# The Effectiveness Of The Case Method Team Based Project Learning Model In Islamic Religious Education And Ethics Subjects

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| ARTICLE INFO | ABSTRACT |
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| | The purpose of this study was to determine the effectiveness of the case method team based project learning model in islamic religious education and ethics subjects. The effectiveness of the . The research method used is experimental. Research samplein the experimental class there were 30 people and in the control class there were 22 people in the information systems study program, faculty of computer science, universitas hangtuah pekan baru. The research instrument uses tests to measure cognitive and psychomotor in students. The results showed that the *case method team based project learning model* was more effective than the conventional learning model in improving cognitive and psychomotor learning outcomes. The Java programming course is one of the basic skills courses in the information systems and informatics engineering study program that students must understand and master. It was measured by measuring cognitive and psychomotor aspects in experimental class students who implemented the *case method team based project learning model*.<br><br>*Keywords:* case method, team based- project,learning. |

## 1. Introduction

Islamic education is a conscious and planned effort in preparing students to know, understand, live, and believe in the teachings of Islam and to respect the followers of other Islamic religions in connection with the inter-religious congregation until the unity of nations is realized [1]. The purpose of Islamic education is to increase the faith, understanding, and practice of students about Islam so that they become Muslims who believe and fear God and have a noble moral in their personal life, the community, the nation, and the country [2].

Islamic education in schools/madrasah is aimed at increasing the belief, understanding, living and practice of students about Islam so that they become Muslims who believe and fear God and have a noble morality in personal life in society, nation and country and to continue education at higher levels [2]. The learning system of Islamic education consists of various parts that are interconnected and stand independent to form a strong unity in achieving the goal [3].

In the process of learning Islamic education, teachers must not only understand a number of materials that will given to his pupils, even though it must be master various approaches and strategies education for transformational survival and internalizing the material, it's because Materials learning methods and techniques Islamic education is different from. In the face of advances such as this century, then Islamic education is very necessary to be given to pupils. But its implementation is not as easy as we imagine, because as an activity with a purpose of course the problems faced are very complex. So the design requires a mature thinking and consideration and a high sense of responsibility.

In connection with this, the educator must be able to be a professional educator, oriented to the pupils fully in creativity and daily activity in learning. To increase the professionalism of educators learning Islamic religion education, it is necessary to enhance one of them through. Islamic education is part of national education, the main purpose is to build and color the life of students with the values of religion and teach the science of Islam, so that they can practice the Islamic sharia correctly.

The importance of the effectiveness of learning in Islamic educational subjects must be noted so that the learning process carried out must be dissolved and able to lead students to be able to think creatively, conduct analysis, form a positive attitude, solve problems, stimulate and enable students to organize their own learning, think independently and work cooperatively to develop abstraction skills as well as other abilities, so that in the end students can understand the concepts of Islamic education correctly and fully and can apply them in life until the day. Another problem faced in PAI-BP learning is the use of the model or method of learning used by teachers when teaching subjects, still many religious teachers who have not mastered the various active learning methods that can actually be used in learning, so that learning is not monotonous.

Basic paths in developing the Case Method Project learning model framework on PAI-BP subjects, where the model development variable adopts some relevant research, advantages and slices of the case method and PJBL model.

Case method is a widely used educational tool that places students at the forefront and center of the learning process, which can bring the real world into the classroom to facilitate improved thinking skills among students, develop a deeper understanding of business problems, and come to better solutions [4]. The project-based learning model is better known as project-based learning, with the aim of enabling students to find ways to solve problems. So the skills are defined as attitudes and working abilities that are able to cooperate and collaborate with others [5].

Contribution from the model case method prejoct based learning provides learning solutions with the presence of case studies, case analysis, problem solving, project creation, monitoring up to project percentage. For access to produce an effective case method model and PJBL model can improve critical thinking and HOT students. While on the impact of the accompaniment students can cooperate, responsibility, discipline, compact in analyzing for each other discussions, besides it also embodied the good employment of students when studying in school and in the industry, for example, feeling, perseverance, caring, sympathy, empathy, gotong royong, mutual help, trust. On the other hand, at the time of the industry, students also obtained the right to worship on time, to leave on religious days, to implement religious values in schools and industries, as well as the right of industry to give students or employees the freedom of worshipping at the hour of prayer or on the day of religious observance, tolerance, and other values of religion.

The learning model recommended for use in the 2013 curriculum is a student-centred learning model, one of which is project-based learning and case method. In general, it can be said that case methods are formed in problem-based or case-based teaching. The application is very relevant in supporting Student Centre Learning SCL by designing and designing previous cases [6]. Case method is a highly adaptable teaching style that involves problem-based learning and promotes the development of analytical skills. By presenting content in a narrative format accompanied by questions and activities that encourage group discussion and complex problem solving, case studies facilitate the development of a higher level of Bloom's cognitive taxonomy in learning; moving beyond the memory of knowledge to analysis, evaluation, and application.

