

THE EFFECT OF PROJECT BASED LEARNING AND STUDENTS' PERCEIVED LEARNING DISCIPLINE TOWARD THE WRITING COMPETENCY OF THE ELEVENTH GRADE STUDENTS OF SMAN 5 MATARAM IN THE ACADEMIC YEAR 2012/2013

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ABSTRACT

This experimental study aims at investigating the effect of Project Based Learning (PBL) and students' perceived learning discipline on students' writing competency of the eleventh grade students of SMAN 5 Mataram. PBL is a teaching method which underlies on project given to the students. Besides teaching method, learning discipline is taken into account because it is predicted can affect the students' achievement in learning foreign language. This research involved three type variables, namely: teaching method as independent variable, learning discipline as moderator variable, and students' writing competency as dependent variable. To conduct this research, 80 students were selected as the sample. The design of this research was 2x2 factorial design. Data were collected by an instrument called posttest which is essay type test. The acquired data were analyzed statistically by two way ANOVA. This research discovers: 1) there is a significant effect of PBL on students' writing competency, 2) there is no significant effect of the interaction between teaching methods (PBL and conventional teaching method) and students' learning discipline level (high and low levels) on students' writing competency, 3) PBL has significant effect for both high and low discipline students. Based on the analysis, PBL has positive effect on students' writing competency. So, it is recommended to apply this teaching method in writing class as an alternative way to improve students' writing competency.

Key words: project based learning, learning discipline, writing competency

INTRODUCTION

The national education system of Indonesia is regulated by Law No. 20/2003 (*Undang-Undang Republik Indonesia No. 20 Tahun 2003 tentang SISDIKNAS*). It means that all education programs in each educational unit in Indonesia are managed under this law. Based on it, the goal of national education is as follows:

"Tujuan pendidikan nasional Indonesia adalah untuk berkembangnya potensi peserta didik agar menjadi manusia yang beriman dan bertakwa kepada Tuhan Yang Maha Esa, berahlak mulia,

sehat, berilmu, cakap kreatif, mandiri dan menjadi warga negara yang demokratis serta bertanggung jawab." (*Undang-Undang Republik Indonesia (UURI) No. 20/2003.*

The statement implies that education does not merely aim at developing students' knowledge, but also skill and values. In other words, the education should be able to develop students' cognitive, psychomotor, and affective. To achieve the goal, the Indonesian government has done innovative ways.

One of them is by changing the curriculum into Competency Based Curriculum (CBC).

CBC emphasizes on the changing of learning paradigm. Here, learning should place the students as active learners, not as passive receivers. It should direct learning to be students-centered. The teacher serves a role as facilitator of students' learning, not as the source of information. By being involved actively during teaching and learning process, the students get meaningful learning experiences and feel the importance of their learning.

In CBC, the students are expected to be competent or to master the competency in all of the three domains, namely: cognitive, affective, and psychomotor. They are considered competent if they can achieve both the competency standard and the basic competency established by the government. This statement is valid for all subjects in all levels of education.

In CBC, English as a foreign language (EFL) is one of the important subjects that should be mastered by the students. It focuses on four language skills, namely: listening, reading, speaking, and writing. Besides these skills, teaching English also focuses on discrete skills, such as: grammar, structure, and vocabulary. Each skill has its standard and basic competencies that should be achieved by the students. The standard and basic competencies are taken from Ministry Regulation (PERMEN) No 22 about content standard. From here, the teachers can develop the indicators of learning per basic competency based on the potency owned by each unit of education.

Writing is one of the language skills that should be mastered by the students. It is categorized as a productive skill, meaning that the students should produce writing product (Harmer, 2007). For many students and teachers, writing is a very difficult skill to learn (Byrne, 1988). This is because of at least two main reasons. *First*, the students are required to write on their own, without any interaction or feedback. *Second*, the students have to compose their writing by using their own choice of sentence structure and organize their own

ideas in such a way that they can be understood by the reader.

Writing is considered as a complex activity since it covers several cognitive and linguistic abilities. Cognitive ability is viewed from the ideas created as the result of writing process. According to Ashman and Conway (1997), cognitive is a fusion of brain activities. The activities involve understanding, especially, about how the integration of existing knowledge with stimuli that originates inside and outside of the individual takes place. In the context of writing, cognitive ability is shown by the quality of ideas, the understanding of the topic selected, and the arrangement of ideas in a writing product. Meanwhile, linguistic ability is indicated by the quality of word choices (diction), the correct implementation of grammar and structure rule, the usage of appropriate utterances, and the correct usage of mechanics. In this case, the students were expected to be competent in applying linguistic ability to express their ideas so that their writing can be understood clearly by the reader.

