# The\_Effect\_of\_PjBL\_-\_BirLE

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### The Effect of Project Based Learning (PjBL) Continuing Learning Innovation on Learning Outcomes of English in Higher Education

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#### Abstract

Global issues that are sustainable in the industrial era 4.0, which requires universities to take part in the current Process, Input, Output and Outcome, one that is suitable for sustaining this project-based continuous learning is the educational approach which focuses on creative thinking, problem solving, and interaction between students and peeds to create and use knowledge in the current digital era. This study aims to determine the effect of Project Based Learning (PjBL) continuous learning innovations on English learning outcomes of students of the faculty of cultural scienges English Education study programs at Brawijaya University Malang. This research method uses experimental design with the Times-Series De. 32n with Control Group. Data analysis of this study used the one way ANOVA test. The results showed that the treatment of the TOEFL test, namely the pre-test and post-test in the control class and the experimental class in the Project Based Learning (PjBL) learning model there were differences. The average pretest toefl score in the experimental class was 344.71 with a range of values ranging from 300-397 and a standard deviation of 29.386. The average post-test toefl score in the experimental class, which is 360.83 with a range of values ranging from 303-400 and a standard deviation of 24.146. Project Based Learning (PjBL) based learning can improve student learning outcomes, the p-value on PjBL is 0.026.

#### Keywords

continuous learning innovation; Project Based Learning (PjBL); english learning outcomes



#### I. Introduction

The learning process will occur well through interactive processes between students and teachers, students with students, and students with learning materials. Besides that students learn naturally, and mental processes occur where students connect new information to relevant concepts (Rangkuti, 2019). In addition to demanding academic ability demands (hard skills), students are also required to be able to improve their personal abilities (soft skills), so that they are ready to enter the real world of work after completing their studies and there is an important thing to do is to master little TOEFL as a prerequisite for gaining jobs the good one. Project-based learning (PjBL) is a learning that is designed for complex problems, emphasizing learning with long activities, assignments given to students are multidisciplinary, product-oriented (artifacts) (Mahanal, Darmawan, Corebima, & Zubaidah, 2010).

Learning that can help students to pave creativity in thinking, solving problems, and interacting as well as helping in learning that leads to solving real problems is Project-Based Learning (PjBL) or project-based learning that is innovated in continuous learning towards

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Education for Sustainable Development (ESD) where Project-based learning can lead to real problems. stimulate motivation, process, and improve student achievement students of the faculty of culture in English Language Education study programs at UB Malang by using problems that are related to certain lectures in real situations. (Abd Syakur, 2017).

Learning outcomes are the level of mastery achieved by students in learning in coordance with the objectives set. According to Sardiman and Rahardjo in (Mansur, 2015), learning outcomes are mastery processes to measure student success agreed upon by the education provider. There are two factors that affect learning outcomes, namely (1) individual factors include maturity, intelligence, motivation, and personal factors; (2) social factors include teacher, family, and learning media. Learning outcomes must show better conditions, so it is useful to (1) increase knowledge, (2) increase understanding, (3) increase skills, (4) have a new outlook, and (5) appreciate something more. The purpose of this study was to determine the effect of Project-Based Learning (PjBL) on learning outcomes of TOEFL-based e-learning students of the Faculty of Cultural Sciences English Education Study Program at Brawijaya University Malang (Syakur, Junining, & Sabbath, 2019).

#### II. Research Methods

This research is a quasi-experimental study with a pretest and posttest design. The subjects of this study were students as many as 65 people from the Faculty of Cultural Sciences, English Language Study Program at Brawijaya University Malang in the English Language course at Brawijaya University Malang Semester VII in 2019-2020.

#### 2.1 Data Collection Methods

Collecting data was conducted with a score of pre-test and post-test in the implementation of the project-based learning model for students of the Department of English Language Education Universitas Brawijaya Malang in the seventh semester. TOEFL test scores were analyzed using statistical methods, namely the one way ANOVA test.