This case method is designed to enhance students' understanding of the core concepts of the course as well as to encourage critical thinking. In the use of cases, students become active. Cases give students the opportunity to make decisions, both individually and in a team format. For discipline students, cases help boost motivation Furthermore, this gives them real life experience examples [7]. Some students have difficulty linking theory with real life, practical examples. case methods can also be merged online [8].

The model developed has a syntax: 1. Formulate problems and select cases, 2. Collect data on cases, 3. Execute review and analysis of cases, 4. Percentage of profits, 5. Design of projects, 6) Create project proposals and online monitoring 7. Preparation of reports and presentation of projects. As for the explanation of each syntax on the model of learning case method and PJBL as follows: 1. Formulate the problem and select the case. At this stage the problem is formulated, and the case is selected on the subject matter, the selection of the group is also done. 2. Collecting data on the case. Each group gathers data about the selected case, searches for sources of information about the case, finds on books, archives, websites and so on. At this stage, students review the information and data that have been obtained on the case, as well as cases analyzed, discussed, 4. Percentage of cases. 5. Design of the project. In this phase the project design is done based on the percentage results of the case, the design is designed, the project illustration and the project description. 6. Create the project proposal and online monitoring. 7. Preparation of reports and project presentations. At this stage, a project report is made and each group presents the results of the project, there are questions and answers, as well as the selection of results.

The advantages of this model of case method prject based learning provide learning solutions with the presence of case studies, case analysis, problem solving, project creation, monitoring up to project percentage. To access generates a case model method and an effective PJBL model can enhance critical thinking and HOT students. While on the impact of accompaniment students can cooperate, be accountable, disciplined, compact in analyzing to discuss each other.

The model developed has a syntax: Syntax 1 Formulates a problem and chooses a source case from [9];[8] [10]; [11] in the presence of such syntaxis students are given the opportunity to formulate a problem from the subject matter, then also the selection of cases deemed important to be solved and given a solution. In syntax 2 gathered data about cases, sources from ; therefore in this stage he searched for sources of information

about cases from various relevant sources. In Syntax 3 carried out review and analysis of cases from sources [10];[11] In this stage students reviewed the information and data that had been obtained about the case, as well as cases analyzed, discussed. In the syntax 4 Percentage of cases originating from [9];[8]there is a need for a presence as a basis that is horizontal to the case so that a way out for a solution to the problem is sought. In syntax 5 Designing a project based on [12] it is necessary to design a project design, illustration and project description. In Syntax 6 Making a project proposal and monitoring online, it is essential to make a project, project and project proposals to see the progress of the project that has been carried out by each group. In syntactic 7 Preparing a report and a project presentation based on the source [13];[12] the reason is necessary for the preparation of a project report, then the project is also graduated and then the evaluation is done.

## 2. Methodology

This research uses a quantitative approach. With the use of numerical data that can be searched using experimental research methods. The research design used was the Matching Pretest – Post-test Comparison Group Design with one kind of treatment.

**Table 1. Design of Matching Pretest-Posttest Control Group Design**

| Kelompok | Pre test | Perlakuan (X) | Post test |
|---|---|---|---|
| KE | $O_1$ | $X_1$ | $O_2$ |
| KK | $O_1$ | $X_2$ | $O_2$ |

KE =Experiment class
KK. = Control class with conventional learning
X 1 = Treatment with its implementation model of case method team based project
X 2 = Treatment with the implementation of conventional learning
O1 = Pretest
O2 = Posttest
Based on the research method design, there are two classes that are selected directly, then given a pre-test to find out the initial state, then the experimental class was given treatment with case method team-based project model, while the control class was given treatment with conventional learning, then ended with a post-test. The research sample in the experimental class was 30 and in the control class there were 22 people in the SMKN 1 Rambah. The research instrument used cognitive and psychomotor tests. Data analysis technique performed is using statistical data analysis techniques. This data analysis is used to analyse quantitative data in the form of student learning outcomes which are processed using the T-test through the SPSS application.

## 3. Results

In this study, the experimental class was implemented model case method team-based project, whereas in the control class, conventional learning is implemented.
The following are student learning outcomes from the experimental class and the control class based on cognitive aspects.

**Table 1. Student Cognitive Learning Outcomes**

| Information | Control Class | | Experiment | |
|---|---|---|---|---|
| | Pretest | Posttest | Pretest | Posttest |
| Amount | 632.90 | 1685.91 | 838.94 | 2525.50 |
| Average | 28.77 | 76.63 | 27.96 | 84.18 |

Student learning outcomes in the cognitive aspect showed that in the experimental class the average pretest result was 27.96 and the average posttest result was 84.18. While in the control class the average pretest result was 28.77 and the average posttest result was 76.63. From these results it shows that the experimental class implemented the model case method team based project.

### a. Test Requirements Analysis
The normality test aims to determine whether the data to be analysed is normally distributed.

