THE INFLUENCE OF PROJECT BASED LEARNING AND ACHIEVEMENT MOTIVATION ON IMPROVING WRITING ABILITY

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Abstract:
Writing skill is one of English skills which is often regarded as something difficult to master. Students tend to have less attention on this skill. Unfortunately, some teachers also often have a little attention on this skill since it needs more time to check the students work on writing. Consequently, the students' writing competence is difficult to increase. To overcome the problem, the possible alternative the teacher can use is using Project Based Learning since the approach seems to be effective to improve the students' writing competence. The other aspect can possibly influence the writing competence is Achievement Motivation. In this research, the problem investigated are whether or not there is influence using Project Based Learning and Achievement Motivation in improving writing ability. The kind of research used is experimental research with nonrandomized control group pretest posttest design. The data analysis used is t-test using SPSS version 21. The result shows that Project Based Learning influences the students' writing ability, while Achievement Motivation has no significant impact on the students' writing ability.

Key words: Project Based Learning, Achievement Motivation, writing ability

Abstrak Bahasa Indonesia

Abstrak: Kemampuan menulis (writing) adalah salah satu kemampuan Bahasa Inggris yang sering dianggap sulit untuk dikuasai. Siswa cenderung kurang memperhatikan kemampuan ini. Celakanya, sejumlah guru juga mempunyai perhatian yang kurang terhadap kemampuan ini, mengingat diperlukan waktu lebih untuk memeriksa pekerjaan siswa di bidang ini. Akibatnya, kemampuan murid di bidang writing sulit untuk ditingkatkan. Untuk mengatasi masalah ini, salah satu alternatif yang mungkin dilaksanakan adalah menggunakan Project Based Learning mengingat pendekatan ini tampaknya efektif untuk meningkatkan kemampuan menulis siswa. Aspek lain yang kemungkinan bisa mempengaruhi kemampuan menulis adalah motivasi berprestasi siswa. Dalam penelitian ini masalah yang diteliti adalah ada tidaknya pengaruh penggunaan Project Based Learning dan motivasi berprestasi dalam meningkatkan kemampuan menulis siswa. Jenis penelitian yang digunakan adalah penelitian eksperimen dengan desain nonrandomized control group pretest posttest. Analisis data yang digunakan adalah t-test dengan menggunakan SPSS versi 21. Hasil penelitian menunjukkan bahwa penggunaan Project Based Learning dapat mempengaruhi kemampuan menulis siswa, sedangkan motivasi berprestasi tidak secara signifikan berpengaruh terhadap kemampuan menulis siswa.

Kata Kunci: Belajar berbasis Proyek, Motivasi berprestasi. Ketrampilan menulis

Learning English as tool of communication in Indonesia is increasing in line with the development of Education in Indonesia. The Government of Education in this case the minister of education is trying to develop effective way to master English since the need of English as tool of communication is increasing.

This development is seen on the rules of English Language development written in Curriculum 2013 especially in Permendikbud No. 22 in 2016 about Process Standard of Dikdasmen (2016: 3). In that rule it is said that the target of teaching learning process includes affective, cognitive, and skill domains.

Those domains have different psychological processes to improve students' competences. To force the students to make learning product, it is suggested that the teachers use learning approaches based on Project based Learning. This approach is also important to develop the students' independence ability since the center of this approach is on the students. (Sumarni, 2012: 172).

Teaching learning process in Senior High School is also related to the principles of the rules above. As we all know, in English, there are two different group of competences that must be developed namely productive competences (speaking and writing) and receptive competences (reading and listening). Among those competencies, writing is considered as ignored skill. The students tend to have less attention on that skill, and unfortunately some teachers also have a little attention on the skill since this skill forces the teacher to "work hard" in checking the students' daily works. This situation makes the students' writing ability has a little improvement regardless of the importance of the skill.

Writing is a complex activity that involves cognitive and linguistic ability. Cognitive activity is seen on the occurring creative ideas as the result of writing process (Ashman and Conway, (1997), while linguistic competences is shown in the quality of word choice (diction), the implementation of correct grammar, using precise expression, and using sharp punctuation. That is why, it is often that the students found the complexity process of writing that make the students difficult and boring.

