

Project Based Learning Models in Advancing Learning Results of Handicraft Entrepreneurs with Object Inspiration of Local Culture

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ABSTRACT

The purpose of this study: (1) To find out how teachers apply project-based learning models. (2) To find out how students' learning outcomes before and after using a project based learning model. (3) To find out whether the project-based learning model (project based learning) can improve student learning outcomes. This research uses quasi quantitative experiment. Data collection methods used were questionnaire and test. Non-Randomized Control-Group Pretest-Posttest sampling with a total sample of 63. The results of the study show: (1) teachers in applying a project based learning model get a score of 5% with a very good category. (2) student learning outcomes before and after using the project based learning model before using the project-based learning model in the experimental class has a score of 56% with a low category and the control class gets a score of 48% with a low category. Learning outcomes after using the project-based learning model in the experimental class is 50% with good categories and the control class gets a score of 35% with low categories. (3) there were changes in learning outcomes before and after using the project learning model with a score of 34.16% increase. So it can be concluded that the project based learning model can improve student learning outcomes with independent-test results with a tcount of 4,862 and at table of 1,670 (t count > t table) at an error level of 5% significant value of $0,000 < 0.05$ so that H_a be accepted.

Keywords: *Project based learning model, Learning Outcomes*

1. INTRODUCTION

The 2013 curriculum development aims to produce creative, innovative, effective and productive students. with affirmation, skills, and good abilities for students. With the development of the 2013 curriculum that is adjusted to the 2006 curriculum or KTSP, the management of Primary and Secondary Education on the quality of education or learning in each school must be assessed by using learning leading to standard processes in teaching students to be effective, democratic, guiding, enhancing creativity, motivating, being active and logical [2].

According to [3] in Full learning is what teachers do so that student behavior becomes good again. The teacher tries to create an atmosphere and service for all the needs of students in different ways. In the learning process, students learn from experience, contribute to knowledge, then interpret that knowledge [5].

According to BF Bell in [7] Project-based learning is a learning model that involves a project in the learning process. Projects created by students can be alone or with others and carry out it in a certain time in a collaborative manner, producing a single product, which will be displayed or represented. Project implementation is carried out collaboratively, innovatively, uniquely, and which focuses on solving problems that relate to student life.

According to CORD et al in [7] Project-based learning is an innovative learning model and emphasizes contextual learning through complex activities, giving students the opportunity to share their creativity.

With this project-based learning model, it is good to apply at SMAN 6 Banjarmasin, because the project learning model has learning processes, namely 1) determining the project, 2) designing the completion process, 3) arranging the days and hours of project work, 4) completing the project with facilities and monitor teachers, 5) compiling material and presentation of project results, 6) evaluation of the process and project results [8]. Project-based learning also has several benefits including making students get new information and skills in learning, students are able to solve student problems to be active, increase student collaboration in groups, students are able to be responsible, students design processes to achieve results [1].

According to the results of interviews with researchers at SMA Negeri 6 Banjarmasin, the value of students in Craft and Entrepreneurship learning is still low due to various factors. The factors that cause the KWU scores in class X IPA 1 and IPA 2 at SMAN 6 Banjarmasin vary widely, among others, are teachers, students, tools, learning models, and the environment. The lack of student scores is attributed to the minimum experience of students in craft and

entrepreneurship subjects, because the learning that is carried out is very dependent on the teacher during the learning process as well as the habits of teachers in using speech learning models and assignments [9]. With this it makes student scores low and makes students passive

during the learning process so as to make students less excited and make student scores not good. Teachers are required to be able to choose and use appropriate learning methods so that learning topics can open up to students' experiences [4].

Table 1 Student Grade X IPA A

| Category | Interval | Class X IPA 1 | |
|---------------|-----------|---------------|----------------|
| | | Frequency | Percentage (%) |
| Very good | 8.5 - 10 | 0 | 0% |
| Very nice | 7.5- 8.4 | 4 | 12% |
| The middle | 6.0 - 7.4 | 6 | 19% |
| Below average | 4.0 - 5.9 | 17 | 53% |
| Very Low | 0.0 - 3.9 | 5 | 16% |
| amount | | 32 | 100% |

Source: Research Results (2019)

Based on the results of learning the initial value of other class X IPA 1 students is at a percentage below the average (53%), and the other students are in the middle percentage

(19%) other students are at a percentage (12%), at very low category has a value (16%).

Table 2 Grade X IPA Student Grade B

| Category | Interval | Class X IPA 2 | |
|---------------|-----------|---------------|----------------|
| | | Frequency | Percentage (%) |
| Very good | 8.5 - 10 | 0 | 0% |
| Very nice | 7.5 - 8.4 | 1 | 3% |
| The middle | 6.0- 7.4 | 5 | 16% |
| Below average | 4.0 - 5.9 | 18 | 58% |
| Very Low | 0.0 - 3.9 | 7 | 23% |
| amount | | 31 | 100% |

Source: Research Results (2019)

Based on the learning outcomes of class X IPA 2, the other 2 are in the percentage below average (58%), the other 2 are in the middle percentage (16%), others are in the good percentage (3%), and some are in the very high percentage. Low (23%).

