The effectiveness of project-based learning to teach writing in relation to students' creativity

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Abstract: This research was aimed to find out whether: (1) the use of project-based learning is more effective than direct instruction in the teaching of writing skills; (2) the students having high creativity have better writing skill than those having low creativity; (3) there is a correlation between teaching methods and creativity in teaching writing. This quasi-experimental research was conducted at SMP N 1 Yogyakarta in the academic year of 2016/ 2017. The sample was taken by using cluster random sampling. To collect the data, two instruments were employed. The data were analyzed by Multifactor Analysis of Variance ANOVA 2x2 and Tukey Test by IBM SPSS 22. The findings of this research can be stated as follow: (1) Project-Based Learning is more effective than direct instruction in teaching writing and it is indicated by the value of sig. (0.048); (2) the students who have high creativity have better writing achievement than the achievement of those who have low creativity and it is indicated by the value of sig. (0.000); (3) there is an interaction between teaching methods and students' creativity in teaching writing and it is indicated by the value of sig. (0.033). It means that the effect of methods and writing skill depends on the level of creativity of the students.
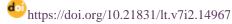**Keyword**: factorial design, project-based learning, direct instruction, students' creativity, writing skill

INTRODUCTION

In modern life, English is obviously becoming important. English is used to conduct communication in almost the entire world. People from different countries learn English in order to communicate. Being able to communicate in English will make people easier to interact, to share and to get any information from people all over the world. Besides, in education, English is potentially required. This condition is reasonable enough since English plays as important role. For some countries in the world, English is the official language used. While in Indonesia, English is as a foreign language. Therefore, as a foreign language in Indonesia, English is taught in every school starting from primary to university level. This is expected to increase their knowledge about English.

Moreover, to be successful learners of English, students should master four language skills. Those are reading, speaking, listening, and writing. When learning English as a foreign language, the learners are required to be able to communicate with other people by using the language. Learners must understand them, talk to them, read what they have written. Therefore, learners should have four skills in English: listening, speaking, reading, and writing. However, the learners have to communicate with each other in spoken or written forms. Harmer (2007) states that writing is a basic language skill, just as important as speaking, listening, and reading. Through writing, the learners are able to express their thoughts, communicate ideas, and views to the others. Besides, Cohen and Riel (1989) state that writing is a communicative act, a way of sharing, observation, information thoughts, or ideas with ourselves and others. It means that writing is usually directed to others for specific purposes. For students, writing is important because it can accelerate them in process of learning the target language. In addition, the goal of language is communication and the aim of writing in a language context is to espouse communicative

efficiency in written products. That is why students have to be able to use the language as accurately as possible with a purpose to deliver message or information.

Learning writing is not a simple case. According to Taylor (2009), for most people writing is an extremely a difficult task because they have to try to grapple in their language with new ideas and new ways of looking at them. However, it is a challenging task for teacher for fostering students' writing skill. Puteh et al. (2010) state that students must master writing skill since it is considered as a basic skill that is very essential for every student. Thus, many learners struggle with the writing process. There are many problems found which cause students to experience difficulty in writing. These problems are lack of ideas, the difficulty to think about interesting or significant thing or topic to write, and inability to find the words to use. These problems can be clearly observed among low proficiency students. van Weijen et al. (2009) believe that writing becomes difficult since it employs many cognitive activities which are strongly interactive at the same time. These cognitive activities are content generation and organization, text organization and production, and revision.

In solving those problems related to the writing skills, there are techniques teachers can apply in teaching writing, project-based learning. According to Beckett and Miller (2006), project-based learning is one possible means for promoting language and content learning in English as a Foreign Language. This method is recognized its existence in the success of language learning. Project-based learning can engage student in investigating real life, develop creativity and collaborated with the team. It means that project-based learning is suitable for teaching writing. Develop creativity here means that the steps of project-based learning will create the ability to increase writing with perfect idea. The use of project-based learning are expected to help the students achieve the learning objectives in writing which focuses on both process and product.

The term of project-based learning has been hotly debated by a great number of scholars (Barron et al., 1998; Dewey, 2017). Each has his own argument in defining the term of project-based learning. For instance: Beckett and Miller (2006) argues that project -based learning requires a fundamental shift in the role of teacher and student from traditional education. Teachers serve as margin agents to transfer knowledge from books. Project-based learning aims for reconstruction for experiences through interactive process with one's environment.

