

Application of Project Base Learning Model in Lesson Materials Made of Equilibrium Prices

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Abstract: *Based on the background of the study, it was known that one of the problems faced by students in learning a social lesson was to relate the theory concept of Making Equilibrium Price with the facts that occur in society. The objective of this study is to make the students easy to understand the theoretical concept of Making Equilibrium price by using project-based learning model. In line with the background of the study, the research problems are as follows: (a) Can the use of project-based learning model make the students easy to understand the theoretical concept of Making Equilibrium Price?, (b) Do this project-based learning model stimulate the students' activation? The method of this study was using an observation technique which gives descriptive quantitative data. Based on the data scores of the student's group and individual, it can be concluded that the use of project-based learning model successfully makes the students easy to understand the theoretical concept of Making Equilibrium Price in VIII A MTsN Ampah and this model is also able to stimulate to the students' activation in learning.*

Keyword: *Project-based learning, an equilibrium price*

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I. Introductions

Education and globalization are two things that complement each other. When the globalization tool has begun to spread evenly while human education is still not evenly distributed, problems will arise. It is not uncommon for globalization to give birth which is called cultural inequality or 'cultural lag', and at the same time it will bring up many social problems in all aspects of human life. Conversely, successful education will give birth to human beings who are able to use the flow of globalization better even beyond it.

The Indonesian millennial generation is required to be responsive to disruptive changes. One of Indonesia's advantages in the midst of the global economy is a very high 'demographic bonus'. Will this be a blessing or disaster. This is where the role of educational generation, prepare a reliable generation, generation of leaders, who will build this country towards essential prosperity. As expected by the national education system regulated in Republic of Indonesia Law No. 20 of 2003 concerning National Education System on weighing c) which reads: "That the national education system must be able to guarantee equitable educational opportunities, improve quality and relevance and efficiency of education management to face challenges in accordance with demand for changes in local, national and global life so that education needs to be planned in a planned, directed and sustainable manner".

According to humanistic theory, the purpose of learning is to humanize humans. The learning process is considered successful if the student understands his environment and himself. Students in the learning process must strive so that gradually they are able to achieve self-actualization as well as possible.

Educators in the era of globalization or the so-called "21st Century Teachers" are teachers of high order thinking skills (HOTS).

As a teacher who has the ability to teach thinking must have the ability to develop innovative learning.

According to La Costa (1985), Teaching of Thinking is a learning process that is directed at the formation of certain mental skills, such as critical thinking skills, creative thinking, and so on.

So that student are trained to think critically and creatively. So, learning strategies can be applied that are centred on students or student centres. Furthermore collaborated with contextual learning or contextual teaching and learning (CTL).

Triyanto (2009: 105) cites the University of Washington (2001) that CTL emphasizes higher-level thinking, transfer of knowledge across disciplines, as well as gathering, analyzing, and synthesizing information and data from various sources and views.

According to Kunandar (2007), contextual teaching and learning / CTL is a learning concept that helps teachers connect between subject matter taught and real-world situations of students and encourages students to

make connections between their knowledge and their application in their daily lives. One of the approaches to contextual learning or CTL is to implement project-based learning.

In a previous study conducted by Rosyidatul Munawaroh, et al. (2012), shows that the application of the Project Based Learning model is able to realize the four pillars of learning. UNESCO views education as a building supported by four pillars, namely learning to know, learning to do, learning to live together and learning to be.

Sometimes students find it difficult to understand the lesson. Of course, many factors can cause it. The following is the definition of learning difficulties according to The World Health Organization (WHO) as stated by the British Institute of Learning Disabilities (enquiries@bild.org.uk) is: "Learning disabilities as a state of arrested or incomplete development of mind. Somebody with a learning disability is said to also have significant impairment of intellectual functioning and significant impairment of adaptive/social functioning. This means that people will have understanding difficulties, learning and giving new things, and in generalising any learning to new situations. Because of difficulties with learning, people have difficulties with social tasks, for example, communication, self-care, awareness of safety and safety.

For example and at the same time the object of research. When material about Market Price Formation is taught, students seem to have difficulty understanding the material. Because theories such as the concept of the law of demand (law of supply) and the concept of supply (law of demand) to the formation of market prices are only explained. There must be a learning technique that can connect the theory with facts. Students are directed to look directly at things related to the material in the surrounding environment so that students can understand the lesson about Market Price Formation as a whole. This is what is called contextual learning.

How can students easily understand the material about forming balance prices? So in this study applied learning techniques with a project-based learning model or project based learning. It is expected that with the project learning model students can easily understand learning about the formation of market prices.