2. METHOD

This research used a quasi-experimental quantitative method with Non-Randomized Control-GroupPretest-Posttest sampling. Data collection is by using questionnaires as well as tests. The following is the population and sample of class X students in SMA 6 Banjarmasin.

Table 3 Population and Sample

| No. | class | Population (Person) | Sample (Person) |
|-----|----------|---------------------|-----------------|
| 1 | X MIPA 1 | 32 | 32 |
| 2 | X MIPA 2 | 31 | 31 |
| 3 | X MIPA 3 | 33 | |
| 4 | X PIS 1 | 35 | |
| 5 | X PIS 2 | 35 | |
| 6 | X PIS 3 | 35 | |
| 7 | X PIS 4 | 35 | |
| | amount | 236 | 63 |

Source: Research Results (2019)

The independent variable (independent) in this study is the project based learning model (X) and the dependent variable (dependent) is the learning outcome (Y).

3. RESULT

The research results table after using the learning projec baset leraning (X) in the experimental class and the literary learning model in the control class with student scores (Y)

Table 4 Value After Using the Project Learning Model

| Class | Learning outcomes | | | | | | Affective | | | Psychomotor | | |
|------------|-------------------|-----|-----|----------|-----|----------|-----------|-----|-----------|-------------|-----|------|
| | Pretest | | | Posttest | | | F | % | Ket | F | % | Ket |
| | F | % | Ket | F | % | Ket | | | | | | |
| Experiment | 18 | 56% | Low | 16 | 50% | good | 15 | 47% | Very good | 18 | 56% | Good |
| Control | 15 | 48% | Low | 18 | 35% | moderate | 16 | 52% | Moderate | 17 | 54% | Good |

Source: Research Results (2019)

From the table above shows the results of the posttest of the experimental class get the highest frequency of (16) and a percentage of 50% in the good category. The affective value of the experimental class got the highest frequency of (15) and the percentage of (47%) with the very good category. The psychomotor score of the experimental class got the highest frequency of (18) and the percentage of (56%) with

the good category. Meanwhile, the control class posttest got the highest frequency of (18) and the percentage of (35%) the middle percentage. The affective value of the control class got the highest frequency (16) and the percentage was (52%) the middle percentage. The psychomotor score of the control class got the highest frequency of (17) and a percentage of (54%) a good percentage.

Table 5 Value of Independent Sample t-Test

| | | Leven's Test for Mean Variants | | t | df | Sig. (2-tailed) |
|-----------|-----------------------------------|--------------------------------|-------|-------|--------|-----------------|
| | | F | Sig | | | |
| Different | Assumption of equivalent variants | 3,957 | 0.051 | 4,862 | 61 | 0,000 |
| | Assumption Variants are not Equal | | | 4,885 | 57,000 | 0,000 |

Source: Research Results (2019)

Based on the results of table 5, it is known that the significant value of the Leven test is $0.051 > 0.05$, meaning that the data variance between the experimental class group and the control class group is homogen / the same. Because it is homogeneous, an equivalent variant assumption table is used to interpret the results of the independent sample t-test. The tcount value obtained is 4,867, meaning that it is greater than the table valued at 1,670 ($t \text{ count} > t \text{ table}$) at a 5% error level, a significant value of $0,000 < 0.05$ (H_a accepted), which is a significant average difference between the experimental class groups and the control class groups. So it can be concluded that there is an effect of the project learning model on student grades.

4. DISCUSSION

The results of the research on the application of the project learning model showed that the teacher used the project learning model to be very good. This shows that there are four categories that get an average score of 5 with very good scores, and two aspects get an average score of 4 with very good scores.

The results showed the results of the experimental class learning (pretest) before using the project-based learning model with a score of 56%, the percentage was below the average, while the learning outcomes (pretest) of the control class were 48% in the low category. After using the project-based learning model, the student scores (posttest) of the experimental class students turned into 50% in a good category. While the control class learning outcomes

(posttest) students got a score of 35% in the moderate category.

Demonstrated that using a project learning model can add even more value to students. this is indicated by the results of the calculation of the mean learning value of students after receiving treatment. Namely the average posttest of the experimental class 75 with an increase of 34.16%, and the control class to 67.2 with an increase of 22.18%. Wina Triani's research [10] reveals that project learning can increase motivation to students, because students participate in the learning atmosphere and develop personal skills, especially making works in the form of poster works.

It is in line with Yayang Putra Nalagasta [6] who stated that the project based learning model is suitable for practical learning because students can be active in finding information about what they need during the learning process.

5. CONCLUSION

Based on the results of the study, it can be decided that there are differences in the learning values of students in the cognitive, affective, and psychomotor domains in craft and entrepreneurship subjects. This can be seen in the independent t-test value on the t-count value of 4,862 and t-table of 1,670 ($t\text{-test} > t\text{-table}$) at an error level of 5%. The significant value is $0.000 < 0.05$ and H_a is accepted.

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