In learning writing, the factors influencing is not only the method used by teacher, but also the psychological aspects such as creativity, self-esteem, self-confidence, liking-disliking, interest and motivation. All of them influence the students' learning process, especially in learning English language writing. Creativity, as one important factor human affective domain. Creativity is a psychological aspect that influences writing skills.

Learning is viewed as the outcome of the learner's personal experiences. The teacher task is to guide, direct, and evaluate these experiences. In addition, they state that project-based learning is the method of learning to engage students in the investigation of real-life problems and develop student's creativity, problem-solving skills, and lifelong learning. It means that there is a close relationship between project-based learning and the life. Beckett and Miller (2006) defines project as a long-term activity that involves a variety of individual or cooperative task such as developing research or question and implementing the plan through document research that include collecting, analyzing, and reporting the data orally.

The above definition are questioned by other scholars who claim that project-based learning is close to real world (Bender, 2012; Wijaya et al., 2020). Project-based learning is an instructional model based on having students comfort real-world issues and problems that they find meaningful, determine how to address them, then act in a collaborative fashion to create collaborative solution. It shows that project-based learning guided students to do a task that considers real life and is done a group.

With regard to the above argument, the definition of project-based learning is asserted by some scholars one of whom is Bransford in Bender (2012). According to him, project-based learning has recently received increased emphasizes as educator and business leader who look for ways to move educator forward and develop student's skill in 21st technologies, problem solving, and collaboration. It contributes to the project-based learning which not only insist in education but also use in other field such as: business, technologies, and medical.

A more moderate definition is proposed by Bender (2012), PBL is now seen by many as the best approach for emphasizing problem-solving skills in a world in which knowledge itself is oriented by the time it is printed in textbook. However, teacher are wise to embrace this instructional approach and

explore the possibilities. Teachers owe students the very best education we can provide, and much research indicates that PBL represents best instructional practice today.

In writing skill, the project-based learning will drive students to be more active in doing their writing activity. Through this method, the students are given the assignment in grammar, vocabularies, punctuation, and other relevant language elements based upon the result of the diagnosis student's language errors in writing. The teacher will became facilitator in the class where students will be the center of the teaching and learning process. To improve creativity in writing, teacher will give the assignment that increase student to develop their ability in writing.

In term of advantages of project-based learning, a scholar mentions the benefit of project-based learning in teaching (Larmer et al., 2015). Regarding to them the benefits of project- based learning are as: (1) motivating student; (2) preparing student for collage, careers, citizenship, helps students meet standards and do well on test that ask student to demonstrate in-depth knowledge and thinking skills; (3) allowing teachers to teach in a more satisfying way; (4) providing schools and districs with new ways to communicate and to connect with parents, communities, and the wider world. The advantages of project-based learning can be implemented in several fields and cover all aspects in world wide.

The issue of project-based learning has disadvantageous that becomes a hot debate among scholars Marx et al. in Thomas (2000). According to him, project-based learning has some weaknesses in its implementation. He also mentions the disadvantages of project-based learning, which are presented as follows: (1) time, projects often take longer than anticipated. In addition, difficulties that teachers experience in incorporating project-based science into district guidelines are exacerbated by the time necessary to implement in-depth approaches such as project-based learning.; (2) classroom management, in order for students to work productively, teachers must balance the need to allow students to work on their own with the need to maintain order.; (3) control, teachers often feel the need to control the flow of information while at the same time believing that students' understanding requires that they build their own understanding.; (4) support of student learning, teachers have difficulty scaffolding students' activities, sometimes giving them too much independence or too little modeling and feedback.; (5) technology use, teachers have difficulty incorporating technology into the classroom, especially as a cognitive tool; (6) assessment, teachers have difficulty designing assessments that require students to demonstrate their understanding.