Project learning is a learning approach in which teachers provide complex, difficult, complete projects or assignments, but are realistic/authentic to students and they are given sufficient assistance so that they can complete their assignments. Learning this model is classified as comprehensive learning, so the learning environment must also be designed so that students can deepen the material, and do other meaningful things. (Kunandar, 2007)

Project-based learning is an application of active learning, constructivism theory from Jean Piaget and constructionism theory from Seymour Papert. Paper is a student of Jean Piaget. As is the case with constructivism, the principle is that every child builds his mental model to think and understand the world around him. In other words, knowledge information will be understood by students through building cognitive structures in their minds. (Warsono and Hariyanto, 2012: 152-153)

This study aims to solve the learning difficulties of students to understand the material of Market Price Formation in social studies subjects at MTs. The problems raised in this study are as follows: (a) Can the application of project-based learning methods make it easier for students to understand the subject matter of Market Price Formation? (b) Can project-based learning methods stimulate student involvement in discussion activities?

II. Method

This research is a one shoot model study. Research Approach. The approach used in this study is the Mixed Methods approach. As stated by Sugiyono (2012: 204), Mixed Methods is an approach in research that combines or connects between quantitative and qualitative research methods to be used together in research activity to obtain more comprehensive, valid, reliable, and objective data. Through a combination of two methods, the data obtained is a descriptive - quantitative approach. According to Arikunto (2006: 12), a descriptive - quantitative approach is a much approach that is required to use numbers starting from data collection, interpretation of the data and the taking of the results.

Research design. This research is action research, it is necessary to design a study so that the implementation of research is better. The research design used two rounds of students is given an explanation of the material about the law of demand and supply and the formation of equilibrium prices. At the end of the lesson, given the project assignments (enter the planning and implementation phase). After students plan the project and implement it, then go into the second stage, namely observation and reflection on the results of project assignments. From the learning process of the project model, student learning outcomes are obtained in the form of values consisting of; (a) the value of assignments which include; aspects of planning, implementation, task reports, and reflection. (b) Observation of the results of assignments projects which include; initiative, activity, collaboration and discussion.

After data collection is complete, data is processed and analyzed. Data is obtained from authentic assessments or observations during the project task process. Triyanto (2009: 105) cites the University of

Washington (2001), authentic assessment of actual learning outcomes expected of students. This strategy can include assessment of student projects and activities.

Data processing. Data is processed into tabulations and graphs. Research subject. All students of class VIII A at the Madrasah Tsanawiyah of the State of Ampah, East Barito Regency, totalling 32 students.

III. Results And Discussion

This research was carried out in two stages. The first stage is an introduction to the theory of forming equilibrium prices, and in the second stage is the assessment of the results of project tasks. Before the research was carried out the first thing researchers did was survey the class VIII A MTsN Ampah. After the survey was conducted, researchers found a recurring problem that in learning social studies subjects in the material chapter Price Equilibrium Price (learning equilibrium price) there were still learning difficulties. Students pay less attention and difficulties in giving answers when given questions related to the chapter on the formation of equilibrium prices, both during the UTS and at the end of the semester. In addition, the method that has been used so far has not been able to make students active in participating in the material provided. For this reason, the researchers tried to apply the method of learning based on learning methods in the hope that students could easily understand the subject matter about the formation of equilibrium prices, and students could be more active in participating in learning activities.

Before the research was carried out, the researcher also compiled a research instrument consisting of the preparation of a Learning Implementation Plan (RPP) as a guideline for the learning process, preparing teaching materials or materials which will be taught, preparing student project assignments, preparing student evaluation tools and student activities and student skills sheets as a guideline for assessment.

After carrying out the planning the researchers carry out learning activities using the Project Based Learning model or project-based learning. The first step in project-based learning is to provide questions or reviews that have been owned by students. But at this stage, many students pay less attention to the teacher's explanation so when asked students are not able to answer it.

Next, the teacher divides students into groups consisting of 4 groups, each of which consists of 8 people. At this stage, there are still many students who are still passive but the number of students who are passively less than before. Only certain students actively answer questions.

Next is to arrange a schedule for the implementation of project activities with the main activities, namely interviews with buyers and sellers in the environment around the student's residence. Students are required to also conduct literature studies from various sources, either from books or online media. Planning is the core subject of starting project tasks. This is done by students guided by the teacher. "Students and teachers plan a variety of specific learning procedures (projects), general tasks and objectives that are consistent with various topics and subtopics (which have been selected or assigned to each group) (Komalasari, 2010: 76)

In the next stage, namely, the second stage, enter the stage of the student interview report regarding the attitude of buyers and sellers. The buyer is a representation of "demand", while the seller is a representation of "offer". Classes are designed as a discussion space between groups. Each group provides corrections and questions to the results of other group reports.