Because writing is a complex activity, students tend to feel writing is difficult and which make them bored in writing class. It becomes a challenge for the teacher on how to make the students to be competent in writing. Innovative teaching writing method should be implemented to make the students can write well. In addition, teaching writing should also consider the nature of teaching method in CBC which is student-centered. By implementing innovative teaching method which is student-centered, the students are expected to have good writing ability.

To know whether or not the expectation is achieved, empirical study has to be done. The empirical study is done to collect information about how teaching writing is conducted and to know the level of students' writing ability. In practice, empirical study is done by observation, interviewing, and recording students' writing ability in teacher's diary. The empirical study was conducted in SMAN 5 Mataram in the eleventh grade students in academic year 2012/2013. The empirical study was done for 4 times. In the observation, teaching writing was done usually after

teaching reading. It was so in order to provide the students examples and topic to be written. Moreover, teaching writing was allocated just 2 school hours (90 minutes). Narrative genre was assigned to be written in the observation.

To teach writing, the teacher directly asked the students to write an essay. The topic was free so the students had freedom to write what they wanted. Before this stage, the teacher explained about the genre that was going to be written. The explanation involved the definition of genre, social function, generic structure, and language features. Then, the students were given chance to ask questions if there was unclear explanation. Then, the students were asked to write. If the students didn't finish the task, they could take it home. The next day, they had to collect their writing to their teacher.

In the next meeting, the teacher returned the students' writing. Score was given for each student's writing. Besides that, there were some corrections indicating students' mistakes. The mistakes concerned were mistakes in the form of linguistic components, such as: grammar, structure, vocabulary, mechanics, and spelling. It was rarely found that the teacher assessed students' mistakes in the form of cognitive components, such as: originality of ideas, arrangement of ideas, and ideas development. In this case, the teacher did not have standard scoring rubric. Then, the teacher was required to assess again the students' writing with reference to scoring rubric given. The result showed that 80 students got score under the passing grade established by the school. It means that the students had problems in writing or they were not competent in writing.

From the empirical study, it was found that the main factor causing the students' low writing competency was the selection of the teaching method. It was based on three reasons. First, the teaching method was not interesting. It can be seen from the steps which were still conventional. It made the students less motivated to write. Second, there was not any brainstorming stage. It has been known that this step has crucial function leading the students to collect ideas. Third, the teaching method did not

give chance for the students to explore more about the authentic problems in real world. If the students were assigned to write problems in reality, the students may get more ideas. So, their writing was more meaningful.

The phenomenon of writing competency mentioned previously indicates that it is urgent to conduct research on how to find solution of the writing competency problem as mentioned. Since the root problem predicted is teaching method, it is important to find other teaching method which has different characteristics than the conventional one. Project Based Learning (PBL) is a teaching method which is considered has different characteristics than conventional. The characteristics of PBL are explained in the next paragraph. So, it is urgent to experiment this method in teaching writing by comparing with the conventional method. By doing the experiment, the effect of teaching method on students' writing competency can be known.

The ideology of PBL lies in "learning by doing" (Dewey; 1900s) that then also reflects constructivism theory. As the pioneer of constructivism, Gimbatista Vico (Perkins, 1991; Piaget, 1969; Vygotsky, 1978) states that individuals construct knowledge through interactions with their environment, and each individual's knowledge construction is different. This theory states that learning is an active, contextualized process of constructing knowledge rather than acquiring it. It also views knowledge as an idea that is constructed based on personal experiences and hypotheses of the environment.

PBL is the use of classroom project in learning and assessment in order to facilitate students in constructing their meaningful idea and knowledge to the real world. Project-based learning (PBL) is centered on the learners and affords learners the opportunity for in depth investigations of worthy topics (Grant; 2002; 1). Project is defined as assignment which is aims at having the students produce a product (Johnson & Johnson; 2002). Students are expected to create a real thing that is based on the teaching material. Learners are given opportunity to express

their idea and develop it by producing a product. Therefore, it is a model that organizes learning around projects (Thomas; 2000;1). With project-based learning, students are encouraged to explore their own interests and to make connections to the world beyond school. According to Bell (2010; 39) Project-Based Learning (PBL) is a student-driven, teacher-facilitated approach to learning.

