop an evaluation tool of learning

Implementation (Acting)

- Forming a group consisting of five (5) students whose members are heterogeneous. Because the number of

students in one class there are 50 students, students were divided into 10 groups.

- Inform students about the work to be done by the group members. The task group is to answer the quiz in the form of a case and the matter is considered in the group.
- Delivering the learning objectives to be achieved
- Communicate / present course material in the classroom. The course material with a range of topics on taxation delivered with lectures, class discussions and assignments with tools worksheet.
- Provide and collect scores to students who answer correctly.
- Announced the results of the assessment
- Provide an appreciation of the efforts that have been made by individuals or by groups.

In this first cycle of students' learning activities and achievement of students has been increasing, it is seen from the activity asks students began to increase answered questions cooperative. Percentage activity of students can be seen from the following table:

Table 3 First cycle Learning Activity

No.	Learning Activities	Number of Students	Percentage (%)
1	Active Students	27	77,1%
2	Students Cooperative	22	62,8%
3	Students Complete Test	20	57,1%
Average Percentage of Students Learning Activities			65,6%

When calculated average activity of learning of students in learning activities increased to 65.6%, as well as student learning outcomes have reached KKM (minimum passing grade) indicated on the test scores of 57.1% which can complete the test as shown in the following table:

Table 4 First cycle Learning Achievement

Score	Number of Students	Percentage (%)	Achievement
A = 85 - 100	8	22,8%	Achieved
B /A = 80 - 84	8	22,8%	Achieved
B = 75 - 79	7	20%	Achieved
C/B = 70 - 74	4	11,4%	Not Achieved
C = 65 - 69	6	17,4%	Not Achieved
D/C = 60 - 64	2	5,7%	Not Achieved
D = 55 - 59	-	-	-
E = < 55	-	-	-
Highest Score: 85			
Lowest Score: 60			
Average Score: 75,7			

While the results of the quiz were conducted in groups are presented in the following table. The table values below are analyzed for known value of the increase is to then categorized with the following criteria:

- Simply, if the average value of an increase in groups of less than 10 (average value increase of the group <10)
- Well, if the average value of the increase in the group between 10 and 15 (10 average value increase of the group <15)
- Very good, when the average value of the increase in the group between 15 and 20 (15 average value increase <20)

- Perfect, when the average value of the increase in the group is more than or equal to 20 (average value increase in group 20)

Observations (Observation)

Researchers actions undertaken at this stage are as follows

- Viewing the situation of activities during the learning process. Conditions observed classroom setting, the smooth process of learning, the results obtained, and so on.
- Viewing the activity of students. Viewing the level of participation of each student in the group and see the activity of students in answering quiz given to the group.
- Viewing Capability student after discussion and to extent to which learning objectives / basic competencies mastered by students through discussion among the group.
- At the end of the first cycle of observation professors concluded:
- Most of the students have started an active and cooperative in following the learning .it
- A proportion of the students also have reached KKM (Criterion Complete Minimal)
- Most groups were active participating in learning activities
- Students are getting used to the conditions of the study group
- Students are getting used to learning Problem Based Learning Methods
- Students are able to deduce the learning materials through the quiz answers given.

Reflection

This classroom action research succeed if they meet several conditions as follows

- The average increase in the value of individual student learning outcomes ranged from 20 points
- Average value of group learning outcome is fair
- 75% of active group members in group discussions
- To fix and maintain the success that has been achieved in the first cycle, then the implementation of the second cycle of planning can be made as follows:
- Provide motivation for the group to be more active in learning.
- More intensive guide the group who are less active in the teaching and learning process.
- Give recognition or reward to the group

Second Cycle

The second cycle executed after the student midterm exam, which consists of a second cycle of planning, implementation, observation, and reflection.

Planning

Planning in the second cycle of planning on the terms of the first cycle

- Provide motivation for the group to be more active in the learning process.