Acording to Lian et al. (2017), direct instruction refers to the explicit teaching of skill sets and describes instruction models which comprise structrured and sequential steps designed to result in the explicit knowledge of those skills. The direct instruction method is designed to improve the basic education of children from economically disadvantaged backgrounds. It is supported by Becker and Carnine (1980), they state that the major goal of the direct instructional method is used to improve the basic education of children from economically disadvantage background and to increase their life options. Arends (2012) states that direct instruction is a conventional teaching method that helps students to learn basic skill and knowledge that can taught in step fashion. It means that people master the knowledge short period of time.

Identifying the characteristics of the components of reflection and creativity is necessary for the formation of scientific and methodological. Kim (2006) notes that creativity includes the following manifestations: (1) emotional responsiveness; (2) motivation for making the creative product; (3) skills of creative activity. All of the manifestation above is useful for students in learning process. Students who are motivated during the learning process can create great products of material has been learned.

In terms of education, creativity is an essential element needed for learning. Creativity is an important element in relation to education and societal growth. Cole et al. (1999) argue that as the degree of complexity and the amount of information in our society continue to increase, society's problems require more creative solutions. For this reason, all sectors of society are requiring leaders who can think critically and creatively.

According to Torrance and Myers (1970), the purpose of creative teaching is to create a responsible environment through high teacher enthusiasm, appreciation of individual differences, and so on. Establishing a creative climate was important to stimulate creative thinking.

There are some related research that supports the positive effect of applying project-based learning in teaching English. Baş (2011) investigated the effects of project-based learning on students' academic achievement and attitudes towards English lesson of 9th grade students 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. They did a pre- and post-test control group research model was used in this study. The data obtained in the study were analyzed using the computer program, SPSS 22.0. The arithmetic means and standard deviations were calculated for each group. In order to test the significance between the groups, the independent samples t-test was used. The significance level was taken as .05 in the research. The results of the research showed a significant difference between the attitude scores of the experiment group and the control group.

Other research comes from Fragoulis and Tsiplakides (2009) examined project-based learning in the teaching of English as a foreign language in Greek primary schools: from theory to practice. It deals with implementing project work in the teaching of English as a foreign language in Greek state primary schools. Theoretical foundations for project-based learning are presented and applied in the classroom, difficulties encountered are discussed, and benefits resulting from student participation in project work are suggested. The article purports to be pragmatic in focus, linking theory with practice, and providing practitioners with a tool for effectively implementing project-based learning in foreign language contexts.

Although a few studies have examined project-based learning and its use in instructional settings, as Barell in Bender (2012) has noted, project-based learning is an instructional model based on having students comfort real-world issues and problems that they find meaningful. Furthermore, very few studies have directly compared both teachers' and students' beliefs and attitudes toward project-based learning. Therefore, Beckett and Miller (2006) argues that project-based learning requires a fundamental shift in the role of teacher and student from traditional education. Since the success of project-based learning depends on both students' and teachers' opinions and on how they match, the present study set out to explore this issue by exploring how ESL teachers and students understand project-based learning and what they think about its use in language classrooms. On the other hand, by carrying out this study, the researcher hopes that project-based learning can receive more attention and enjoy more popularity amongst English language teachers at all grade levels.

METHODS

This study aimed at finding the effectiveness of teaching methods used as the independent variables and creativity as the attribute variable in teaching writing skill for the seventh-grade students of SMP N 1 Yogyakarta. This study belongs to quasi experimental research. The research design used in this research was factorial design. Three kinds of variables were used in this study: (1) independent variables; (2) dependent variable; and (3) attribute variable. The independent variable was the teaching method. The teaching method was the factors of this study manipulated, measured, and selected to know the effect and the relationship to the reality investigated. The teaching method used in this research was Project-Based Learning and Direct Instruction. These two different method were clung to two groups of students. Project-Based Learning group of students was functioned as an experimental group and Direct Instruction of students was functioned as a control group. The treatment was conducted from October until November 2016.

The dependent variable in this research was the students' writing skill of the seventh-grade of SMP N 1 Yogyakarta in the academic year of 2016/2017. The attribute variable of this study was students' creativity in learning writing. This variable was also assumed as the secondary independent variable to the reality investigated. Furthermore, in conducting this research the writer was interested in investigating the effect of independent variable (X) or teaching method on dependent variable (Y) or writing skill, in which the relationship between X and Y were influenced by the attribute variable (Z) or students' creativity

At the end of the treatments, both experimental and control groups were given a post-test. In this post-test only design, the two groups of the subjects were first assigned to the different treatments or control conditions. Then the experimental group and control group were given a post test of writing. The result was analyzed by comparing the post test scores of both groups by using multifactor analysis of variance (ANOVA) or F-test and then by using Tukey test.