Besides teaching method, students' successfulness in learning is also influenced by students' discipline (Charles, C.M; 2011). In this research, learning discipline is taken into account for three reasons. *First*, it is not frequently found research about learning discipline in English as a Foreign Learning, especially, in Indonesia. *Second*, writing is a complex process so the role of learning discipline is important to be known in affecting students' writing competency. *Third*, since PBL needs students' active participation, it is important to know how learning discipline will affect PBL and finally writing competency.

Discipline is a positive preventing approach to teach a child self-control and confidence. As opposed to punishment, discipline methods focus on what we want the child to learn, and what the child is capable of learning. Discipline is a process, not a single act. It is the basis for teaching children how to be in harmony with themselves and get along with other people. The ultimate goal of discipline is for children to understand their own behavior, take initiative and be responsible for their choices, and respect themselves and others. In other words, they will internalize this positive process of thinking and behaving (Kight and Roseboro, 1998).

Here, PBL is combined with learning discipline to know its effect in writing course. PBL is very students centered. It needs hard effort of students in learning when it is implemented. Meanwhile, writing is considered as a productive skill which is very complex. It expects the students to produce writing product. When PBL is implemented in writing, the students will explore knowledge to be the material in their writing. Since PBL is students-centered, it needs high discipline of the students in the implementation. The

students having high learning discipline do their writing well. So, if PBL is combined with learning discipline, it will have significant effect on writing skill.

As far as PBL is concerned, it has never been implemented in any classes in senior high schools, including in teaching the writing skill. In another side, by considering the importance of discipline role in learning, it is urgent to research PBL and learning discipline together in writing. This interaction is predicted to be able to make the students' writing competency better. So, clear picture on how the main effect and interactional effect of both factors improve the students' competency can be obtained.

Based on the previous explanation about PBL, learning discipline, and students' writing competency, there were four questions which should be investigated in this research, namely:

- a. Is there a significant effect in writing competency between the students taught with PBL and those taught with the conventional method?
- b. Is there a significant effect of the interaction between teaching methods (Project Based Learning and Conventional Teaching method) and students' learning discipline level (High and Low) on students' writing competency?
- c. Is there a significant effect in writing competency between the students having high learning discipline taught with PBL and those taught with conventional method?
- d. Is there a significant effect in writing competency between the students having low learning discipline taught with PBL and those taught with conventional method?

RESEARCH METHOD

In this research, *Posttest Only Control Group* with *2x2 factorial design* was applied. There were 80 students included to be the samples. To get the sample, cluster random technique was applied. Then, questionnaire was distributed to classify students' learning discipline level. The data involved students' writing

competency and learning discipline data. The instruments were developed by creating blueprint and modifying the previous instrument used by other researchers. Then, the validity and reliability those instruments were tested. The data analysis involved descriptive and inferential analysis. Descriptive analysis aims at describing data by measuring mean

and standard deviation. Meanwhile, inferential analysis aims at testing the hypothesis. Inferential analysis was done by using Two-Way ANOVA which is followed by Tukey test if there is an interaction occurring.

FINDING AND DISCUSSION

The calculation of descriptive analysis measuring mean and standard deviation can be presented in table 1

Table 1 **Sum of the Calculation of the Central Tendency and Dispersion**

Group	Mean	Std Dev
PBL	233.65	16.19
CM	195.45	20.79
PBLHLD	241.70	11.84
PBLLLD	225.6	16.16
CMHLD	206.2	16.98
CMLLD	184.7	18.87

Notes:

PBL = Project Based Learning

CM = Conventional Method

HLD = High Learning Discipline

LLD = Low Learning Discipline

Std dev= standard deviation

Based on table 1, it is known that (1) mean value of PBL is higher than CM, (2) mean value of PBLHLD is higher than CMHLD, and (3) mean value of PBLLLD is lower than CMLLD. In terms of standard deviation (SD) value, SD value of CM is the highest value. It is followed by the value of

CMLLD, CMHLD, PBL, PBLLLD, and PBLHLD. However, this result can not be used to answer the research problems. To answer research problems, inferential analysis by Two-way ANOVA was applied. The result can be presented in table 2.

