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The Effect of Innovative Learning Based on Project Based Learning (PjBL) on Learning Outcomes in English

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Abstract: ***This study aims to determine the effect of innovative learning based on Project Based Learning (PjBL) on the learning outcomes of English students at UniversitasBrawijaya Malang. This research method uses an experimental design with the Times-Series Design with Control Group. Analysis of this research data using a 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, had differences. the average pre-test toefl score in the experimental class is 344.71 with a range of values ranging from 300-397 and standard deviation of 29.386. The average toefl post-test score in the experimental class is 360.83 with a range of values ranging from 303-400 and standard deviation of 24.146. Project Based Learning (PjBL) based learning is able to improve student learning outcomes with a p-value in PjBL of 0.026.***

Keywords: Project Based Learning (PjBL), Results of Learning English

1. Introduction

Project-Based Learning (PjBL) is a learning that is designed for complex problems, emphasizing learning with long-term activities, assignments given to students are multidisciplinary, product oriented (Mahanal et al, 2010). Learning that can help students to have creative thinking, solving problems, and interacting with one another in the investigation that leads to the resolution of real problems is Project-Based Learning (Thomas, 1999; Esche, 12002; The George Lucas Educational Foundation, 2005; Turgut, 2008). Project-based learning can stimulate motivation, process, and improve student learning by using problems related to a particular course of study in the real situation.

Learning outcomes are the level of mastery achieved by students in learning according to the goals set. According to Dimyati and Mudjiono (2006), learning outcomes are a mastery process to measure student success agreed upon by education providers. Hasan (1994) argues that two factors influence learning outcomes, namely (1) individual factors include maturity, intelligence, motivation, and personal factors; (2) social factors include teachers, families, and learning media. Learning outcomes must show better conditions, so that it is useful to (1) increase knowledge, (2) increase understanding, (3) increase skills, (4) have new views, and (5) appreciate something more. The purpose of this study was to determine the effect of Project-Based Learning (PjBL) on e-learning based TOEFL learning outcomes in English Language Education Department, Brawijaya University, Malang.

2. Methods

This study was an experimental study with a design of pre test and post test. The subject of thisstudy was student as many as 65 students, Department of English Language Education in Brawijaya University, 2017/2018.TOEFL test scores were analyzed using statistical methods, namely one way ANOVA test. Questionaire data collection was conducted to determine the relationship between project based learning learning methods to student learning outcomes. The scores of the respondents' responses were analyzed using statistical methods, namely structural equation modelling.

One way ANOVA test was used to test the effect of treatment where more than two treatments (Montgomery, 2013). To find out the relationship between the process of achieving Project-Based Learning (PjBL) based learning outcomes on students of the English Language Education Department in Malang using PLS analysis . According to Abdillah and 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 statistical method designed to complete multiple regression when specific problems occur in the data, such as small research sizes, missing values, and multicollinearity.

3. Results and Discussion

Measurement of Student Learning Outcomes in English Language Courses

Measuring the value of the TOEFL results in learning Project Based Learning (PjBL) in the English education study program at Brawijaya University Malang is shown in the table below.

Table 1: Comparative Analysis of English Language Ability with PjBL Learning

		Experimental Class	Control Class
Respondent		35 Students	30 Students
Pre Test TOEFL Score	Minimum	367	450
	Maximum	483	510
	Mean	417,03	470,53

	Delta Mean		53,5
	Std. Deviation	27,630	21,218
Post Test TOEFL Score	Minimum	380	450
	Maximum	490	510
	Mean	450,06	476,67
	Delta Mean		26,61
	Std. Deviation	27,566	17,486

Based on the table above 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 . Score of the test post 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. The evaluation conducted on learning English states that as many as 60% of English language lecturers view that student learning outcomes in the subjects taught so far have been quite satisfying (already fulfilling the competency and learning outcome standards planned in the RPS and RPP). However, improvement efforts need to be carried out as an improvement and improvement effort.

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 agreed that they felt monitored in order and discipline inside and outside the classroom in the process of implementing character education in higher education. As many as 30.8% of the student respondents in the survey stated that they felt monitored in order and discipline within and outside the classroom in the process of implementing character education in higher education. As many as 30.8% of the student respondents in the survey stated that they felt monitored in order and discipline within and outside the classroom in the process of implementing character education in higher education.

The questionnaire data shows that as many as 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. The 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 habituation by important lecturers so that students get reinforcement of good behavior. 87.7% of students agreed that they felt agreed with the implementation of a new project-based curriculum and learning method that had been applied by most lecturers in universities today. 9.2% of the student respondents in the survey stated that they felt neutral with the implementation of a new project-based curriculum and learning methods that had been applied by most lecturers in today's universities.

Questionnaire data shows that as many as 56.9% of students strongly agree and the remaining 43.1% that they feel interested in and obtain good learning outcomes due to using innovative learning methods. 83.1% of students agree that they feel that the ability to work together, think critically, responsibly and socially that you feel right now is appropriate and appropriate. As many as 10.8% of the student respondents in the survey stated that they felt that the ability to work together, think critically, responsibly and have a social spirit that you feel is right now. Regarding the cooperative method, 66.2% of students agreed that the implementation of Project Based1 Learning (PjBL) based learning on the E-Learning-based TOEFL learning process was 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 based learning in improving learning outcomes.

The Effect of Project Based1 Learning (PjBL) Based Learning on Student Learning Outcomes in English Language Courses

The results of the one way ANOVA test in the experimental class sig value is 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 show that in the PjBL model control class 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 calculation	P-Values
Learning Outcome PjBL of E-Learning Based TOEFL	0,433	2,244	0,026

Based on the table above, it is known that the application of Project Based1 Learning (PjBL) to e-learning-based TOEFL learning outcomes has an influence with a p-value of 0.026 meaning that there is a significant effect between Project Based Learning (PjBL) based learning on student learning outcomes VII semester of English Language Education, Brawijaya University. The influence of Project Based1 Learning (PjBL) based learning on e-learning-based TOEFL learning outcomes is 0.433.

4. Conclusion

This study concludes that Project Based Learning (PjBL) has a significant effect on e-learning-based TOEFL learning outcomes and the effect is 0.433.

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