The Evaluation of Teachers’ Practices of Project-Based Learning Strategy in Writing Instruction

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Abstract

This research is a qualitative study of the Project-Based Learning (PjBL) practice. PjBL is one of the three main teaching and learning methods suggested in the implementation of the 2013 curriculum. Researches on the teachers’ perception were mostly on the benefits of PjBL, but their understandings of PjBL were commonly ignored. Meanwhile, the teachers’ beliefs and perceptions affect what they do in the classrooms. Their perceptions deeply influence the way they plan, teach, and perform assessments. Therefore, this study is aimed at evaluating how the teachers perceive, plan, implement, and assess PjBL in writing instruction. The result of this study is expected to enrich the practical concept and theory of PjBL. Besides, it is important for the readers, especially the teachers to either revise or improve their perception, knowledge, and understanding of PjBL, especially in writing instruction. To collect the data, the researcher used a questionnaire, document, classroom observation, and interview. The findings show that the teachers have several incorrect perceptions of PjBL. Their misperceptions lead them to make inappropriate PjBL plans, implementations, and assessments. Accordingly, it reveals the teachers’ perceptions of PjBL were compatible with their PjBL plan, implementation, and assessment. However, this compatibility did not show the appropriateness of the teachers’ PjBL practice due to several misperceptions of PjBL of the teachers.

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INTRODUCTION

According to the regulation of the Indonesian Ministry of Education and Culture (Kemendikbud RI, 2016), there are three main teaching and learning methods suggested in the implementation of the 2013 curriculum. The methods include Problem Based Learning, Project-Based Learning, and Discovery Learning. Those methods are suitable to reach the goals of the output expected by the curriculum that is to develop attitude, knowledge, and skill. In practice, however, the methods must be elaborated and adjusted to meet the requirements in the field (Musfiqon & Nurdyansyah, 2015).

Project-Based Learning (PjBL), as one of the teaching methods applied in the 2013 curriculum, relies its theoretical foundations on experiential learning and constructivist theories. Harrigan (2014) asserts that the basic principle of the Project-Based Learning strategy is the presence of a constructive learning environment in which students construct their knowledge through a meaningful authentic experience. The learning activities bring challenges for students to solve. In line with Harrigan, Laverick (2018) confirms that PjBL engages students through the act of inquiry and promotes the development of critical thinking skills. Supporting the PjBL process, the students are given opportunities to gather information from a variety of sources and synthesize, analyze, and derive knowledge from it (Solomon, 2003).

The Ministry of Education and Culture of Indonesia, through the 2013 curriculum has formulated the PjBL syntaxes into 6 phases: (1) start with essential questions; (2) design a project; (3) create a schedule; (4) monitor the students and progress of the project; (5) assess the outcome; and (6) evaluation of the experience. The phases should be followed considerably to get an optimum result of PjBL. Therefore, teachers must have correct perceptions of the teaching strategy.

Perception is the brain’s and the sense organs’ sorting out, interpretation, analysis, and integration of stimuli. It is the process of recognizing (being aware of), organizing (gathering and storing), and interpreting (binding to knowledge) sensory information so that they become meaningful experiences (Bernstein et al., 2008; Carterette & Friedman, 2008; Fieldman, 2011; Ward et al., 2015). A perception results in the attitude and behavior of a person. This study wants to reveal teachers’ perceptions of Project-Based Learning (PjBL). How well they understand PjBL as one of the recommended teaching methods according to the 2013 curriculum, and how precise they practice it. It is believed that teachers’ perception of PjBL will significantly influence how they plan, practice, and assess their students.