Table 2 **Sum of the Results of Hypothesis Testing by Two-Way ANOVA**

Source	F	Sig. (Probability)
Teaching method (TM)	111.59	0.00
Learning Discipline (LD)	27.028	0.00
TM*LD	0.557	0.458

To answer of the first research question, can be seen from the value of TM (teaching method). From table 2, the sig value or probability of 0.00 which is lower than 0.05 is known. It means that there is

significant difference in writing competency between the students taught with PBL and those taught with conventional method. Meanwhile, the second hypothesis is answered by looking the value of tm*ld.

From table 2, it is known that the value of t_{m*ld} of 0.458 is lower than 0.05. It means that there is no significant interaction effect on the implementation of teaching method and learning level on students' writing competency.

Since there was not any interaction found, Tukey test was not administered. The mean score of each group was needed to know the result. As being mentioned previously, the mean score of high and low learning discipline students taught with PBL was higher than mean score of high and low learning discipline students taught with conventional method. It means that PBL contributes significantly to both high and low learning discipline students.

Based on the result of hypothesis testing using two-way ANOVA, it was discovered that the Project Based Learning implemented during the teaching and learning process affected significantly toward the students' writing competency of the eleventh year students of SMAN 5 Mataram in the academic year 2012/2013. It was proven by the probability value of 0.00, which was lower than 0.05. It meant that there was significant difference in writing competency between the students taught with PBL and those taught with conventional method. Further analysis showed that the mean score of the students taught by PBL is 233.6 ; while the mean score of students taught by conventional method is 195.5. It means that the mean score of students taught by PBL is higher than those taught by conventional method. Based on the result of hypothesis testing and the analysis, it could be concluded generally that the students' writing competency taught by PBL is better than those taught by conventional method.

The same finding was found by Sudarya (2008) and Bas (2011). Sudarya (2008) conducted a research about *Pengembangan Project-Based Learning dalam Mata Kuliah Evaluasi Pembelajaran di PGSD Bumi Siliwangi UPI*. The results showed that: 1) The effectiveness of PBL in the Evaluation Study, based on the results of data processing, showed that there is an increase in students' learning achievement which further means that PBL was implemented effectively. It was supported

by indicators that show increasing understanding of theories: (a) preparing lay out (b) writing about, (c) organizing matter, (d) establishing a score, (e) reproduction tests and (g) an empirical analysis of the achievement test. 2) The ability of the students in identifying evaluation problem, based on data processing, results indicates an improvement in students' learning achievement which further means that PBL were effective, which was supported by the indicator on increasing students' ability to identify the problem of evaluation of learning outcomes. 3) The ability of the students in planning project evaluation study, based on the results of data processing that authors analyze and interpret the level of students' ability to plan project evaluation, before and after implementing PBL apparently increased. 4) The ability of students to analyze and reflect linkages between Theory to Practice Evaluation, based on the results of data processing authors analyze and interpret the level of students' ability to plan project evaluation, before and after implementing PBL apparently increased. 5) Students' perceptions of the PBL, based on the data processing that the author analyze and interpret the direction of positive change in the students' perceptions of the PBL before and after implementing the activities in the field. It shows that PBL is effective to be implemented to improve students' achievement in the subjects Learning Outcomes Evaluation.

Bas (2011) conducted a research about *Investigating The Effects Of Project-Based Learning On Students' Academic Achievement And Attitudes Towards English Lesson*. The research was carried out in 2010–2011 education-instruction year in a high school in Nigde, Turkey. Totally 60 students in two different classes in the 9th grade of this school participated in the study. The result showed that the academic achievements in the experimental group expressed positive attitudes towards learning English. The students seemed rather happy to learn English through project-based learning because they were able to progress at their own pace and, at the same time, contribute to others' learning in such a supportive and

encouraging learning context. In this sense, the most important thing in research was the experimental group students who had more fun when they were learning and they also had the chance of socialization and cooperation which were more important for them in these ages. On the other hand, it was also found out that project-based learning was more effective in the positive development of the students' academic achievement levels. At the end of the research, it was revealed that the students who were taught by project-based learning were more successful and had higher attitude levels towards the lesson than the students who were taught by the instruction based on student textbooks.

Project Based Learning is a teaching method which is based on student centered learning. It has a mission to increase students' participation during teaching and learning process. Ndraka (1985) states that PBL is rooted on investigation process during learning. By investigation process, the students can: 1) solve problem during learning, 2) make decision in their learning, and 3) have scientific act so they can think and act critically.