After the students have finished working on the project assignments given; then the learning outcomes of equilibrium price material are obtained in the form of project value. Where the project appraisal according to Kumalasari (2010: 163), "the activity of evaluating a task must be completed within a certain period of time. The task is in the form of an investigation since planning, data collection, organizing, processing and presenting data. The following is a description of the results of the project assignment assessment of students in class VIII A MTsN Ampah, East Barito Regency.

Evaluation of project assignments for each group which contains four aspects with the score determination as follows:

- Planning : maximum score of 10
- Implementation : maximum score of 20
- Results report : maximum score of 30
- Discussion and reflection: a maximum score of 40

The total maximum acquisition score is 100

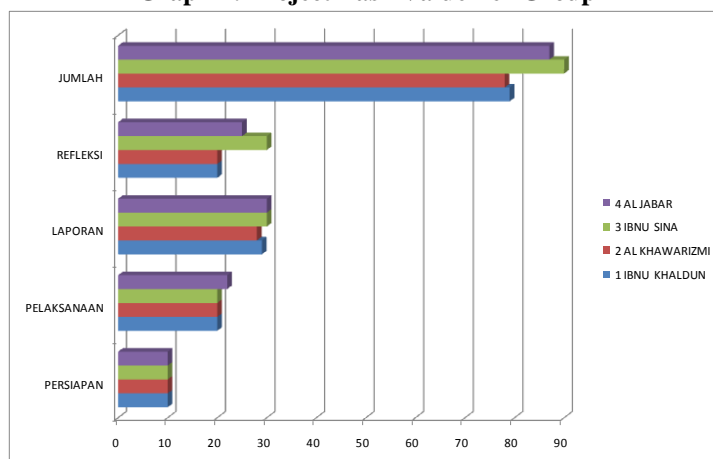
The following are the results of project assignments per group:

Table 1: Project Task Values Per Group

Group Name	Assessment aspects				Total
	Planning	Implementation	Product	Reflection	
Ibnu Khaldun	10	20	29	20	79
Al Khawarizmi	10	20	28	20	78
Ibnu Sina	10	20	30	30	90
Al Jabar	10	22	30	25	87

As in table 1 above, the results of student project assignment score scores can also be projected in graphical form as in graph 1, this is to facilitate analysis, to help direct the findings of things that may not be included in previous estimates. Therefore the results of project assignment data in this study the researcher present in graphical form. The following is graph data that describes the results of project tasks and their analysis.

Graph 1: Project Task Value Per Group



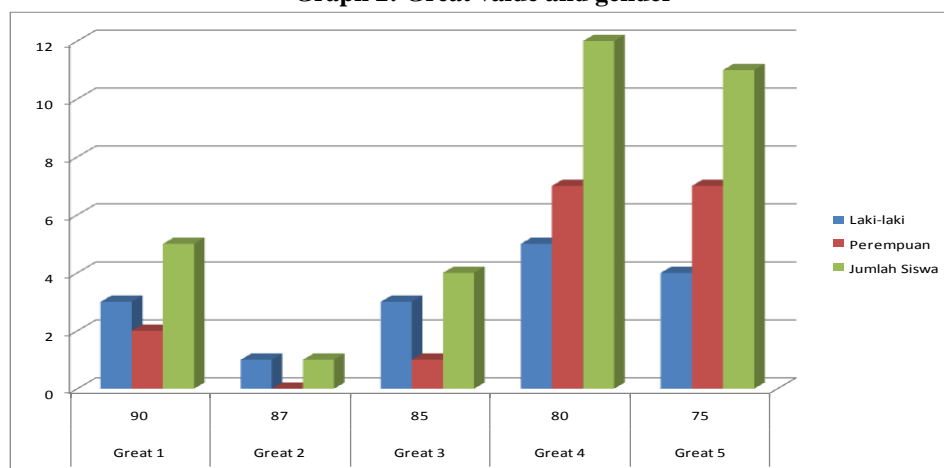
From the description of quantitative data from project assignments per group, there are two groups that are considered very good, namely the Ibn Sina and Al Jabar groups. Based on data obtained by scores of 90 and 87 respectively (see Table 1), while the other two groups also succeeded in surpassing the KKM above 75, namely the groups of Ibn Khaldun and Al Khawarizmi, each with scores of 78 and 79.

Inadvertently in this study found, the two best groups were female student groups. The Ibn Sina and Al Jabar groups consisted of female gender students, while Ibn Khaldun and Al Khawarizmi groups consisted of male gender students. For results can be seen in table 1 and graph 1.

Researchers had assumed that whether the project model learning was only appropriately applied to female students?

The above assumption turned out to be wrong, after examining the activity value data per student. This happens because learning in madrasa is used to separating between groups based on gender. The following is a graph of the data for score scores based on gender (gender) per student combined with great grades per student.