Questionnaire data collection is carried out to determine the relationship between projects based learning methods and student learning outcomes. Respondents' score scores are analyzed using statistical methods namely structural equation modeling.

#### 2.2 Test

To find out data about learning outcomes, conducted through pretest and posttest with the TOEFL test at the beginning before the learning process and the end after the learning process is done.

#### a. Pre TOEFL Test

The TOEFL Pre Test was given to both classes for the seventh semester of the 2019/2020 school year after it was discovered that the two classes used were actually the same according to statistics (Ho was accepted if t arithmetic <t table).

#### b. Pre Test Learning Outcomes

Pre-Test Results are given to students of the Department of English Education, University of Brawijaya Malang to see that the initial interest held by each class is the same.

#### c. Research Treatment

The treatment of this study was carried out 14 times by researchers in the experimental class and the control class. This research treatment uses the same material, lecturers, and

class conditions and time. How to teach an experimental class using Project Based Learning (PjBL) learning.

#### d. Post TOEFL Test

Post Test is given by using the E-TOEFL Test as a good and valid test instrument (Valid, Reliable, and Practical) for students in both classes after the treatment lasts for 14 times. The items in the test instrument given are the same as the test instruments given in the Pre Test

#### 2.3 Instrument

#### a. Questionnaire

- 1) Results questionnaire (for all students)
- 2) Project Based Learning Questionnaire (PjBL) model questionnaire (for Experimental class students).
- b. E-TOEFL Tests are used on Pre and Post Tests to determine student learning outcomes before and after treatment. E-TOEFL This test is valid (valid, reliable, and practical). So no need to calculate the content validity (content validity) of the test that is in accordance with the Higher Education curriculum, and the validity of the items from the TOEFL need not be doubted because this test has been used in all countries, more over the practicality of this instrument is very practical easy to read, understand, and accompanied by an answer so that all assessors in all countries will give the same value to the same work. Video is used for material and recording images, especially treatment time using the Project Based Learning Model (PjBL) (Rizky, Asri, & Purwoko Aji, 2017).

#### 2.4 Data Analysis

To answer the problem formulation regarding the TOEFL test score, a one way ANOVA test was used to test the effect of treatment in which more than two treatments (Montgomery, 2013). To find out the relationship between the process of achieving Project-Based Learning (PjBL) based learning outcomes of students of the Department of English Education, University of Brawijaya Malang using PLS analysis. According to (Abdillah & Jogiyanto, 2015), PLS is a multivariate statistical technique that makes comparisons between multiple dependent variables and multiple independent variables. PLS is a variant-based SEM method that is designed to solve multiple regressions when specific problems occur in data,

#### III. Discussion

such as the size of a small study, the presence of missing values, and multicollinearity.

3.1 Measurement of Student Learning Outcomes in English Subjects

Measurement of the value of TOEFL results in learning Project Based Learning (PjBL) in the English language education program at Brawijaya University Malang as follows.

Table 1. Comparative Analysis Table of English Language Skills with Long Distance Learning

		Experiment	Control
Respondent		35	30
Pre Test	Min	367	450
	Max	483	510
	Mean	417,03	470,53
	Delta Mean		53,5
	Std. Deviation	27,690	21,218

Post Test	Min	<b>28</b> 0	450
	Max	490	510
	Mean	450,06	476,67
	Delta Mean	,	26,61
	Std. Deviation	27,566	17,486

It is known that the pre-test score of the experimental class, the minimum value is 367 and the maximum value is 483 with an average value of 417.03, while in the control class, the minimum value is 450 and the maximum value is 510 with an average value of 470.53. Post test scores in the experimental class, the minimum value is 380 and the maximum value is 490 with an average value of 450.06, while in the control class, the minimum value is 450 and the maximum value is 510 with an average value of 476.67.

An evaluation of English learning stated that as many as 60% of English lecturers considered that student learning outcomes in the satisfactory (had met the competency standards and learning out comes planned in the RPS and RPP). However, improvement efforts need to be made as an effort to increase and improve.