If the theory is related to the implementation of PBL in writing class, it is clear that PBL has positive effect. Writing is productive skill in which the students have to produce writing product. Writing is a complex skill because it covers cognitive and linguistics components (Marhaeni, 2005). It makes the students possibly face many problems during writing. As mentioned previously, PBL is rooted on investigation. The investigation in writing may involve the writing ideas, generic structure of the text written, grammar, organization of ideas, and mechanic. By investigating them, the students discover how to write a good writing product. It also directs the students to think critically when they write. It makes them be able to practice them in their writing and finally produce qualified writing product.

For the effectiveness of PBL implementation, some steps are implemented during research. These steps are based on the recommendation proposed by Darmojo and Kaligis (1992). Those steps are:

- a. Writing is started by posing question. The question is a problem in real world which can activate the students to start an investigation. In this research, the question for narrative is "Do you know local folktale in your area?"
- b. Designing project planning. Here, the students are given characteristics of a good writing and the students are given standard of their writing product. The students are also given guideline on what they should write and how they do it.
- c. Making schedule. Here, the students are given time how long they should finish their project. It involves when they should start, show the content or materials of their writing, make draft, and give final product. It avoids the students to act carelessly on their learning.
- d. Controlling and observing the students and their project development. Here, the students are taught how to work and cooperate. Asking the students to be a leader and deciding what their responsibilities in the project are. It avoids some students who may be careless on their work. By doing it, it can be ensured that all students in the group have the same contribution.
- e. Assessing the result. The assessment must be holistic. The teacher should assess the process and product of the project. In addition, the teacher should decide the individual assessment and group assessment.
- f. Evaluating experience. Here, asking the students to make reflection when they make the first project. So, they did not make the same mistakes in the next project.

The implementation of those steps was proven to be effective in the class. The observation done during the implementation showed the students could not play when the project was implemented. They did the project seriously and seemed they were motivated to study. It was predicted made the students' writing product that was taught with PBL was higher than those taught by using conventional teaching method.

Another conclusion from the result of hypothesis testing on the simple effect

discovered that conventional method is inappropriate with the nature of teaching writing. Writing is viewed as an ongoing process. It needs a teaching method which can be applied not in one session class. When teaching writing is conducted continuously, the students can make reflection and dig more sources as the material for their writing. However, conventional method does not provide this chance for the students. Since writing is not taught continuously and tends to be taught in one session class, the students get fewer sources as their writing material. The students also get lack of exercise to write. It causes many mistakes in their writing, like: grammar, idea organization, spelling, vocabulary, and mechanic. This situation makes the students taught by conventional method get lower score than those taught by PBL. In other words, conventional method does not contribute positively on students' writing competency.

Since writing is difficult for them, the students tend to be not serious in writing. It is worse because the conventional method did not control their behavior well. It makes them act as what they want. Here, conventional method did not train the students to share their ideas with their friends. They worked individually. So, they just wrote what they could do without trying to share to their friends.

In the second hypothesis testing, it was discovered that there was no significant interaction effect of teaching method (PBL and conventional method) and learning discipline level (high and low) on students' writing competency. It means that PBL has the same effect for both high and low learning disciplines. By seeing the mean score of four groups (group of students' having high learning discipline and taught with PBL, students' having low learning discipline and taught with PBL, group of student having high learning discipline taught with conventional method, and student having low learning discipline taught with conventional method), the mean score for the groups taught with PBL were higher than those taught with conventional method. It indicates that PBL is effective for both high and low learning discipline levels.

Why does PBL make the students' achievement improve? A research done by Filippatao and Kaldi (2010) shows PBL brings positive effect on students' motivation, self-efficacy, and social ability. When PBL is implemented, the students' motivation, self-efficacy, and social ability increase. Students with high motivation tend to be hard worker to reach their goal (Marhaeni, 2005). By working harder, the students can perform better. In another side, Hampton and Mason (2003) state that the students with positive self-efficacy tend to expose some sources. It grows belief in their mind. This belief ensures them that they can be successful in their learning.

By observing carefully Filippatao and Kaldi (2010) and Hampton and Mason (2003), it is clear that PBL is effective for all students even for high and low discipline students. It means that PBL does not bring different effect for high and low learning discipline students. For high discipline students, it is appropriate with the nature of PBL itself in which PBL needs discipline students to be successful in the implementation. Besides that, PBL can increase their motivation and self-efficacy.