The population of the study consisted of 272 seventh-grade junior high school students from eight classes in Yogyakarta. Then, the sample was only 3 classes. The classes were selected randomly (Fraenkel et al., 2012) from the school. One group (VII A class) was randomly assigned to the experi-

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mental group (η= 34), while the other (VII C class) formed the control group (η=34) of the study, the rest is VII B (η=34) class as a validation class to know the quality of instrument.

In this research, the writing test scale was used in order to measure student ability in writing toward English lesson. The scale was arranged by having done the reliability and validity studies and used to evaluate the writing skill of students by the researcher. The writing test used inter-rater reliability. The validity of writing test was content validity and expert judgment validity.

In the experimental group, project-based learning was applied. Whereas, in the control group direct instruction was used in the process of the study. The design of the study can be described as in the Table 1.

Table 1. Research Design

Creativity	Teaching Method (A)	
	Project-based learning	Direct Instruction
High (B1)	(A1B1)	(A2B1)
Low (B2)	(A1B2)	(A2B2)
Mean	A1	A2

As can be seen in Table 1, one can see the scales applied on the subjects of the study. The writing skill test and creativity test scale were applied on the subjects of the study for two times before and after the experimental process.

The writer used a descriptive analysis and inferential analysis in this research. Descriptive analysis was used to know the mean, median, mode, and standard deviation of scores of the writing test. Meanwhile, inferential analysis will be used to test the research hypotheses. Testing hypotheses will be conducted in order to manage the research data which were in the form of numbers. As a result, it can produce a real conclusion. In this research, multifactor analysis of variance (ANOVA) 2 x 2 will be used in testing hypotheses. H0 is rejected if F_0 is higher than F_t. Then, the analysis will be continued to find out the significant difference from one to another by using Tukey test. Before conducting ANOVA, normality and homogeneity test were done.

RESULTS AND DISCUSSION

This section presents the quantitative results of the present study and their interpretation. After the presentation of descriptive and inferential statistics of the data, this section proceeds to discuss those results in the light of the theoretical framework adopted in the study and the results of previous studies. Finally, the pedagogical implication is offered.

The research question of the study was (1) Is there a significant difference between creativity of students and their writing skill students in the experimental group in terms of the usage of project-based learning? (2) Do the students with high creativity have better writing skill than students with low creativity? (3) Is there any interaction between teaching methods and students' creativity to teach writing for the seventh-grade of SMP N 1 Yogyakarta in the academic year of 2016/2017?

Table 2. ANOVA Result

Dependent Variable: Score					
Creativity	Method	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
High creativity	PBL	87.824	1.092	85.642	90.005
	DI	83.235	1.092	81.054	85.417
Low creativity	PBL	79.471	1.092	77.289	81.652
	DI	79.647	1.092	77.465	81.829

Table 3. The Result of Method Mean Score

Method					
Dependent Variable: Score					
Method	Mean	Std. Error	95% Confidence Interval		
				Lower Bound	Upper Bound
PBL	83.647	.772		82.104	85.190
DI	81.441	.772		79.898	82.984

Table 4. The Result of Creativity Mean Score

Creativity				
Dependent Variable: Score				
Creativity	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
High creativity	85.529	.772	83.987	87.072
Low Creativity	79.559	.772	78.016	81.102

Table 5. The Result of Teaching Method and Creativity Mean Score

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.
Creativity	606.015	1	606.015	29.889	.000
Method	82.721	1	82.721	4.080	.048
Creativity * Method	96.485	1	96.485	4.759	.033
Error	1297.647	64	20.276		
Total	465403.000	68			
Corrected Total	2082.868	67			

Because F_o in the source coloum of method on Table 2 (4.080) is higher than $F_{t\,(0.05)}$ (4.00) and the significant (0.048) is lower than (0.05), the difference between columns is significant. Therefore, Ho is rejected. It means that teaching writing using Project-Based Learning to the seventh-grade of SMP N 1 Yogyakarta is significantly different from the one using Direct Instruction. According to Table 3, the mean score of the students taught by using Project-Based Learning (83.65) is higher than the mean score of students taught by using Direct Instruction (81.64). Thus, it could be concluded that Project-Based Learning is more effective than Direct Instruction to teach writing to the seventh-grade students of SMP N 1 Yogyakarta in the academic year of 2016/ 2017.