To overcome the problem and to force the improvement of writing ability there are some techniques that can be used by the teacher. But the writer thinks that most effective technique is Problem Based Learning. The principle of Project Based Learning is "learning by doing" (Dewey, 1993) in which it can be the power to make teaching writing successful. Besides Problem Based Approach, the writer is also focused on students'' Motivation Achievement since writing subject is regarded as lesson that get a little attention from students.

Motivation achievement (McClelland and Atkinson (1978:78) is a characteristic of someone that has more a high expectation than being afraid of fail. Furthermore, it is also stated that motivation achievement is a tendency of someone to lead and keep behavior to reach achievement standard. The achievement standard is used by the students to evaluate the activity they have ever done. The students who want to reach a good achievement will check whether the activities they have done have been suitable with the criteria determined.

In this research, the researcher focused on investigating the implementation of Project Based Learning to improve the writing ability and the motivation achievement of the students' class XI IPA SMAN 2 Jember on semester 2 in the academic year 16/17.

Project Based Learning is a kind of teaching model in which the students are asked to do the task, that is usually called Project. The project has been arranged systematically. Besides that, students are also asked to show their performance and responsibility of the result of their work. The teacher duty in Project Based Learning is to arrange the project systematically. The planning is done systematically to enable the students to learn about knowledge and skill through the process of searching. Besides that, the teachers also have duty to arrange and implement guiding process. Project Based learning is closely related to Problem Based Learning and we can also say that *Project based Learning* is the implementation of *Problem Based Learning*. In Project based Learning, the teaching learning process is focused on the students through research activity. The research activity means finishing specific learning

project. This teaching learning process combines science concept, subject, and activity (Maryani and Fatmawati, 2015).

Using Project based learning has some advantages. By using Project Based Learning the students will implement the knowledge they have or try to the science needed. Besides that, the students can integrate their cognitive and skill simultaneously and implement it in the relevan context. The other advantage is that Project Based Learning can improve critical thinking, growing students' initiative in working, internal motivation in learning, and developing interpersonal interaction in working group.

Motivation Achievement, the second focus in this research, is a kind of power of individual to do something for the sake of their need. The role of motivation achievement in teaching learning process is as energizer to do something needed. McClelland and Atkinson (1987:78) stated that motivation achievement is a characteristic of someone who has a high expectation more to be success than to be fail. He, furthermore stated that motivation achievement is a tendency of someone to lead and defend their behavior to reach achievement standard. Achieving achievement standard is used by the students to evaluate the activity they ever did. Students who want to reach a good achievement will evaluate whether what they have done is suitable with the criteria determined before.

Furthermore, McClelland and Atkinson (1987:80) stated that motivation achievement is social value that emphasizes on desire to reach the best result to reach personal satisfaction. The implementation of motivation achievement describes that individual will do something persistently with medium risk, he will work more responsible and get the feedback for the achievement.

As it is stated above that by using Project Based Learning the students learn to solve problem, they apply the knowledge they have or try to know the knowledge they need. It means that the learning in the context of applying concept. Learning can be more meaningful when the students face the situation in which they can apply the concept they have. This is the real description that the same process and pattern also happen in the process of mastering Writing. We can say that the use of Project Based

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Learning can be theoretically to improve the students writing competence. As it is said by Grant (2002), Project Based Learning is centered on the students reinforce them to investigate topics deeply. Moreover, Johnson (2002) stated that project is defined as a task given to the students so that they can make product, they are expected to produce something real based on learning material, they are given chance to express their idea by making a product.

In line with the statement, motivation achievement as an internal factor can also push the students to do activities such as writing and the steps. WS. Winkel (1997: 197) stated that achievement is a driving force of someone to reach the highest achievement and self-pride. From the statement it can be said that motivation achievement will influence the students to work hard in reaching the best result for making a product in this case writing competence.

Based on the description and the study related to the topic, the writer determines to investigate the phenomenon above in a research with title The Influence of Project Based Learning and Achievement Motivation on Improving Writing Ability of the students of SMAN 2 Jember.