For low discipline students, PBL also can increase their motivation and self-efficacy. The increasing of motivation can make the students become hard workers in finishing their writing project. In another side, the increasing of self-efficacy makes low discipline students dig more source or information as the materials for their writing. By digging the information, the students can have more idea to write and more reference on characteristics of a good writing product.

Furthermore, it is predicted that the nature of PBL itself has control over the students' attitude during learning. The steps proposed by Darmono and Kaligis (1992) showed that the students attitude during the implementation of PBL was controlled tightly. So, it can be ensured that all the students worked based on their responsibility. They were also controlled during PBL, starting from investigating the problem until collecting the project. Even though low discipline students tend to be careless in their learning, they did not have chance to do the same thing when PBL

was implemented. Shortly, low discipline students were directed to be serious workers in writing.

Raka (2010) discovers that cooperative learning peer tutoring method and learning disciplines affect the reading competency in English at the eighth grade students of SMPN 1 Tampak Siring in academic year 2009/2010. In order to obtain the maximum results in learning English, students' learning discipline should be considered. Based on the output of SPSS, there was a significant difference in reading competency between high and low discipline students. The high learning discipline students were better than the low learning discipline students. It means that learning discipline affects students' reading competency. It can also be said that discipline has positive effect on students' writing competency. It can be seen from the result of simple effect showing that there was a significant difference in writing competency between high learning discipline and low learning discipline. The high learning discipline students' score was better than low learning discipline.

However, when learning discipline is combined with teaching method, the result is different. PBL applied in experimental group has good effect for both high and low learning discipline students. So, in implementing PBL, the teacher does not need to worry for students' learning discipline level. It is so, because PBL contributes significantly to both high and low learning discipline students.

Furthermore, Esquivel (2010) argues that when children have a positive learning

CONCLUSION AND SUGGESTION

Based on the result of hypothesis testing, there were two conclusions that can be drawn, namely:

a. There was significant difference in writing competency between the students taught with PBL and those taught with conventional method. It was proven by the probability value of 0.00 which is lower than 0.05. From the result of descriptive analysis, it was known that the mean score

environment (discipline) where they feel comfortable they become motivated and begin to grow academically, socially as well as emotionally. So, PBL, motivation, and discipline were related to each other. It makes PBL not just good for high discipline students, but also low learning discipline students. It is so because the students learning disciplines increased during PBL implementation. Because the level of the students' learning discipline increases, it motivates the students to learn. It also occurs on low learning discipline students. Their learning discipline is increased by PBL which has tight control on students learning. It makes the students' writing competency of low learning discipline students taught with PBL is better than those taught with conventional method.

From the explanation, it is clear why interaction effect did not occur. The reasons the interaction did not occur were: 1) the nature of PBL itself controlling tightly students act/attitude during learning, 2) PBL increases students' motivation (motivation of both high and low learning discipline students), and 3) PBL increases students' self-efficacy (self-efficacy of high and low learning discipline students). Those factors make PBL have positive effect for both high and low learning discipline students.

of the students taught with PBL was 233.6; meanwhile the mean score of the students taught with conventional method was 195.5. It means that the writing competency of the students' taught with PBL was higher than those taught with conventional method. So, it can be concluded that the PBL affects better than conventional method on students' writing competency.

b. There was no significant interaction effect of teaching method (PBL and conventional method) and learning discipline level (high and low levels) on

students' writing competency. It was proven by the probability value of 0.458, which was higher than 0.05. It means that PBL affects better than conventional method for both the students having high and low learning discipline. In other words, PBL affects better for writing competency of high and low discipline students. It can be seen from the mean score of four groups (writing competency of high discipline students taught with PBL, writing competency of low discipline students taught with PBL, writing competency of high discipline students taught with conventional method, and writing competency of low discipline students taught with conventional method). Based on the explanations above, Project Based Learning has same effect for learning discipline level, even high and low learning discipline.

The suggestion of this research goes to whom concerns on education, namely: students, teacher, and next researchers.

1). For students

- a. During the implementation of PBL, the students are suggested to follow the steps in PBL seriously. PBL steps closely relate with each other. If the students are careless on one step, they might be not successfully in writing class.
- b. The students is suggested to make good cooperation in PBL because PBL is done in group. If one of the group members does not work well, of course it can influence the other member.