The finding of this research informs that there is a significant difference between teaching writing using project-based learning and teaching writing using direct instruction. Project-based learning is more effective than direct instruction to teach writing because the mean score of the students who were taught by using project-based learning is higher than that of those who were taught by using direct instruction.

By using project-based learning, students can explore their idea in conducting the project. The students have many chances to solve their problem. They have extra time to discuss with their partner in doing assignment. They also feel free to express their taught, idea, and innovation. Barell (Bender, 2012) argued that PBL is now seen by many as the best approach for emphasizing problem-solving skills in a world.

The implementation of project-based learning is exactly suitable for developing the 21st students' skill in English. As states by Bransford (Bender, 2012), project-based learning has recently received increased emphasizes as educator and business leader look for ways to move educator forward and develop student's skill in 21st technologies, problem solving, and collaboration. The research show that the steps of project-based learning method ask students to identify the topic at the first. Then, they solve the problem of assignment with their groups. This real moment is exactly straight forward with the fundamental of current Indonesian curriculum which adopt scientific approach in the way of learning. It is supported by the mean score of student who were taught by using project-based learning and implemented 2013 curriculum. The scores also prove that project-based learning is effective for teach writing in practicing of Curriculum 2013.

Learning through free writing ideas is fundamental to young children's education, helping them to develop the necessary skills in life like listening, speaking, reading and writing. One of the method that supports learning trough free expressing ideas for writing is project-based learning. Project-based learning can stimulate students' creativity and discovery imagination with a wonderful non-interactive way to create project in describing things, for example: house, animal, people. Project-based learning helps students to write text based on the real situation, the closet neighborhood, and something imaginative. The implementation of project-based learning gives student experiences for their lifelong learning. Teaching has been an activity undertaken behind closed doors between moderately consenting participants. PBL promotes lifelong learning because students become engaged builders of a new knowledge base and become active, lifelong learners (Shulman, 2007).

Teaching writing by using direct instruction is also interesting, but it cannot depict motion as project-based learning does. Direct instruction restricts the students to explore their idea. Arends (2012)

stated that direct instruction method is an approach to teach that helps students learn basic skills and acquire information that can be taught in a step-by-step fashion. Students who have high intelligence or creativity are difficult to improve their ability. Since the teacher give information step by step. All of information delivered in classroom are from the teacher. It makes students passive. Direct instruction makes student lack of attention, need, proficiency, and condition. In other word, it can be said direct instruction is teacher centered teaching method.

Based on the explanation of the differences between both teaching methods above, it could be summed up that project-based learning has more complex and challenging activities which involves all the students being creative and having high self-confidence and motivation in learning than direct instruction does. Project-based learning is quite different from direct instruction based on the activity involved in. It could be estimated that project-based learning is more effective than the direct instruction to teach writing.

It could be proved that the significant difference between project-based learning and direct instruction could be seen from the learning activities and the process of the students to be active and creative learners. Thus, it could be concluded that project-based learning is more effective than direct instruction in teaching writing.

Because F_o in the source coloum of creativity on Table 2 (29.889) is higher than $F_{t(0.05)}$ (4.00) and the significant (0.000) is lower than (0.05). Therefore, Ho is rejected. It means that students having high creativity are significantly different from those having low creativity. According to Table 4, the mean score of the students having high creativity (85.53) is higher than the mean score of the students having low creativity (79.56). It could be concluded that students having high creativity have better writing skill than students having low creativity of the seventh-grade students of SMP N 1 Yogyakarta in the academic year of 2016/2017.The finding of this research reveals that students having high creativity have better writing skill than those having low creativity. The mean score of students having high creativity is higher than those having low creativity. Students' creativity naturally has to do with students' desire to value and motivate them related to the learning process. However, it also concerns with the reasons or goals that underlies their involvement or noninvolvement in academic activities.