Research Method

In this research, the type of research used is experimental research. The design used is *randomize subject pretest-posttest control group design*. In this case, the subject of research is divided into two groups namely experimental group and control group. Both of them are tested (Ary, 2002:307)

Table 1 Randomize subject pretest-post test control group design

Group	Pretest	Treatment	Posttest
E	Y_1	X	Y_2
C	Y_1	-	Y2

The purpose of the research is to know whether there is influence of Project Based Learning and motivation achievement on the improvement of writing ability

before treatment (pre-test) and after treatment (post-test). The treatment given is the implementation of Project Based Learning during teaching learning process of writing. Besides, the role of motivation achievement is also investigated during teaching learning process of writing that uses the Project Based Learning.

To reach the objective of research determined, the researcher must collect data. The data collected are in the form of information about the students' activities during teaching learning process, motivation achievement of the students that are collected using questionnaire, and the score of writing after the students got teaching learning process after they study using Project Based Learning. The main data source in this research the English Teacher of SMAN 2 Jember, they are respondents of this research. The research area is Public Senior High School 2 Jember that is located in Jl. Jawa 16 Jember. This research is done for 3 months in 2017.

The population in this research is all the students in class XII SMAN 2 Jember which consists of 2 classes with total number 55 students. The sample of this research is one of the two classes chosen using Purposive Random Sampling since in general, all the classes have the relatively the same characteristics since they are taught by the same teacher, having relatively the same age, and using the same curriculum.

To collect the data, there are two ways namely writing test, to know the students' writing score, and questionnaire, to get the data about the students' motivation achievement.

The data analysis is done in four stems namely; 1) sorting out the collecting data, 2) displaying the data, 3) counting the influence using SPSS program, and 4) making conclusion based the data analysis process.

Finding

In this research, both of the experimental and control group were given pretest and posttest. The treatment was given to experimental group only by using Project Based Learning and the control group was teaching conventionally. The aim of this treatment was to find out the effect of using Project Based Learning Method on

students writing ability. The raw data was analyzed by using SPSS version 21 using double regression analysis.

The research is done in 2 classes namely experimental and control classes. The total number of students in control class are 25 while the number in experimental class are 30. The total sample in this research are 55 students.

Tabel 2. Description of Research Data

	Mean	Std. Deviation	N
Skor Writing	30.9455	16.95246	55
Motivasi	63.15	4.720	55
Group	.55	.503	55

1. Assumption Test

Some assumption tests should be done before doing inferential analysis. The aspects we should give attention are such as multicollinearity, normality, and outlier

a. Multicollinearity

Multicollinearity is a situation in which each variable has so high correlation that the contribution of independent variable and dependent variable is overlapping and causes the data bias. A variable is categorized of having high multicollinearity when it has Pearson correlation larger than 0.9 ($r > 0.9$) on its predictors. The following is the table of the correlation between variable.

Tabel 3. Correlation between Variables

		Writing Score	Motivation	Group
Pearson Correlation	Writing Score	1.000	.166	.804
	Motivation	.166	1.000	.263
	Group	.804	.263	1.000
Sig. (1-tailed)	Writing Score	.	.113	.000
	Motivation	.113	.	.026
	Group	.000	.026	.
N	Writing Score	55	55	55
	Motivation	55	55	55
	Group	55	55	55

Based on the above table, it is known that there is no variable having high multicollinearity (r>0.9). From Pearson Correlation column it is seen that motivation achievement has low correlation with score 0.166. from that column it can also be known that giving Project Based Learning does not have relation with motivation on each group. So, it can be concluded that each group has relatively the same motivation (r >0.263).

b. Normality

Normality can show that the data of the research is normal or not. The normality of data in this research can be seen on the following graphic.

Tabel 4 Graphic of Data Normality
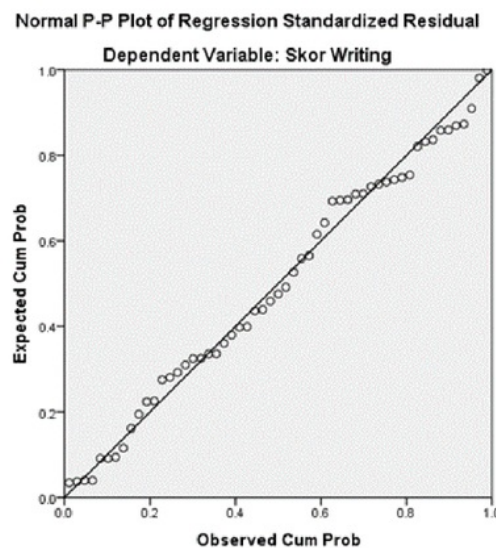
From the above graphic, it is known that the distribution of the data tends to form straight line from left below to right upper position. The distribution means that there is no significant deviation from normal, so it can be said that the collected data has fulfil normality test.