**Table 2. Normality Test Results**

| | variable | Kolmogorov-Smirnova | | | Shapiro-Wilk | | |
|---|---|---|---|---|---|---|---|
| | | Statistics | df | Sig. | Statistics | df | Sig. |
| control | | .110 | 44 | .200* | .968 | 44 | .253 |
| experiment | | .120 | 44 | .115 | .976 | 44 | .470 |
| a. Lilliefors Significance Correction | | | | | | | |
| *. This is a lower bound of the true significance. | | | | | | | |

From the results of the data normality test from student learning outcomes in the experimental class and control class, the results obtained in the experimental class and control class were sig 0.200 and 0.115 respectively Sig > 0.05 so that the data was concluded to be normal data.

In this study, a homogeneity test must be carried out to ensure that the comparison between the two data sets has homogeneous data. The learning outcomes that were compared were the average values after the implementation of the case method team based project model in the experimental class, and conventional learning in the control class. Here are the results of homogeneity:

**Table 3.Homogeneity test results**

| Information | Levene Statistics | df1 | df2 | Sig. |
|---|---|---|---|---|
| Control Class | 1,507 | 15 | 39 | .150 |
| Experiment class | .909 | 7 | 50 | .507 |

Based on the results of the homogeneity test, the learning outcomes in the experimental class were 0.507> 0.05, and in the control class 0.150 > 0.05, so it was concluded that the data had the same or homogeneous variance.

Next, the independent sample t test/t-test was tested, obtained as follows:

**Table 4. Independent Samples Test**

| | Levene's Test for Equality of Variances | | t-test for Equality of Means | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | F | Sig. | t | df | Sig. (2-tailed) | Mean Differences | std. Error Difference | 95% Confidence Interval of the Difference | | |
| | | | | | | | | Lower | Upper | |
| Equal variances assumed | 2,616 | .109 | -44,791 | 100 | .000 | -52.15892 | 1.16449 | -54.46923 | -49.84861 | |
| Equal variances not assumed | | | -42,581 | 71,972 | .000 | -52.15892 | 1.22493 | -54.60079 | -49.71705 | |
| Equal variances assumed | .772 | .382 | -5,125 | 100 | .000 | -4.99843 | .97524 | -6.93327 | -3.06359 | |
| Equal variances not assumed | | | -5,044 | 86,639 | .000 | -4.99843 | .99098 | -6.96823 | -3.02863 | |

Based on the results of the independent sample t test/t-test test, the results show that the t-count results are 2,616 when compared with the critical price t-table for df 100 at a significance of 0.05, namely 1.75, it is known that t count> t table, which means there is differences in student learning outcomes in the experimental class implemented by the model case method team-based project, where as in the control class applied conventional learning. It is concluded that the model is case method team-based project proven effective.

Psychomotor results were also seen in two different classes, namely the experimental class and the control class. Control class learning outcomes can be seen in the following table:

**Table 5.** Student Psychomotor Results

| No. | Control | | Experiment | |
|---|---|---|---|---|
| | Project 1 | Project 2 | Project 1 | Project 2 |
| Amount | 1667.00 | 1779.00 | 2492.00 | 2628.00 |
| Average | 75.77 | 80.86 | 83.07 | 87.60 |
| Standard deviation | 3,829 | 2,783 | 3,532 | 3,328 |

Based on Student psychomotor results showed that in the experimental class the average project 1 result was 83.07 and in project 2 the average was 87.60. Whereas in the control class the results of project 1 averaged

75.77 and in project 2 the average was 80.86. From these results it shows that the experimental class implemented the model case method team based project have higher psychomotor results than the control class implemented conventional learning.

After the development of the Case Method-Team Based Project on PAI and BP subjects, and by using e-learning support as a means that makes it easier for teachers and students to obtain teaching material, video learning, evaluations and so on, then everything feels much easier and faster to complete, where: (1) The material can be repeated easily; (2) A more flexible way of learning, where with the use of this e-Learning students can learn not only at the time of school study with conventional model only but from anywhere and anytime the training materials can be read, studied without any particular limitation.

In this way, the proposed learning model tries to leverage the advantages of both approaches to create an interactive, engaging learning environment and provide a deep learning experience for students. The Case Method-Team Based Learning Model Project balances the Application of Theory in a real context, so students will be trained to link PAI-BP theory to everyday situations and challenges in the industry. They will have practical experience in applying the concepts they learned during learning. The cases used in learning reflect situations that often occur in the industry. It allows students to understand and prepare themselves for the challenges they may face when working in industry

## 4. Discussion

The research has produced a Case Method Learning Model - Team Based Project with a sense: 1) Formulate problems and select cases, 2) Collect problems about cases, 3) Do case reviews and analyses, 4) Case presentations, 5) Design projects, 6) Make project proposals and online monitoring, 7) Prepare reports and project presentations

**Conflict of interest** The author declares that there is no conflict of interest.

**Fundings:** Self.

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