Several studies on PjBL are chosen as the fundamental theories to support this study. Carpenter (2006), Goodman and Stivers (2010), and Schafer (2020) claim that PjBL is effective at all grade levels and subjects. PjBL researches on English teachings supported their finding. PjBL increases students’ listening motivation and autonomy significantly (Ekawati et al., 2018; Mujtaba et al., 2016; Zhang, 2015). PjBL also significantly enhances students’ reading motivation, creativity, self-directed learning, confidence, and collaborative learning skills. (Wiranegara, 2019; Kurnely, 2018). In teaching speaking, PjBL leads the students to be more autonomous, active, collaborative, and confident. (Kamisah et al., 2013; Maulany, 2013a; Permatasari, 2013; Rahmawati, 2020; Setiawan & Bharati, 2019; Wahyudi et al., 2019). Furthermore, PjBL on teaching writing brings the students involved in more deep and autonomous learning. (Anggraeni et al., 2015; Chikita et al., 2013; Nurwachid et al., 2018; Putra et al., 2014; Sukerti & Yuliantini, 2018; Wachyu & Rukmini, 2015; Yogi et al., 2015).

Despite the effectiveness of the PjBL strategy, several problems were also detected. The problems include group management, student participation, assessment practices, and time distribution (Arumsari & Bharati, 2015; Bakar et al., 2019). The problems that occurred
must relate to the teachers' perception of PjBL. Unfortunately, researchers on the teachers’ perception mostly in the benefits of PjBL. Their understanding of PjBL is commonly ignored. Meanwhile, teachers’ beliefs and perceptions affect what they do in the classrooms (Sugesti et al., 2020).

According to the previous studies, this research is aimed at evaluating the PjBL practices in writing instruction. The researcher believes that teachers’ perceptions deeply influence the way they plan, teach, and perform assessments in the classroom. The result of this study is expected to enrich the practical concept and theory of PjBL. Besides, it is important for the readers, especially the teachers, to either revise or improve their perception, knowledge, and understanding of PjBL, especially in writing instruction.

METHOD

This research is a case study that utilizes qualitative research. It involves two English teachers of a private Junior High School in Semarang in the academic year 2020/2021 as the subject. The teachers’ PjBL perception is the main object studied in this research since the perception is believed to lead the teachers to have appropriate PjBL planning and implementations. They were the evidence of what the teachers perceived about PjBL and how they performed it in their teaching practices.

A questionnaire was applied to collect data to examine the teachers' perception of Project-Based Learning. The questionnaire was adapted from Amy Mayer’s table (Mayers, 2018; TeachThought, 2019). It contains Task-Based Learning (TBL) and Project-Based Learning (PjBL) statements. The odd number statements belong to TBL, while the even ones belong to PjBL. The questionnaire comprises four aspects of PjBL: Teaching Materials, Learning Activities, The roles of the teachers and the students, and the Assessment. The four aspects were then confronted with the lesson plan documents, classroom PjBL practice, and the interview.

Analysis of the data started with the result of the questionnaire. Accordingly, the teachers’ perceptions were interpreted. The teachers’ perceptions were then matched to the lesson plan documents, especially in the part of the PjBL phases. The steps that the teachers have planned were also analyzed whether they belonged to the PjBL phases. Later, the findings from the lesson plans were confronted with the observation in the classroom. Finally, the interview result was also analyzed and interpreted.

RESULTS AND DISCUSSIONS

This part discusses the results of the research and gives a detailed explanation of the findings.

Project-Based Learning Perception

The first findings are obtained from the questionnaire. Accordingly, four (4) PjBL perception categories were determined. The teachers were asked to respond to statements whether they belong to PjBL or not. Their correct responses (C) show their correct perceptions of PjBL while the incorrect responses are vise versa. Briefly, their responses revealed their perceptions of PjBL.

