Improving Student Learning Activities in Islamic Macroeconomics Course through a Project-Based Learning (PjBL) Approach

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ABSTRACT
One solution to solving problems faced by students in Blended Learning is to apply one of the learning approaches, namely the Project Based Learning (PjBL) approach where with this learning approach students will be creative, because through this learning approach students are expected to deepen their knowledge and realize learning experience. Adjustment of the learning system to keep up with current developments, blended learning innovation in Islamic Macroeconomics is expected to increase students’ enthusiasm and understanding. The implementation of this project Based learning method aims to create a learning system that requires students to study more effectively and have the skills needed in the world of work, as well as to trigger students to be creative and enthusiastic about Islamic Macroeconomics courses. This study aims to determine student responses to project Based learning and the quality of student learning in the Islamic Macroeconomics course. This study uses qualitative methods, data obtained from students using direct observation method by distributing questionnaires so that a conclusion can be drawn from what is learned. Based on the results of research and data analysis, it can be concluded that learning with the Project Based Learning approach in the Islamic Macroeconomics course can improve understanding, creativity, critical thinking, effectively and efficiently. Learning achievement is in very good criteria. Furthermore, the indicators of Student and Lecturer Interaction Aspects, Motivation of student interest in learning, Understanding of subject matter, Time management, student learning outcomes, The suitability of the application of the learning model with the characteristics of the subject, has a "good" value.

Keywords: Project Based Learning, Blended Learning, Islamic Macroeconomics.

1. BACKGROUND

Islamic Macroeconomics is a study of economic analysis that is comprehensive (aggregate) and focuses on the analysis of the factors that determine a country's economic activity and examines the role of the government in overcoming all economic problems Based on sharia principles in accordance with the objectives of Maqhhasid Al-Sharia. The purpose of the Islamic Macroeconomics course is that students have knowledge and understanding of differentiating macroeconomic variables in conventional and Islamic approaches. This knowledge is important for students, especially in developing research skills. The main lecture method applied so far in Islamic macroeconomics is face-to-face classical lectures. The assessments carried out in measuring student learning achievement that have been implemented so far are assignments in the form of reading assignments from selected topics, as well as written exams. The teaching materials that have been developed so far are in the form of handouts, power points, and modules, or textbooks. Judging from the distribution of values, it means that there is still a lack of student ability in exploring Islamic Macroeconomics that has been given, so that it requires the active role of students and also requires information technology assistance in the learning process.

One solution to solving problems faced by students, the author will apply one learning approach, namely the Project Based Learning (PjBL) approach where with this learning approach students will be creative, because through this learning approach students are expected to deepen their knowledge and realize the learning experience. In addition, as an effort to help students understand the material, it can be done by conducting research. This knowledge is important for students, especially in developing research skills [1].

Among the topics discussed in Islamic Macroeconomics during this semester, is the material on the Concept and Definition of Inflation. In this material, students sometimes find it difficult...
to understand the concept. So that students find it difficult to solve problems that have to do with the material. This is where a problem arises that requires a solution. In conventional learning that is in the process of teaching and learning activities centered on the lecturer, the lecturer only transfers the knowledge they have to students so that the lecturer is considered everything by students. But in learning with the PjBL approach, the lecturer teaches the existing material with actual/concrete conditions. So that in learning that reflects the actual situation, students experience it directly, which results in learning that is more meaningful and easier for students to understand.

Based on the foregoing, the authors were inspired to conduct a research in the form of classroom action research with the aim of knowing the results of Islamic macroeconomic lectures through the Application of Learning Models with Project Based Learning (PjBL) Approaches. This method also aims to determine the active involvement of students, and to determine student responses during the application of the learning model, so as to produce a work in the form of simulation videos and scientific articles.

Project-Based learning (PjBL) provides opportunities to broaden knowledge and develop skills through problem solving and investigation. In PjBL students can practice decision-making Based on real-life problems. Students can also develop skills, think critically and then apply knowledge to create a project that will solve the problem presented. Students can gain invaluable experience by doing and actively participating in the learning process, compared to reading the information presented on the course and then taking a test at the end of the course on e-Learning [2].

Currently, face-to-face lectures cannot be carried out to avoid the spread of the Covid 19 pandemic virus. Therefore, an adequate learning management system (LMS) for e-learning called interactive learning (i-learn) provided by Andalas University is very effective. To be used in current study from home (SFH) or Learning From Home (BDR) lectures and will also greatly help students understand and develop Islamic Macroeconomics courses.