Students who have high creativity generally tended to be independent, to have wide interest, to be open in new innovation. Those who have high creativity did well the challenging writing activity given by the teacher in their accomplishments and tried hard to be successful. They were inclined to attribute their success to their abilities. As a result, students with high creativity generally had a realistic assessment of their strengths and weaknesses. They had a better self-confidence, independent and coope-rative attitude, optimistic, feeling comfortable with a wide range of emotions, and ability to solve prob-lems. As stated by Simonton (2004), students with high creativity tend to be independent, unconventio-nal, more risk-taking, to have wide interests, and to have a greater openness to new experience.

On the other hand, students with low creativity tended to feel unworthy, incapable, and incompetent. They thought that they have a negative view of life that turns into low risk taking ability. They tended to expect the worst, on their tasks especially challenging demanding ones, achieved less success, was afraid and pesimistic to do something. It is in contrasts with Gomez (2007) theory, stating that creative people are often diligent, disciplined, and highly focused unworthy, and incapable.

The choice of method in teaching learning process will influence student's achievement, especial-ly in teaching writing. In writing class the teacher must use suitable method in order to get the students more active and get involved. Project-based learning raised positive activities to enhance the students' writing skill. The use of project-based learning provided an opportunity for students' ability to solve the problem through real life. As stated by Beckett and Miller (2006), project-based learning as the method of learning to engage students in the investigation of real-life problems and develop student's creativity, problem-solving skills, and lifelong learning.

By virtue of the above explanation, it could be stated that project-based learning method was appropriate in teaching writing for student having high creativity than for those who have low creativity.

Because F $_{correlation}$ on the table 2 (4.759) is higher than $Ft_{(0.05)}$ (4.00) and the significant (0.033) is lower than (0.05). Therefore, Ho is rejected. It means there is an interaction between the two variables, the teaching method and creativity in teaching writing to the seventh-grade students of SMP N 1 Yogyakarta in the academic year of 2016/2017. The finding reveals that the choice of method in teaching learning process will influence student's achievement, especially in teaching writing. In writing class the teacher ought to use suitable method in order to get the students more active and get involved.

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Project-based learning raised positive activities to increase the students' writing skill. The use of project-based learning provided an opportunity for students' expression through social aspects of communication. Through project-based learning, students could improve their proficiencies in written language, involvement, motivation, and creativity. Based on the nature of this method, the activities created were really demanded for students who are active, creative, having high confidence, having high capability, having high self-worthy, having belief of success to do challenging activities. Scardamalia and Bereiter (1991) state that project-based learning empowers students to go beyond being knowledge builders and generators of new knowledge. There was evidence that when teachers used project-based learning, children write more readily about new idea and their use of higher-order thinking is enhanced. They therefore appeared to offer a valuable extension to the teaching/ learning strategies. Project-based learning could create descriptive text which sets a context for learning and provides a purpose for children's writing and follow-up activity. Students collaborated their idea to write readily with the fun steps of project-based learning and feel comfortable.

The students having high creativity usually have high motivation and belief to learn something, especially writing skill. They would face their fear and anxiety as a challenge. Students also had positive attitude towards the lesson by encouraging and supporting themselves to learn. They were favorable and capable to develop and enhance something. Wilson (2004) says high creativity persons usually display a great deal of curiosity about many things; are constantly asking questions about anything and everything; may have broad interests in many unrelated areas. These conditions are appropriate with the activities created by using project-based learning. The activities were intended to encourage the students to develop writing skill as risk taking, challenging and appropriate responses in writing and also develop sense of story by exploring their capability in delivering it by involving themselves in a plot of story. They were expected to have high creativity and believe to be able to do activities. Creative individuals tend to have a discovery orientation, which leads them to view situation from multiple perspective, to find problems, and to ask novel questions. They would have retained a natural curiosity for learning and would be eager and enthusiastic when presented with a new challenge. Students also more active and creative in class and did not afraid making mistakes. By considering the explanation, project-based learning was suitable to teach writing to the students whose creativity was high.