As many as 15.4% of the student respondents in the survey agreed that the student learning outcomes in the courses received were satisfactory. 49.2% of students agree that they feel supervised or monitored in order and discipline inside and outside the classroom in the process of implementing character education in tertiary institutions. As many as 30.8% of student respondents in the survey stated neutral that they felt supervised or monitored in order and discipline inside and outside the classroom in the process of implementing character education in tertiary institutions. As many as 30.8% of student respondents in the survey stated neutral that they felt supervised or monitored in order and discipline inside and outside the classroom in the process of implementing character education in tertiary institutions.

Questionnaire data shows that 72.3% of students strongly agree and the remaining 27.7% of students agree that they feel that the student learning outcomes are influenced by good learning processes and methods. Questionnaire data shows that as many as 78.5% of students strongly agree and the remaining 21.5% of students agree that they feel agree with the implementation of exemplary habituation by important lecturers so that students get reinforcement of good behavior. 87.7% of students agree that they feel agree with the implementation of the new curriculum based on the project and the learning not hods that have been applied by most of the lecturers in higher education today. As many as 9.2% of the student respondents in the survey stated neutral that they felt neutral with the implementation of the new project-based curriculum and the learning methods that had been applied by most lecturers in tertiary institutions at this time.

Questionnaire data shows that as many as 56.9% of students strongly agree and the remaining 43.1% that they feel interested and get good learning outcomes because they use Innovative learning methods. 83.1% of students agree that they feel the ability to work together, think critically, resonsibility and have a social spirit that you feel right now is appropriate and appropriate. As many as 10.8% of student respondents in the survey stated neutral that they felt the ability to work together, think critically, responsibility and have a social spirit that you feel now is appropriate and appropriate. With regard to cooperative methods, as many as 66.2% of students agree that the implementation of Project Based Learning Based Learning (PjBL) in the TOEFL learning process based on E-Learning is one of the effective efforts to improve student learning outcomes. This proves that this research is

important where as many as 73.8% of students feel agree with the implementation of Project Based Learning in improving learning outcomes.

## 3.2 Effect of Project Based Learning Based Learning (PjBL) on Learning Outcomes Students in English courses

One way ANOVA test results in the experimental class the value of sig is equal to 0,000. Because sig <0.05 (0.000 <0.05), it can be concluded that H2 is accepted, meaning that the treatment effects of the three TOEFL tests namely pre-test and post-test in the experimental class are different, or there are significant differences. The test results indicate that in the control class PjBL the sig value is 0.031. Because sig <0.05 (0.031 <0.05), it can be concluded that H2 is accepted, meaning that the treatment effects of the three TOEFL tests namely pre-test and post-test in the control class are different, or there are significant differences.

Table 2. PjBL Learning Hypothesis Test Results Against Student Learning Outcomes

Hypothesis	Coefficient	T count	P-Values
PjBL E- Linning Based Toefl Learning Outcomes	0,433	2,244	0,026

It is known that the implementation of Project Based Learning Based Learning (PjBL) on TOEFL learning outcomes based on e-learning has an influence with a p-value of 0.026 meaning that there is a significant influence between Project Based Learning Based Learning (PjBL) on learning outcomes in VI semester students at the science faculty culture of English Education study programs at Brawijaya University Malang. The amount of influence between Project Based Learning Based Learning (PjBL) on learning outcomes of TOEFL based on e-learning is 0.433.

#### IV. Discussion

Studying in higher education, especially in the field of education, in addition to providing sufficient theories, related to technical skills, is also required to have good personal abilities. Personall abilities such as soft skills are abilities that are absolutely fulfilled by individual students before and when they enter the work force. As a solution to the above mentioned, continuous learning based on Project Based Learning (PjBL) can be concluded to have a significant effect on learning outcomes of e-learning based TOEFL and its influence is 0.433.

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