By adjusting the learning system that follows current developments, the innovation of blended learning in Islamic macroeconomics is expected to increase students’ enthusiasm and understanding. The implementation of this project Based learning method aims to create a learning system that requires students to study more effectively and have the skills needed in the world of work, as well as to trigger students to be creative and enthusiastic about Islamic Macroeconomics courses.

Based on the description above, the formulation of the problem in this study is: how to improve student learning achievement by using the PjBL approach in Islamic macroeconomic subjects with the subject matter of the concept of inflation in Islam? Can the PjBL approach increase Islamic macroeconomic learning activities in solving the problem of Inflation in Islam? Can the PjBL approach improve learning outcomes for Islamic Macroeconomics courses? The objectives to be achieved in this study are: to find out how much the increase in student motivation in Islamic Macroeconomics courses in problem solving through the PjBL approach.

There are five important characteristics in the learning process using the PjBL approach.

1. Learning is a process of activating existing knowledge (activating knowledge)
2. Learning to acquire and add new knowledge (acquiring knowledge)
3. Understanding knowledge
4. Putting this knowledge and experience into practice (applying knowledge)
5. Reflecting (reflecting knowledge)

Project-Based learning (PBL) refers to an instructional approach that teaches curriculum concepts through projects that adhere to the principles of learner-centered teaching, learner autonomy, collaborative learning, and learning through assignments [3]. Application of project-

2. THEORETICAL FOUNDATION

PjBL is a strategy that fully involves students in the learning process. Students are encouraged to study the subject matter according to the topic to be studied. Learning in the context of PjBL is a hands-on experience process. Project Based Learning (PjBL) is a learning strategy that emphasizes the process of student involvement in order to be able to find the material being studied and relate it to real life situations so as to encourage students to be able to apply it in their lives. There are three things to understand. First PjBL emphasizes the process of student involvement to find material, second PjBL encourages students to find the relationship between the material studied and real life situations, third encourages students to be able to apply it in life.
Based learning (PBL) to solve problems, and learn from each other along to build their knowledge [4] [5]. Yasin, et al., 2009 stated that PBL is a broad learning model for students. They can work individually or in groups to investigate a topic. PBL is a systematic learning that involves students in knowledge and learning skills through a development investigation to obtain a product [6].

The framework for thinking in this activity is as follows:

![Figure 1. Thinking Framework](image)

**Figure 1. Thinking Framework**

The picture above shows that the classroom action research method with a Project Based learning approach will be carried out on material that students have low understanding of in this course. After obtaining problems, then planning for class follow-up research is carried out on materials that have difficulties.

**2.1. Hypothesis**

In conducting classroom action research, there is hypotheses that is assumed to achieve the objectives of this project based learning activity. The hypotheses formulated is:

H1: The level of student understanding is getting better by providing project based learning in learning activities.

**3. METHODOLOGY**

This study uses a Classroom Action Research Design that focuses on student activities in the Islamic Macroeconomics course [7].

1. The research was conducted online on students of the Islamic Macroeconomics course.
2. In implementing the action, the design is carried out in 3 cycles which include: (a) planning, (b) action, (c) observation, (d) reflection.

**a. Planning Stage**

The activities at this planning stage are: 1) Reviewing the curriculum for introductory microeconomics subjects, 2) Making blended learning teaching tools with a Project-Based learning approach, 3) Making observation sheets to see teaching and learning conditions in class 4) Making evaluation tools for knowing student learning outcomes, 5) Making a questionnaire to see student responses.

**b. Action Stage**

The activities at the action stage are: 1) explaining the material in general, 2) explaining the selection of approaches and the number of members in the action, 3) planning Project-Based learning and the form of outputs generated from the PjBL. 4) presentation by students regarding the content of the material with the resulting video.

**c. Observation/observation stage**

Activities at the action stage are: 1) Observation, used to make observations. 2) Questionnaire, aims to determine student responses to the application of the Learning Model. 3) The evaluation aims to determine the effect of the implementation of learning actions on the learning outcomes of introductory microeconomics. 4) Reflection to adjust the actions that have been taken from observations [8].

**d. reflection**

Reflection is a step to make improvements and refinements or actions in accordance with the reality found in the field. Data collection techniques used are qualitative and quantitative data.

