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The Implementation of Project Based Learning in Improving The Result of Learning Correspondence at Vocational High Schools in Medan

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Properly, learning can prepare human resources that have competition power. However, the fact in the field is the graduates of Office Administration, who must have capability in writing Indonesian and English correspondence, do not conduct correspondence well. The low skill of vocational high school graduates in doing correspondence activities is because the teachers have lack ability in conducting the learning process that transforms the learning material effectively.The objectives of this research are to improve the competence of correspondence *teachers in mastering the learning material and to give the proper learning model in conducting the teaching and learning process in correspondence class. This research conducted descriptive method. The data collection was done by doing observation, interview and test. The analysis result of Paired Samples Test that used SPSS statistic 20 found that the mean deviation is 13,83. It shows that the mean of learning result after conducted Project Based Learning in Correspondence subject is increased. Therefore, it can be said that there is improvement of the teachers' score after Project Based Learning implemented. Moreover, tcount -9,990 < Table -2,074 with Sig 0,000<0,05. Thus H0 is rejected and H1 is accepted means that there is significant improvement of the teachers' result before and after the implementation of Project Based Learning.Keywords; Textbook, Project-Based, Filing*

I. INTRODUCTION

Education is held as process of endeavoring learners for their whole life. Through educative activities, a student has competence that can be used in his/her society. Therefore, the law of Republic Indonesia No. 20 year 2003 about National Education System states that vocational education is intermediate education which prepares the students to be skillful in certain field[1].

The objective of education can be achieved when the teacher has competence based on the Regulation No. 14 year 2005 about Teacher and Lecturer. The regulation states teacher must have competences, namely: 1) pedagogic competence, 2) personal competence, 3) social competence and 4) professional competence from profession education[2]. But, in fact, only 75% productive teachers of Office Administration in Private Vocational High Schools in Medan are not graduation of Office Administration Department. The teachers' education background which is not linier causes the teachers of productive subject in Office Administration do not master the teaching material, and neither do in Correspondence subject.

Based on the result of office administration competence which was facilitated by Office Administration Department of Economy Faculty of Unimed on 4th May 2016 followed by MGMP members of Medan office administration and regional coordinator of institute professional certification of administration and Indonesia secretary (LSPS-AP) found that many teachers had difficulty of conveying office productive lesson material [3]. Ideally, learning can create human resource with the competitive ability, meanwhile, in fact graduation of office administration could not write correspondence well both in Indonesian and English.

Referring to the background above, the research was conducted in order to improve teacher's competence on mastering material and project based learning model. Since correspondence is compulsory lesson, office administrative students have to able to prepre the learning correspondence activities. These activities were done through sending and replying letters, more simply known as communication via letters [4].

Correspondence is a productive lesson in office administration. Its characteristic is practical and creating product, it is then believed that lesson using problem based learning suits with it. According to PP no.19 year 2005 Par.19 verse 1 : Standard of National Education stated that process of learning in each unit has to be done interactively, inspiring, enjoyable, challenging, motivated, participative, enabling for initiative, creativity, independent to sharpen student's talent and interest[5].

Project based learning is an approach that focuses on student's creativity, problem solving, interacting with others so that new knowledge is emerged. Project based learning is learning approach in which students are hoped to do and create the same project, at the end presenting the project result[6]. Moreover, by extending project in group would train the students to cooperate in finishing the project. It would help the students build their soft skill. Project Based Learning supports the students work in teamwork, increase their creativity, and can improve the competence of work in group between the students.

Teacher-centered learning should be abandoned. Now the teacher's role has shifted from knowledge transmitter to learning facilitators, collaborators and trainers. Teachers are not the primary source of information, but they are knowledge explorers, knowledge enhancers and peers. Learners are given a choice and give responsibility for their own learning [5].

The implementation project based correspondence learning adopts project based learning steps proposed by Lucas [7] as follow:

1. Start With the Essential Question: instructor asked some obstacles which faced by teachers in teaching Correspondence. The teachers were asked to identify their problems when they explained Correspondence teaching material, and what the students' problems are in comprehending the material.

2. Design a Plan for the Project: project's plan was designed by both the instructor and the teachers, thus, teachers have sense of belonging to the project itself. The project's plan consisted about everything that would be done in designing a letter, deciding the instrument and material that could be accessed to help the finishing of the letter. Here, the project was designing letter of payment claim and letter of inquiry in Indonesian and English.

3. Create a Schedule: the instructor and the participants made an agreement about the time needed to finish writing the letter of payment claim and inquiry letter. Moreover, they also agreed the time needed to type and print out the letter, and they have to prepare the letter's envelope with letter head on it. The agreement were decided by both the instructor and participants that they need 20 minutes to write each letter and 15 minutes to type the letter, and 7 minutes to prepare the letter head envelope.

4. Monitor the Students and the Progress of the Project: the teachers indeed made the letter of payment claim and letter of inquiry, typed the letter with semi block style, printed the letters, preparing the envelope with its heading letter, and folded the letters with low standard type as well as put the letter into the envelope with its heading letter. Instructor at the same time monitored the teacher's activity and facilitated them in completing the task.

5. Assess the Outcome: the outcome assessment covered teacher's letters, as well as print out, form, language structure, fold and envelope of letter. The assessment was aimed to measure the achievement of letter. In addition, the outcome is also used for discussion between the instructor and teachers for the sake of correcting the next conceived letters.