Graph 2: Great value and gender



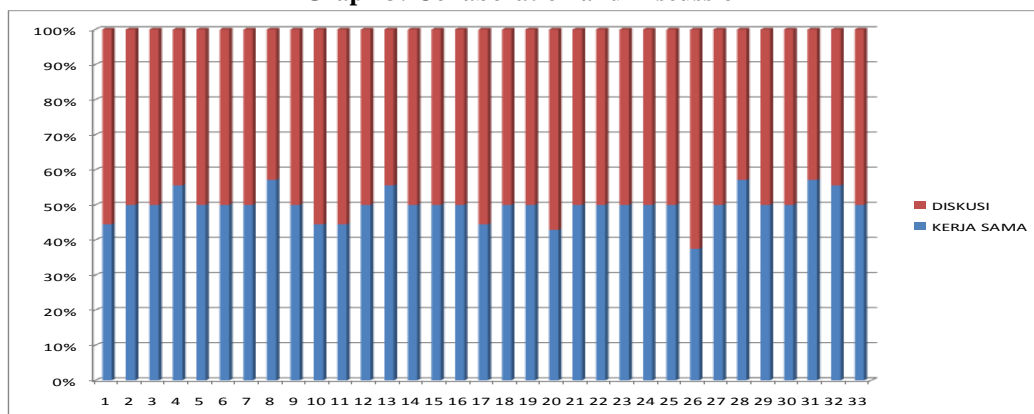
In graph 1 above, the researcher conducted a classification of values based on great, then found there were 5 great score scores. Precisely on the great 1, 2 and 3, male students are more than female students.

The difference between group-based assessment and assessment per student can provide information to researchers about the importance of collaborative learning.

So, even though in groups, the project assignment score scores are dominated by students who are female gender, but polarization based on great value per student varies and is not determined by gender. This shows that project learning has no problem with gender differences.

Researchers also compare collaboration with discussions per student. For data projections, the comparison between collaboration and discussion can be recorded on chart 3. An interesting comparison, that there is a pattern of good cooperation among students in planning, carrying out project tasks. This is important, to see the ability of teamwork and as habits among students. Graph 3 shows a balance with the ability to discuss to maintain the results of group work.

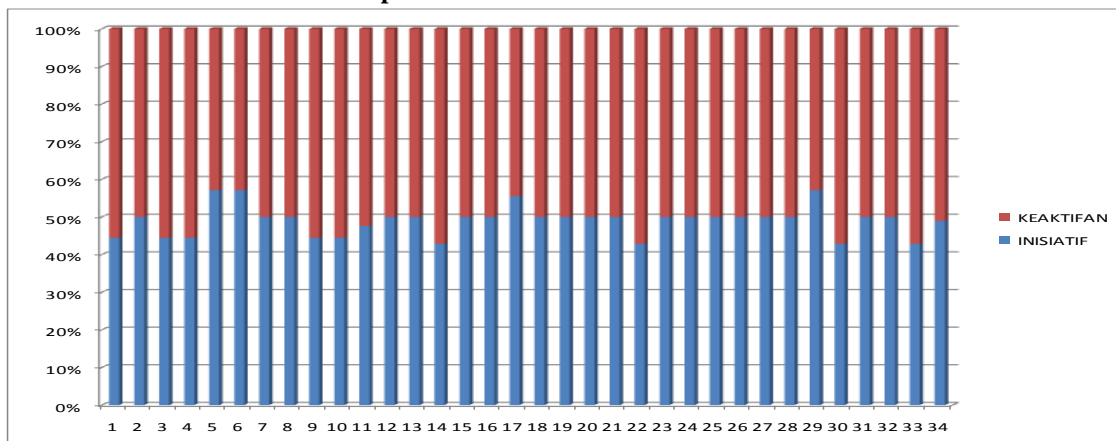
Graph 3: Collaboration and Discussion



So in general, students of class VIII A at MTsN Ampah have described their involvement in social studies learning in the subject matter of forming equilibrium prices.

In the last part of the study, the data that became the focus of the analysis was initiative and activity. It is important to find student learning motivation when using the project learning model. Balanced comparisons can be seen in graph 4. That means students have the initiative to activate themselves in each set of project tasks, ranging from planning, implementation, outcome reports to discussion and reflection.

Graph 4: Initiative and Active discussion



From the acquisition of cumulative and individual values, the project-based learning process informs the researcher that the project learning model or project-based learning can facilitate students in understanding market price formation subject matter in the social studies field and also able to stimulate students' active learning activities. Project learning can also be applied across gender. Not as had been assumed by the author when this research took place.

IV. Conclusion

Based on the results and data analysis, it can be concluded that: (a) Students can understand the subject matter about forming market prices easily through project-based learning. This can be seen from the high score obtained from the project task report obtained by students as can be seen in table 1 and graph 2. (b) The project-based learning method is very good for encouraging student activity in learning. (See in Graph 4)

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