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c. Outlier

outlier is the case of deviate in which it is so far from normal limit that cause bias on measurement. On regression analysis, outlier can be detected by comparing Mahalanobis Distance and Chi Square critical value using the number of independent variable as the degree of freedom. The number of independent variables in this research are 2, so the critical Chi square value is 13.28 (Pallant, 2007)

In Table 5, we can see that maximum score of Mahalanobis Distance shown on the line "Mahal Distance" is 11.740. this score is less than the critical Chi square value. That is why we can say that there is no outlier in the data because no score of Mahalanobis Distance exceeds the critical Chi square value.

Tabel 5. Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	14.2164	44.3541	30.9455	13.64452	55
Std. Predicted Value	-1.226	.983	.000	1.000	55
Standard Error of Predicted Value	1.874	4.976	2.311	.631	55
Adjusted Predicted Value	14.1520	44.6738	30.9905	13.63472	55
Residual	-18.66001	31.68706	.00000	10.06047	55
Std. Residual	-1.820	3.091	.000	.981	55
Stud. Residual	-1.856	3.144	-.002	1.003	55
Deleted Residual	-19.39551	32.78187	-.04502	10.51004	55
Stud. Deleted Residual	-1.902	3.459	.002	1.031	55
Mahal. Distance	.822	11.740	1.964	2.025	55
Cook's Distance	.000	.114	.015	.021	55
Centered Leverage Value	.015	.217	.036	.038	55

a. Dependent Variable: Skor Writing

d. Evaluating Model

To know whether the model hypothesized is really good, we must be sure that the independent variables can predict the dependent variables. From table 6 we can see that this model is a good predictor for improving writing ability. On the table we

can see that *Adjusted R Square* score is 0.634 means that this model can predict 63.4% from varians of Improving writing ability.

Tabel 6. Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.805[a]	.648	.634	10.25211

a. Predictors: (Constant), Kelompok, Motivasi

b. Dependent Variable: Skor Writing

e. Evaluating each Independent Variables.

In the previous parts, the roles of variables are analyzed wholly as prediction model of Writing ability. In this part, each variable will be analyzed one by one.

Tabel 7 Koefisien [a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	26.884	19.044		1.412	.164	-11.330	65.098					
	Motivasi	-.174	.306	-.048	-.566	.574	-.788	.441	.166	-.078	-.047	.931	1.074
	Kelompok	27.535	2.877	.816	9.570	.000	21.761	33.308	.804	.799	.788	.931	1.074

a. Dependent Variable: Skor Writing

Based on Table 7 , we can see that the implementation of Project Based Learning gives the biggest unique contribution on the improvement of writing ability significantly (B = 27,535; p < 0,05) when other varians that describe the variable are being controlled. Meanwhile, Motivation Achievement does not give contribution on improving writing ability (B = -0,174; p > 0,05). Based on those data, it can be concluded that the implementation of Project Based Learning statistically gives unique and significant contribution on writing ability. The unique contribution of implementing Project Based Learning is gotten from squared semipartial correlation coefficient, namely $0.788^2 = 0.620$ or 62% of this model.

Discussion

The objective of this research is to know whether or not there is influence of Project Based Learning and Achievement Motivation on improving students' writing ability. Based on the result of data analysis, it is known that the implementation of Project Based Learning can predict the improvement of writing ability of the students, while motivation achievement cannot predict the improvement of writing ability. That is why, the implementation of Project Based Learning can be used as a model of effective ways to improve the Senior High School Students' Writing ability in English.

The fact is suitable with the characteristics of Project Based Learning in which meaningful learning happens. The students that are learning a problem will apply the knowledge they have or try to get the knowledge they need. It means that learning is in the context of applying the concept. Learning will be more meaningful and can be enlarged when the students face the situation in which they can implement the concept. Besides, as it is stated in the previous part about the advantages of Project Based Learning, when the students integrate their knowledge and skill simultaneously and apply it in the relevan context means that what they do is in accordance with the real situation and it is not theoretical anymore. Then, they will also find the problem of implementing a concept or theory during teaching learning process. The other excellence of Project Based Learning is that it can improve critical thinking, initiative in working, internal motivation to learn, and develop interpersonal relation during working in group. All those aspects can be drivers for the students to improve their writing ability since writing activity always need ability such as thinking critically, full initiative, and thinking about interpersonal correlation with other person in this case the reader.