- More intensive guiding groups who have difficulty in answering the quiz game
- Give recognition or awards
- Make a matter of learning more easily understood by students

Implementation

The results of the implementation of this phase in the cycle two is as follows

- Learning environment has led to learning Problem Based Learning method for improving the effectiveness of student
- Most students feel motivated to participate and answer quizzes and contribute to group discussions
- Atmosphere effective learning and fun has begun to be created

In this second cycle students' learning activities and achievement of students has been increasing, it is seen from the activity asks students are likely to increase where students answered questions cooperative. Percentage activity of students can be seen from the following table:

Table 5 Second cycle Learning Activity

No.	Learning Activities	Number of Students	Percentage (%)
1	Active Students	30	85,7%
2	Students Cooperative	32	91,4%
3	Students Complete Test	30	85,7%
Average Percentage of Students Learning Activities			87,6%

Average student learning activities in the learning activities increased to 92%, as well as student learning outcomes have reached KKM (minimum passing grade) indicated on the test scores of 87.6% which can complete a test as shown in the following table:

Table 6 Second cycle Learning Achievement

Score	Number of Students	Percentage (%)	Achievement
A = 85 - 100	28	80 %	Achieved
B /A = 80 - 84	3	8,5 %	Achieved
B = 75 - 79	3	8,5%	Achieved
C/B = 70 - 74	1	2,8%	Not Achieved
C = 65 - 69	-	-	-
D/C = 60 - 64	-	-	-
D = 55 - 59	-	-	-
E = < 55	-	-	-
Highest Score: 90			
Lowest Score: 70			
Average Score: 80			

In the second cycle, the average score increased by 4.3 points predicated relatively well. Average value of the quiz in the previous cycle is 75.7 whereas at the end of the second cycle is 80. So it can be said in general an increase in test scores of individual students than before using Problem Based Learning method.

Observation and Evaluation

From the observation after some repair activities with the institute of the results of the first cycle of reflection, have also been changes in the learning activities of students compared to the previous cycle of learning activities and also an increase in student test scores.

Reflection

The success obtained during this second cycle is as follows

- Activities of students in the learning process has led to Problem Based Learning method so that students are able to build cooperation in groups and have a spirit of competition to obtain the best results.
- Increased activity of students in the learning process is supported by the increasing role of the lecturer as facilitator, mediator, moderator and organizer in managing and creating a learning atmosphere that leads to Problem Based Learning and can improve the effectiveness of student learning, so as to create an atmosphere of cooperation, interdependence and competition and the spirit of the best results for the group.

Problem Based Learning method for improving the effectiveness of student learning in the classroom and as study materials associated with the subject of taxation, it is expected that students can easily understand the material being taught, which is expected to improve student learning outcomes and student can instill a sense of togetherness, mutual respect, respect the opinions of others and establish good cooperation. In the study group led discussions to solve problems with the same, and it is expected of motode Problem Based Learning can change the concept of conventional learning that focused only on the faculty was changed to student as central and permanent lecturer directed by dividing students into groups, each group is expected can build and assess their own performance group. Each group must be able to show that they are a group of tight-knit group both in discussion and in terms of work on the problems; each member should be responsible for their results. If the results are not maximum or lower than the other groups then they have to improve the performance of the group. When the implementation of learning, the student group discussion sessions to respond is up and running more conducive, because students are already getting used to working with each group. Students seen already started to cooperate with friends in the group. Activities and learning activities of students, there is an increase, such activity asks, writing, listening, and debating express an opinion. On the other hand when they do the tasks, there is seriousness. Task, it proved insufficient presence of students who do things that interfere with the process of learning, so that all students in the second cycle can collect assignments on time. At the end of the learning process students are given an evaluation using formative test questions, intent and purpose is to know how big the success rate of students in the learning process with the adoption of problem-based learning.

CONLUSSION AND RECOMMENDATION

Application of Problem Based Learning method possible in an effort to improve student-learning competency in the subject of Taxation at the Faculty of Economics, University of Muhammadiyah Sumatera Utara has been going well. This is supported by the results of tests conducted on the pre-test, the first cycle and the second cycle. During the learning process using Problem Based Learning in an effort to improve students' competence in the subject of Taxation at the Faculty of Economics, University of Muhammadiyah Sumatera Utara increased, because students are empowered and given the

confidence and are actively involved in learning activities. The average percentage of students' learning activeness continues to increase where the pre-cycle only amounted to 35.2%, then reach the percentage 65.6% in the first cycle and increased again to 87.6% in the second cycle. There should be variation in developing and enriching learning methods in the course of taxation and needed a strategy for learning methods in the classroom more focused and tailored to the curriculum so that it can increase the motivation to learn, and is therefore expected to increase student learning outcomes. There should be an increase in facilities, equipment and infrastructure to support the teaching and learning process that increases student motivation and achievement.

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