**3.1. Questionnaire**

This study uses a questionnaire to determine and see the progress of students in the application of project-
Based learning models. To make research variables, operational definitions are given to these variables and then the indicators to be measured are determined. The indicators are then translated into questions or statements. There are 7 indicators that will be measured and then a grid of questions/statements is made which is translated into 23 question/statement items. The following is a table of instruments that will be used as a questionnaire in the study:

**Table 1. Indicator Variable Item Number Number of Items**

| Variabel | Indikator                                                                 | Nomor Item | Jumlah Item |
|----------|---------------------------------------------------------------------------|------------|-------------|
|          | Project-Based Learning Strategies in Islamic Macroeconomics Course        |            |             |
|          | 1. . Aspects of Student and Lecturer Interaction                          | 1, 2, 3, 4,| 4            |
|          | 2. Student interest in learning motivation                                 | 5, 6, 7    | 3            |
|          | 3. Understanding of subject matter                                        | 8, 9, 10   | 3            |
|          | 4. Thinking critically, effectively and efficiently                       | 11, 12, 13,14 | 4        |
|          | 5. Time management                                                         | 15, 16, 17 | 3            |
|          | 6. Student learning outcomes                                               | 18, 19     | 2            |
|          | 7. The suitability of the application of the learning model with the characteristics of subjects | 21, 22, 23 | 3            |
|          | Number of Questions/Statements                                             |            | 23           |

**3.2. Data analysis method**

This research data was collected from a questionnaire regarding student perceptions of Islamic macroeconomics lectures on Project Based Learning (PjBL) taken from students of the Unand Development Economics Study Program who became the object of research. After the research data is collected, the data is processed using the following techniques and stages [9]:

1. Looking for the percentage of answers to the questionnaire from respondents with the formula:

   \[ P = \frac{F \times 100}{n} \]

   Where : 
   
   - \( P \) = Percentage
   - \( N \) = Number of Respondents
   - \( F \) = Frequency

2. Determine alternative qualifications for the answers to each question item, namely answers with qualifications of strongly agree (SA), given a weight of 4, qualification of agree (A) given weight, qualification of disagree (DA) given weight of 2, and qualification strongly disagree (SDA) given weights 1.

3. Calculate the average score of each statement in the questionnaire using the positive statement formula, with the formula:

   \[ \text{Average Score} = \frac{(4 \times \text{SA}) + (3 \times \text{A}) + (2 \times \text{DA}) + (1 \times \text{SDA})}{
   \text{SA} + \text{A} + \text{DA} + \text{SDA}} \]

4. The calculation of the respondent's achievement value is used with the following formula:

   \[ \text{TCR} = \frac{\text{Average score} \times 100}{n} \]

   Where:
   - \( \text{TCR} \) = Respondent Achievement Level
   - \( \text{Rs} \) = Average score of respondents' answers
   - \( n \) = number of Maximum Score

5. Setting benchmarks for the category of percentage calculation results as a guideline for interpretation of data obtained from TCR calculations.

   According to Arikunto [6], the categorization of respondents' achievement scores is used as follows:

**Table 2. Criteria For Respondents' Answers**

| No. | Answer Interval | Answer Category     |
|-----|----------------|--------------------|
| 1.  | 81 - 100%      | Very Good          |
| 2.  | 61 - 80%       | Good               |
| 3.  | 41 - 60%       | Good Enough        |
| 4.  | 21 - 40%       | Not Good           |
| 5.  | 0 - 21%        | Not Good           |
4. RESEARCH RESULT

Based on the questionnaire, the results obtained are as follows:

Table 3. Aspects of Student and Lecturer Interaction

| No. | Statement                                                                                       | SA   | A    | DA   | SD  |
|-----|-----------------------------------------------------------------------------------------------|------|------|------|-----|
| 1.  | I feel more active in the Islamic Macroeconomics course with a project-Based learning model (Project Based learning/PjBL) in the form of videos | 22.2 | 33.3 | 44.4 | 0.0 |
| 2.  | I dare to ask every time I face difficulties in doing the task of Islamic Macroeconomics       | 22.2 | 77.8 | 0.0  | 0.0 |
| 3.  | With the PjBL method, the lecturer always gives direction in every work assignment              | 66.7 | 22.2 | 11.1 | 0.0 |
| 4.  | With the PjBL model (Based learning program) I dare to express my opinion to my lecturers and friends in class about the subject matter | 22.2 | 44.4 | 22.2 | 0.0 |

Average of score \(= \frac{112}{36} = 3.11\)

\[TCR = \frac{3.11 \times 100\%}{4} = 77.8\%\]

Based on the data tables and graphs, it can be seen that the percentage of answers on the Student and Lecturer Interaction Aspect indicators of agree and strongly agree is greater than the answer choices of less agree and disagree. The average who answered strongly agree was 33% and the average who answered agreed was 44%. Based on the calculation of the respondent's response (TCR) that the respondent's response to student self-learning through Project Based learning in the Islamic Macroeconomics course was 77.8% in the good criteria because it was in the range of 61-80%.