Teaching Materials

The teaching material part contains 12 statements to recognize. Six of them belong to TBL and the rest are PjBL statements. The responses describe the perception of the teachers. Table 1 describes the findings:
Table 1. Teachers’ perceptions of PjBL on the teaching materials (TM)

| No | Learning Statements                                                                 | Responses |
|----|-------------------------------------------------------------------------------------|-----------|
|    |                                                                                     | T1 | T2 |
| 1  | The projects can be outlined in detail on one piece of paper by the teacher.         | IC | IC |
| 2  | The projects include many "need to knows" on the part of the students and teachers. | C  | C  |
| 3  | The projects are often graded based on teachers’ perceptions that may or may not be explicitly shared with students. | C  | C  |
| 4  | The projects are graded based on a clearly defined rubric made or modified specifically for the project. | IC | IC |
| 5  | The projects are closed: every project and every student has the same goal.          | IC | C  |
| 6  | The projects are open: students make choices that determine the outcome and path of the research. | IC | IC |
| 7  | The projects cannot be used in the real world to solve real problems.                 | C  | C  |
| 8  | The projects could provide solutions in the real world to real problems even though they may not be implemented. | C  | C  |
| 9  | The projects are not particularly relevant to students’ lives.                       | C  | C  |
| 10 | The projects are relevant to students’ lives or future lives.                         | C  | C  |
| 11 | The projects do not resemble work done in the real world.                             | C  | C  |
| 12 | The projects are just like or closely resembles work done in the real world.         | C  | C  |

| Total correct responses | 8  | 9  |
|-------------------------|----|----|
| Percentage              | 67 | 75 |

According to the finding shown in Table 1, none of the teachers could recognize the whole statements of PjBL. Teacher 1 (T1) correctly answer 8 of 12 statements (67%) while teacher 2 got 9 correct answers (75%). The finding indicates that dealing with the teaching material the teachers still considered PjBL was similar to TBL. They still thought that a project must be determined and prepared by the teachers. What makes them different was in their perception to share the project with the students before it is determined. However, both teachers perceived that a project must be authentic and applicable in real life.

Learning Activity

The Learning activity section contains 8 statements to differentiate. Four of them belong to TBL and the others belong to PjBL statements. The responses describe how the teachers perceive the learning activities of PjBL. Table 2 shows the findings:
Table 2. Teachers’ perceptions of PjBL on the learning activity (LA)

| No | Learning Statements                                                                 | Responses |
|----|--------------------------------------------------------------------------------------|-----------|
| 1  | The projects can be done at home without the teacher’s guidance or team collaboration. | IC IC     |
| 2  | The projects require teacher guidance and team collaboration.                         | IC C      |
| 3  | The projects are based upon directions and are done "like last year."                | C C       |
| 4  | The projects are based upon driving questions that encompass every aspect of the learning that establishes the need to know. | IC IC     |
| 5  | The projects do not include scenarios and background information or are based on events that have already been resolved. | C C       |
| 6  | The projects use technology, tools, and practices of the real-world work environment purposefully. The students choose tools according to their purposes. | C C       |
| 7  | The projects are based on the provided tools and materials. (i.e., Make a cup of tea.) | IC IC     |
| 8  | “Design a beverage recipe using more than 2 types of fruit” is an example of the project. | C C       |

| Total correct responses | 4 5 |
|-------------------------|-----|
| Percentage              | 50 63 |

The finding presented in Table 2 shows that T1 perceived four (4) of the eight (8) statements of PjBL (50%) correctly, while T2 perceived six (6) of the eight statements (63%) correctly. Their incorrect response to LA1 indicates their misperception of PjBL. They believed that by providing projects to their students, they had implemented PjBL. They also failed to recognize the phases of PjBL on LA4. They did not realize the urgency of an essential question to start a PjBL while it’s the main key of the implementation of PjBL.

Teachers’ and Students’ Roles

The next findings deal with the teachers’ and students’ roles in PjBL. This part has four statements. Two (2) of them deal with TBL and the other two (2) concern with PjBL. The responses show the teachers’ perception of how they should manage their and their students’ roles. Table 3 in the following describes the findings:

Table 3. Teachers’ perceptions of PjBL on the teachers’ and students’ roles (TSR)

| No | Learning Statements                                                                 | Responses |
|----|--------------------------------------------------------------------------------------|-----------|
| 1  | The teacher work occurs mainly after the project is complete.                       | C C       |
| 2  | The teacher's work occurs mainly before the project starts.                         | C C       |
| 3  | The students do not have many opportunities to make choices at any point in the project. | C C       |
| 4  | The students make most of the choices during the project within the pre-approved guidelines. | C C       |

| Total correct responses | 4 4 |
|-------------------------|-----|
| Percentage              | 100 100 |