On the contrary, the students with low creativity were likely to give up or go through the motions of trying without really giving their best. They were non-active students. They did not have high motivation or interest to do their task. Students depended on the teacher because they had low desire to find new idea of their lesson. The facts showed that the student having low creativity have less attention, motivation, confidence, self-worthiness and interest in joining the learning process. They were afraid to write and to take a risk in making mistake. As Manktelow (2005) states that uncreative people do not think about creativity and do not give themselves the opportunity to create anything new. The activities using direct instruction were also accordance with the characteristics of student having low creativity. Direct instruction did not give many opportunities to students to be free and creative. This method was more effective for students with have low creativity. In addition, Arends (2012) says that direct instruction is a teacher-centered that has five steps establishing set, explanation, guided practice, feedback, and extended practice. Considering to the explanation, it could be concluded that there was a correlation between teaching method and students' creativity for teaching writing. Project-based-learning method was appropriate in teaching writing for students having high creativity than for those who had low creativity. Meanwhile, direct instruction method was appropriate in teaching writing for students having low creativity than for students having high creativity.

Table 6. Tukey Test Result

No.	Data	q_o	q_t	A	Status
1.	A_1 and A_2	4.04	2.83	0.05	Significant
2.	B_1 and B_2	10.93	2.83	0.05	Significant
3.	A_1B_1 and A_2B_1	5.94	2.88	0.05	Significant
4.	A_1B_2 and A_2B_2	0.23	2.88	0.05	Not Significant

Because q_o between columns (4.04) is higher than q_t at the level of significance $\alpha = 0.05$ (2.83), it means that project-based learning method is significantly different from Direct Instruction in teaching writing. The mean score of the students taught by using project-based learning (83.65) is higher than the mean score of students taught by using Direct Instruction is (81.64). Thus, it could be concluded that

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Project-Based Learning was more effective than Direct Instruction to teach writing to the seventh-grade students of SMP N 1 Yogyakarta in the academic year of 2016/ 2017.

Since, q_o between rows (10.93) is higher than q_t at the level of significance α =0.05 (2.83), it means that the students having high creativity are significantly different from those having low creativity. The mean score of the students having high creativity (83.53) is higher than the mean score of the students having low creativity (79.56). It could be concluded that students having high creativity had better writing skill than students having low creativity to the seventh-grade students of SMP N1 Yogyakarta in the academic year of 2016/2017.

In addition, q_o between cells A_1B_1 and A_2B_1 (5.94) is higher than q_t at the level of significance α = 0.05 (2.88), it means that Project-Based Learning is significantly different from Direct Instruction to teach writing to the students having high creativity. The mean score of A_1B_1(87.82) is higher than A_2B_1(83.23), it could be concluded that Project-Based Learning is more effective than Direct Instruction to the students having high creativity.

The last result of tukey test, q_o between cells A_1B_2 and A_2B_2 (0.23) is lower than q_t at the level of significance α = 0.05 (2.88), it means that Project-Based Learning is not significantly different from Direct Instruction to teach writing to the students having low creativity. The mean score of A_1B_2 is 79.47 and A_2B_2 is 79.65. It means that Direct Instruction is more suitable for student having low creativity.

CONCLUSION

The research finding shows that Project-based learning is an effective method to teach writing. Project-based learning can affect students' writing skill. It provides the opportunity, challenge, and situation for the students to practice their writing. The implementation of project-based learning in teaching writing gives good contribution to the development of teaching-learning activities. This study can offer an effective and efficient method to apply in teaching writing whether or not the previous method used is still suitable to improve the students' writing skill. It can be seen from the positive affects offered by project-based learning as an effective and efficient method for learning.

This study can offer an effective and efficient method to apply in teaching writing whether or not the previous method used is still suitable to improve the students' writing skill. It can be seen from the positive affects offered by project-based learning as an effective and efficient method for learning. Since, project-based learning is an effective method to teach writing, English teachers can implement this method. They should have a preparation to implement this method effectively. They should understand the concept as well as strength and weaknesses of this method in order to avoid obstacles which may appear in the teaching and learning process. Further researches are encourage to optimize the use of PBL by combining it with interesting teaching media. The use of other moderate variables also encouraged.

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