Table 4. Motivation Of Students' Interest In Learning

| No. | Statement                                                                                       | SA   | A    | D    | SD  |
|-----|-----------------------------------------------------------------------------------------------|------|------|------|-----|
| 5.  | I am always passionate about making videos                                                      | 33.3 | 55.6 | 11.1 | 0.0 |
| 6.  | The application of the project-Based learning model adds to my liking for the Islamic Macroeconomics course | 11.1 | 88.9 | 0.0  | 0.0 |
| 7.  | I don't feel tired in doing every video assignment given by the lecturer                         | 11.1 | 66.7 | 22.2 | 0.0 |

Average of score \(= \frac{83}{27} = 3.07\)

\[TCR = \frac{3.07 \times 100\%}{4} = 76.85\%\]

Based on the data tables and graphs, it can be seen that the percentage of answers on the motivation indicator of student learning interest from agreeing and strongly agreeing is greater than the answer choices of less agree and disagree. The average who answered strongly agree was 22% and the average who answered agreed was 64%. Based on the calculation of the respondent's response (TCR) that the respondent's response to student self-learning through Project Based learning in the Islamic Macroeconomics course was 76.85% in the good criteria because it was in the range of 61-80%.

Table 5. Understanding The Subject Matter

| No. | Statement                                                                                       | SA   | A    | D    | SD  |
|-----|-----------------------------------------------------------------------------------------------|------|------|------|-----|
| 8.  | The application of the project-Based learning model (video), I became more aware of every detail of Islamic Macroeconomics | 11.1 | 55.6 | 33.3 | 0.0 |
| 9.  | Application of project-Based learning model (video), I understand better what to do in future work in the field | 22.2 | 33.3 | 44.4 | 0.0 |
| 10. | Applying the project-Based learning model, I have come to understand the meaning of each curve in Islamic Macroeconomics | 0.0  | 44.4 | 55.6 | 0.0 |
Average of score = \( \frac{72}{27} = 2.67 \)

TCR = \( \frac{2.67 \times 100\%}{4} = 66.67\% \)

Based on the data tables and graphs, it can be seen that the percentage of answers on the subject matter understanding indicators of agree and strongly agree is greater than the answer choices of less agree and disagree. The average who answered strongly agree was 14% and the average who answered agreed was 49%. Based on the calculation of the respondent's response (TCR) that the respondent's response to student self-learning through Project Based learning in the Islamic Macroeconomics course, 66.67% is in good criteria because it is in the range of 61-80%.

Table 6. Think critically, effectively and efficiently

| No. | Statement                                                                                  | SA  | A   | D   | SD |
|-----|-------------------------------------------------------------------------------------------|-----|-----|-----|----|
| 11. | Project-Based learning model (Video) makes me creative in doing Islamic Macroeconomics tasks | 55.6| 33.3| 11.1| 0.0|
| 12. | I became trained how to find solutions to every economic problem in accordance with the Islamic Macroeconomics course | 11.1| 77.8| 11.1| 0.0|
| 13. | Islamic Macroeconomics that I do can be applied to real economic problems                  | 11.1| 88.9| 0.0 | 0.0|
| 14. | The application of the project-Based learning model (video) allows me to explore the potential within myself | 55.6| 44.4| 0.0 | 0.0|

Average of score = \( \frac{118}{36} = 3.28 \)

TCR = \( \frac{3.28 \times 100\%}{4} = 81.94\% \)

Based on the data tables and graphs, it can be seen that the percentage of answers to the Critical Thinking indicator, effective and efficient from agreeing and strongly agreeing is greater than the answer choices of less agree and disagree. The average who answered strongly agree was 33% and the average who answered agreed was 61%. Based on the calculation of the respondent's response (TCR) that the respondent's response to student self-learning through Project Based learning in the Islamic Macroeconomics course was 81.94%, it was in good criteria because it was in the range of 61-80%.