Table 3 indicates they have similar perceptions of the teachers’ and the students’ roles in the PjBL practice. They respond to all statements correctly. However, their responses to TSR3 and TSR4 were inconsistent with their answers to TM6 where the students did not have chances to be involved in determining the materials or the kinds of stuff that might be needed. This inconsistency might be caused by their other knowledge of other teaching-learning strategies. Therefore, their perception of the teachers’ and students’ roles need to be confronted with other findings.
**PjBL Assessment**

The last part of the PjBL perception is related to the assessment practice in PjBL. There are six statements given in the questionnaire. This part has six statements. Three (3) of them deal with TBL and the other three (3) concern with PjBL. The responses show the teachers' perception of how they should manage their and their students’ roles. Table 4 reflects the findings:

**Table 4. Teachers’ perceptions of PjBL on the Assessment (PAS)**

| No | Learning Statements | Responses |
|----|---------------------|-----------|
| 1  | The projects are used year after year and usually focus on the product. | IC C |
| 2  | The projects are timely, complex, covers many fields, and takes a team of highly trained professionals significant time to plan and implement. | IC C |
| 3  | The projects are turned in. | IC IC |
| 4  | The projects are presented to a public audience encompassing people from outside the classroom. | C C |
| 5  | The projects are all the same. | IC IC |
| 6  | The students may have different projects at a time. | C C |

|   | T1 | T2 |
|---|----|----|
| Total score | 2  | 4  |
| Percentage  | 33%| 67%|

The results showed that the teachers had an incomplete understanding of PjBL. This can be seen that they correctly responded to some PjBL principles but failed to some others.

**Lesson Plans**

The next findings were obtained from the teachers’ lesson plans. The main activities planned by both teachers were closer to the implementation of TBL. The phases of their PjBL practice obtained from the teachers' lesson plans documents are presented in Table 5.

**Table 5. PjBL Lesson Plan Observation form**

| Objects to Observe | Aspects to Observe | Finding |
|--------------------|--------------------|---------|
| Learning Activities | Apperception       |         |
| Phase 1. Start with essential questions | X X |
| Phase 2. Design a project | V V |
| Phase 3. Create a schedule | V V |
| Phase 4. Monitor the students and progress of the project | V V |
| Phase 5. Assess the outcome | V V |
| Phase 6. Evaluation of the experience | V V |
| Closing | V V |

Table 5 shows that T1 and T2 did not mention the first phase of PjBL that was giving an essential question. The teachers did not recognize that this phase determined the next phases. As the phase was not performed, the students’ roles to search for projects to do did not occur. From this finding, the teachers’ teaching practice planned cannot be categorized as a PjBL. Fortunately, other phases of PjBL were in line with the standard of PjBL practice. Thus, the class observation
conducted would support this document-based finding.

**PjBL Practice**

Strengthening the finding from the lesson plan documents, the class observation showed that the teachers had implemented PjBL as they had planned. Concerning the implementation of PjBL, several non-PjBL practices were found.

Guiding by the lesson plans prepared, it revealed that in their PjBL practice, the teachers did not provide an essential question to initiate the students’ projects. Instead, they explained the materials to the students using a powerpoint presentation. As the result, the students were not involved to decide their projects. The projects were not based on the essential question. Otherwise, the teachers had designed and scheduled a group project for the students. The projects were determined by the teachers at a certain time.

Here the teachers had initiated students’ collaboration. During doing the project, the teachers monitored the students and helped them if necessary.

To sum up, the teachers’ PjBL practice was in line with what they have prepared in their lesson plans. Their PjBL practice ran as what the teachers perceived. Despite their misperceptions of PjBL, the teachers assumed that they have implemented the PjBL strategy in their classes.