From the above description, it is really appropriate that Project Based Learning can predict the improvement of writing ability in English for the students of Senior High School, so it is suggested that teacher use this technique to improve the students writing ability.

Related to Motivation Achievement, although logical thinking and some theories support that Motivation Achievement can support the students' appearance and desire to learn but the result of the research give description that Motivation Achievement does not give contribution on the improvement of the students' writing ability (B = -0,174; p > 0,05). This fact shows that Motivation Achievement is not effective contributor to improve the students writing ability. Writing is a "special" skill although in general it can be learned. As it is generally known, motivation achievement is a tendency to reach a success that involve ego and great expectation (Chaplin, 2005). But, usually someone ability to write does not always depend on the condition of motivation to write they have. But it depends more on his talent or his natural skill, so the merely high courage or motivation does not guarantee that he can produce the high quality of writing product.

Conclusion

Based on the result of data analysis and discussion, we can conclude that

1. There is influence of Project Based Learning on the improvement of writing ability of the students' class XI science class SMAN 2 Jember in academic year 2016/2017.
2. There is no influence of motivation achievement on the improvement of writing ability of the students' class XI science class SMAN 2 Jember in academic year 2016/2017.

Reference

Ary, Donald. Lucy Cheser Jacobs and Asghar Razavieh. 2002. *Introduction to Research in Education*. Belmont. Wadsworth Thomson Learning.

Ashman, Adrian F and Conway, Robert N.F. (1997). *An Introduction to Cognitive Education: Theory and Application*. London : Routledge

Atkinson, J. & Raynor, J. (1978). *Personality, motivation & achievement*. New York : Halstead Press, John Willey & Sons.

Chaplin, J.P. 2005. *Kamus Lengkap Psikologi*. Terjemahan Kartini Kartono. Jakarta : Raja Grafindo.

Depdikbud, 2016, Permen_tahun 2016_nomor 22. Kemdikbud; Jakarta

Dewey, J. (1933). *How we think: a restatement of the relation of reflective thinking to the educative process*, rev. ed. Boston, MA: D.C. Heath.

Grant, M. (2002). Getting a grip on Project-based Learning: *Theory, Cases and Recommendations. Meridian*: A Middle School Computer Technologies Journal a service of NC State University, Raleigh, NCVolume 5, Issue 1, Winter

Hughey, R. 1983. *Spoken English*, TESOL and applied linguistics: challenges for theory and practice. New York: University of Nottingham

Johnson, D. W., & Johnson, R. T. (2002). *Meaningful Assessment*. Boston: Allyn and Bacon.

Kirschner, P.A.; Sweller, J.; Clark, R.E. (2016). Why minimal guidance during instruction does not work: *An analysis of the failure of constructivist, discovery*, problem-based, experiential, and inquiry-based teaching. Educational Psychologist 41 (2): 75–86.

Maryani, I dan Fatmawati, L. 2015. *Pendekatan Scientific dalam Pembelajaran di Sekolah Dasar*: Teori dan Praktik. Yogyakarta: Dee publisher

McClelland, D. C. (1987). *Human Motivation*. New York : Cambridge, University

Nursalam dan Efendi, F. 2008. *Pendidikan dalam Keperawatan*. Surabaya: Salemba Medika.

Pallant, Julie. 2007. *SPSS Survival Manual*. McGraw-Hill.

Pearsonhighered.com. Teaching for Success: Methods and Models. [online] tersedia: http://www.pearsonhighered.com/samplechapter/0131149903.pdf d diakses 24-10-2014

Richards, J. & Renandya, W. 2002. *Methodology in Language Teaching: An Anthology of Current Practice*. New York: Cambridge University Press

Sumarni. 2012. *Model Model Pembelajaran Geografi.* Malang; Aditya Media Publishing

Wallace, Stariha, H. 2004. *Teaching Speaking, listening and writing.* Switzerland: Geneva

Winkel, WS. 1997. *Psikologi Pengajaran.* Yogjakarta; Media Abadi

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