6. Evaluate the Experience: in the end, the instructor and teachers made reflection on the overall activities and the outcome. The instructor and teacher's reflection then noted in a paper.

In analyzing the data, the researchers conducted t-test random sampling by using the Application of SPSS Statistic 20. Furthermore, this research conducted descriptive method. The techniques of data collection were observation, interview, test [9].

II. METHODOLOGY

The aim of this research is to find out the effect of the implementation Project Based Learning on the teacher's correspondence competence. This research is conducted in SMK BUDISATRYA MEDAN. The sample of this research were the correspondence teachers who became the participants in the teacher training program on the Implementation of Project Based Learning with the total number 23 teachers. This research method is quasi experiment, since the design of the research compare pretest and post test score. The instrument of the research is written test that focus on evaluating correspondence competence, such as number of questions in pre test and post test..

The data analysis conducted Paired T test which tested the difference parametrically to see whether there is mean deviation between two pairs sample group. The pre test is for Paired T test conducted non parametric by using test Wilcoxon, said that the provision of Normality Test, distribution of population is normal, if the probability >0,05 thus H0 is accepted. Whereas, the distribution of population is not normal, if the probability ≤0,05 thus H0 is rejected. The hypothesis trial used T test paired sample by using SPSS statistic application in order to know whether certain value (given as comparison) show factual difference or not with the mean of the sample. The provision of Paired Sample Test as follows: H0 is rejected if $t_{count} > t_{Table}$ or $-t_{count} < -t_{Table}$, H_0 is accepted if $t_{count} < t_{Table}$ atau $-t_{count} > t_{Table}$.

II. RESULTS AND DISCUSSIONS

This research is conducted in SMK Budisatrya Medan. The sample of this research were the correspondence teachers who became the participants in the teacher training program on the Implementation of Project Based Learning with the total number 23 teachers.

testing the normality Saphiro Wilk to know the deviation between two data distribution. The following Table show the result of Normality test on the competence of correspondence teachers in Medan's Vocational Schools

TABLE I. TEST OF NORMALITY

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
difference	.196	23	.022	.950	23	.299

Based on the output of the Normality Test above, it can be seen that the statistic valu for Shapiro Wilk is 0,950 and Sig or p-value = 0.299>0.05, thus H0 is accepted or it is not significant. Therefore, the correspondence result distribute normally, thus the Paired T-test can be continued

TABLE II. . PAIRED SAMPLES STATISTICS

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	pretest	67.6957	23	6.29888	1.31341
	posttest	81.5217	23	7.94795	1.65726

Based on Table Paired Sample Statistics above, it can said that the mean of the correspondence teacher's score of Vocational Schools in Medan is 67.70 with standard deviation 6.30 before they have been trained by Project Based Learning. But after the correspondence teachers were trained by Project Based Learning, the score improve significantly 81.52 with standard deviation 9.95. It means that there was an improvement before and after conducting the Project Based Learning.

TABLE III. PAIRED SAMPLES CORRELATIONS

		N	Correlation	Sig.
Pair 1	Pretest & sesudah	23	.587	.003

From the Table Paired Sample Correlation, it is found the coefficient correlation correspondence score between before and after conducted Project Based Learning is 0.587 with the number of sig. or p value = 0,003 or 0.003<0,005 or significant.

TABLE III. PAIRED SAMPLES TEST

			Pair 1
			pretest - posttest
Paired Differences	Mean		-13.82609
	Std. Deviation		6.63772
	Std. Error Mean		1.38406
	95% Confidence Interval of the Difference	Lower	-16.69645
		Upper	-10.95572
	t		-9.990
	df		22
	Sig. (2-tailed)		.000

The above Table describes the t_{count} of -9.990 while the hypothesis in this study is:

H_0 = There is no difference in learning outcomes before and after implementations project-based learning..
H_1 = There are differences in learning outcomes before and after implementations project-based learning.

The comparison of t_{count} and t_{Table} is as follows:
H_0 is rejected if $t_{count} > t_{Table}$ or $-t_{count} < -t_{Table}$.
H_1 is accepted if $t_{count} < t_{Table}$ or $-t_{count} > -t_{Table}$.

From the Table Paired Sample Test, it was found the mean deviation = -13,83. It shows the mean after conducted the Project Based Learning is higher than the mean before the model was conducted. In other words, the value of negative mean shows that the mean after conducted Project based Learning in Correspondence class is improved. Moreover, t_{paired} -9,990 < t_{Table} -2,074 with sig 0,000 < 0,05, so H_0 is rejected and H_1 is accepted which means that there is significant difference between before and after the implementation of Project Based Learning.

IV. CONCUSION AND SUGGESTION

a. Conclusion

Based on the result of the study and the discussion it can be summarized as following:

1. There was a difference result of teaching correspondence by using project based learning either after or before the participant followed the training, it was a fact that the correspondence improvement increased.

2. The application of project based learning showed the affect on improving the teacher of office administration Medan in learning correspondence.

3. The learning correspondence outcome really went up by using project based learning.

b. Suggestion

Based on the conclusion above, the researchers proposed some suggestions:

1. Based on the average of learning result before and after the training of application project based learning in teaching correspondence in fact increased.It is suggested that teachers of office administration are suggested to implement this problem based learning model in teaching correspondence.

2. Since office administration belongs to productive subject requiring the teacher to make product as a learning result, it is suggested that productive teachers are able to select the appropriate model that enables their students to make the learning product, one of them is project based learning..

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