**PjBL Assessment**

Dealing with the assessment, the teachers targeted 3 aspects of the students: knowledge, skill, and character. T1 and T2 used the written results of the discussion to assess students’ writing knowledge and skill. This, of course, did not reflect the PjBL assessment which must be process-oriented. For the character aspect, both teachers were concerned about the students’ activeness during the project. T1 used peer assessment during the discussion while T2 applied self-assessment. This can be accepted as the practice of PjBL assessment.

**Compatibility of the PjBL perception to its practice**

The last procedure performed by the researcher was having an interview with the teachers. The interview was aimed at validating the findings. It was also expected to strengthen the findings. Accordingly, it was revealed that teachers have misperceptions of the PjBL syntax. They perceived that the phases of PjBL are the same as strategies of all scientific learning. reasons. T2 asserted as follows:

“I was very sure that what my students and I did during my English class was a Project-Based Learning. During my teaching, I had performed the steps of the scientific learning strategy. I was also sure that the practice considered the PjBL strategy. Moreover, I had assigned my students to do a group project task in my writing class. Also, by the end of the meeting, I had had my students do homework for a personal project. Since I had assigned my students to do both a group and an individual project, I was sure that I had implemented the PjBL strategy.”

T2’s answer indicates that she does not understand the concept of PjBL. T1 as a senior teacher has also the same perception. Their misperception caused the chain of the inappropriate practice of PjBL. He assumes that when he has given his students projects, he has implemented PjBL. As a result of their misperception, the teachers inappropriately plan, implement, and assess the students using the PjBL strategy.

Their misperceptions of PjBL also deal with their inappropriate PjBL syntax. They generalized that all syntaxes of scientific learning strategy are the same. They forgot that each teaching strategy has specific syntaxes.

Dealing with PjBL preparation, T1 and TC- realized that their lesson plans should contain the standard components of the 2013 curriculum lesson plan. T1 stated on this matter:

“A lesson plan should contain several main parts, the goal of the meeting, the topic of the lesson, material resources, and the teaching-learning phases. Since it is a PjBL lesson plan,
certain projects and its scoring protocols must be enclosed, too."

T1 PjBL misperception is shown in this statement. He perceived that PjBL is characterized by the students doing a project. He does not realize that a project in a PjBL practice must be preceded by an essential question. Moreover, the project in PjBL must not be determined by the teacher. It should come from the students’ responses to the essential questions given by the teacher.

Dealing with the benefits and problems faced when implementing PjBL, T1 and T2 believed that PjBL is a good strategy to train the students to be collaborative, creative, responsible, and independent. However, they thought that it might take more time to finish. To Make it worse, passive students might become a burden for a group to do a project.

T1 and T2 responses indicated that they had implemented PjBL, as they perceived. They could even mention several benefits and challenges of PjBL. Unfortunately, due to the teachers’ misperceptions of PjBL, several phases of their PjBL practice were not implemented. Thus, the implementation of PjBL by T1 and T2 was considered inappropriate.

CONCLUSIONS

Following the findings, the researcher comes to a conclusion that the teachers have incorrect perceptions of PjBL. Their misperceptions of PjBL occur in the dimensions of the teaching materials, teaching activities, teachers’ and students’ roles, and in the assessment. As the result, their misperceptions of PjBL lead them to prepare inappropriate lesson plans for their PjBL practices. Several phases of PjBL practices are not included in their lesson plans. The phases the teachers’ prepared in their lesson plans are closer to the plan of scientific learning in general rather than the phases of PjBL. The implementation of PjBL performed was in line with their lesson plans. The teachers follow what they have designed in their lesson plans. They have projects in their classes, but the projects were prepared and determined by the teachers. Finally, in their PjBL assessment, the teachers assessed three aspects of the students’ achievement: knowledge, skills, and characters.

To sum up, the teachers’ misperceptions influence other phases of PjBL practices. Revising the teachers’ misperception, more training and workshop on PjBL strategy will revise the teachers’ perceptions as well as enhance their competence to implement PjBL.

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