2). For English Teacher

- a. The English teachers are expected to apply PBL in writing class. In implementing PBL, the teacher should understand the steps and run the steps well. So, PBL can give maximum effect on students' writing competency
- b. In implementing PBL, teachers do not need concerning on students' learning discipline level. It is so because PBL is good to be applied for both the

students having high and low learning discipline.

3). For next researchers

- a. For next researchers, it is suggested to explore other variables in connection with current research studied. The other variable might be self-efficacy, self-control, students' creativity, etc.
- b. For the future, PBL should be researched by involving big number of sample. So, it can be ensured that PBL is appropriate for both high and low learning discipline students.

REFERENCES

- Ashman, Adrian F and Conway, Robert N.F. (1997). *An Introduction to Cognitive Education: Theory and Application*. London : Routledge.
- Baş, Gökhan. (2011). Investigating the effects of project-based learning on students' academic achievement and attitudes towards English lesson. *The Online Journal Of New Horizons In Education, Volume 1, Issue 4. Educational Sciences/Curriculum and Instruction Department; Turkey*.
- Bell, S. (2010). *Project-Based Learning for the 21st Century: Skills for the Future*. Taylor & Francis Group, LLC.
- Byrne, D. (1988). *Teaching Writing Skills*. London: Longman Group UK.
- Charles, M.C. (2011). *Building Classroom Discipline*. Pearson Education.
- Darmojo, Hendro and Jenny R.E.Kaligis. (1992). *Pendidikan IPA II*. Jakarta: Depdikbud.
- Depdiknas. (2003). *Kurikulum 2004 Standar Kompetensi Mata Pelajaran*

- Bahasa Inggris*. Jakarta: Departemen Pendidikan Nasional.
- Dewey, J. (1916). *Democracy and education*. New York: McMillan.
- 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.
- Dewey, J. (1938). *Experience and Education*. New York: Simon and Schuster.
- Esquivel, Annalisa. (2010). *Learning Through Positive Discipline and Intrinsic Motivation*. Southwest Texas State University. San Marcos; Texas.
- Filippatou, Diamanto and Kaldi, Stavroula. (2010). The effectiveness of Project Based Learning on Pupils with Learning Difficulties Regarding Academic Performance, Group Work, and Motivation. *International Journal of Special Education*. Vol 25 no 1 (17-26).
- 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, NC* Volume 5, Issue 1, Winter.
- Hampton, N.Z and Mason, E. (2003). Learning Disabilities, Gender, Sources of Self-Efficacy, Self-Efficacy Beliefs and Academic Achievement in High School Students. *Journal of School Psychology*. 41. 101-112.
- Harmer, J. (2007). *How to (New Edition)*. Edinburgh Gate: Pearson Longman.
- Harmer, J. (2007). *How to the practice of English Language Teaching (Fourth Edition)*. Edinburgh Gate: Pearson Longman.
- Johnson, D. W., & Johnson, R. T. (2002). *Meaningful Assessment*. Boston: Allyn and Bacon.
- Kight, G. & Roseboro (1998). *Positive Guidance and Discipline*. North Carolina State University.
- Marhaeni. (2005). *Pengaruh Assessment Portfolio dan Motivasi Berprestasi dalam Belajar Bahasa Inggris Terhadap Kemampuan Menulis dalam Bahasa Inggris*. *Unpublished Dessertation*: Program Pascasarjana Universitas Negeri Jakarta.
- Ndraka, T. (1985). *Teori Metodologi Administrasi*. Jakarta: Bina Aksara.
- Perkins, D. N. (1991). What constructivism demands of the learner. *Educational Technology*, 31, 18-23.
- Piaget, J. (1969). *Science of education and the psychology of the child*. New York: Viking.
- Raka, I Made. (2010). *Pengaruh Model Pembelajaran Kooperatif Teknik Tutor Sebaya Terhadap Kemampuan Membaca Dalam Bahasa Inggris Ditinjau Dari Disiplin Belajar Siswa*. , *An Unpublished Thesis*. Singaraja: Undiksha.
- Sudarya, Yahya. (2008). *Pengembangan Project-Based Learning dalam Mata Kuliah Evaluasi Pembelajaran di PGSD Bumi Siliwangi UPI*. *JURNAL, Pendidikan Dasar “ Nomor: 10; UPI*.
- Thomas, W. J. (2000). *A review of research on project-based learning*. California.
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University.