Table 7. Time management

| No. | Statement                                                                 | SA  | A   | D   | SD |
|-----|---------------------------------------------------------------------------|-----|-----|-----|----|
| 15. | The Islamic Macroeconomics assignment that I did was completed on time, as determined by the lecturer | 33.3| 66.7| 0.0 | 0.0|
| 16. | I spend my spare time at home by understanding Islamic Macroeconomics      | 11.1| 55.6| 33.3| 0.0|
| 17. | My study time becomes more meaningful by applying the project-Based learning model according to the given task | 22.2| 66.7| 11.1| 0.0|

Average of score = \( \frac{83}{27} = 3.07 \)

TCR = \( \frac{3.07 \times 100\%}{4} = 75.85\% \)

Based on the data tables and graphs, it can be seen that the percentage of answers on the Time Management indicator of agree and strongly agree is greater than the answer choices of less agree and disagree. The average who answered strongly agree was 25% and the average who answered agreed was 63%. Based on the calculation of the respondent's response (TCR) that the respondent's response to student self-learning through Project Based learning in the Islamic Macroeconomics course was 75.85%, it was in good criteria because it was in the range of 61-80%.

Table 8. Student learning outcomes

| No. | Statement                                    | SA  | A   | D   | SD |
|-----|----------------------------------------------|-----|-----|-----|----|
| 18. | I am satisfied with the results of my assignments | 22.2| 66.7| 11.1| 0.0|
| 19. | Project-Based learning model (video) can improve my learning outcomes       | 22.2| 77.8| 0.0 | 0.0|
Average of score = \( \frac{57}{18} = 3.17 \)

TCR = \( \frac{3.28 \times 100\%}{4} = 79.17\% \)

Based on the data tables and graphs, it can be seen that the percentage of answers to the student learning outcomes indicators of agree and strongly agree is greater than the answer choices of less agree and disagree. The average who answered strongly agree was 22% and the average who answered agreed was 72%. Based on the calculation of the respondent's response (TCR) that the respondent's response to student self-learning through Project Based learning in the Islamic Macroeconomics course was 79.1% which was in good criteria because it was in the range of 61-80%.

Table 9. The suitability of the application of the learning model with the characteristics of the subject

| No. | Statement                                                                 | SA  | A  | D  | SD |
|-----|---------------------------------------------------------------------------|-----|----|----|----|
| 20. | I find it easy to understand the task of Islamic Macroeconomics with a project-Based learning model (video) | 22.2 | 55.6 | 22.2 | 0.0 |
| 21. | The Based learning model (video) that I am working on makes the task of the Islamic Macroeconomics subject more realistic | 44.4 | 44.4 | 11.1 | 0.0 |
| 22. | Project-Based learning model (Video) makes Islamic Macroeconomics more useful according to the material | 33.3 | 66.7 | 0.0 | 0.0 |
| 23. | I think the project-Based learning model (Video) is appropriate for Islamic Macroeconomics subjects | 22.2 | 55.6 | 22.2 | 0.0 |

Average of score = \( \frac{114}{36} = 3.17 \)

TCR = \( \frac{3.28 \times 100\%}{4} = 79.17\% \)

Based on the data tables and graphs, it can be seen that the percentage of answers on the indicators of the suitability of the application of the learning model with the subject characteristics of agree and strongly agree is greater than the answer choices of less agree and disagree. The average who answered strongly agree was 31% and the average who answered agreed was 56%. Based on the calculation of the respondent's response (TCR) that the respondent's response to student self-learning through Project Based learning in the Islamic Macroeconomics course was 79.1% which was in good criteria because it was in the range of 61-80%.

5. Conclusion

Based on the results of research and analysis of student response questionnaire data for the Islamic Macroeconomics course, it shows that of the overall indicators of each aspect of assessment and perception, most of the students' answers strongly agree and agree. This means that the use of the Project Based learning (PjBL) approach learning method improves all aspects of the assessment from before the use of this PjBL approach. The results of this achievement can also be seen in the calculation of student responses (TCR), where the highest achievement is on the indicator of critical thinking, effective and efficient with a TCR value of 81.4% or the criteria of "very good". Furthermore, the indicators of Student and Lecturer Interaction Aspects, Motivation of student interest in learning, Understanding of subject matter, Time management, student learning outcomes, The suitability of the application of the learning model with the characteristics of the subject, is "good".

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