Chapter Four

Findings and Discussion

In this chapter, the researcher reports the findings based on the data analysis and the discussions of the findings. The researcher explains the finding and relates to the theory. The research findings show the data obtained from the analysis results to see the students’ perceptions about the implementation of Project based learning in a Material Design course at English language education department in a private university in Yogyakarta. Those findings were about the benefits of the implementation of PBL and the challenges faced by the students’ in the implementation of PBL in a Material Design course.

Benefits of Using Project Based Learning in Material Design Course

The first aim of this finding was to find out the benefits of using Project based learning in a Material Design course. The researcher found some benefits of using Project based learning in a Material Design course. These findings were obtained from the answers of four participants. The findings of benefits perceived by the students after being taught using Project based learning in Material Design course. Based on the experiences of the participants, the researcher found some benefits in using Project based learning in Material Design. The benefits obtained in using Project based learning in Material Design were improving students’ language skill, helping students to understanding the material better, increasing students’ creativity and critical thinking, improving students’ team work, and improving skills needed for future job.

Improving students’ language skill. Based on the experience of the participants, using Project based learning in a Material Design course brought the benefit to improve students’ language skills. The finding showed that students’
language skills get improved when teacher used the Project based learning in a Material Design course. Using Project based learning could improve students’ language skill especially in their reading and writing skill. The first statement was mention by P2 who said “Using PBL in the classroom can increase my writing ability” (P2.3). P2 said that when looking for the material to create a textbook, I read many textbooks, and the result of reading a book in form of writing. Then, my reading skill and writing skill get improved. “My language ability is increased in term of reading and writing skill“ (P2.5). Also, the statement was in line with P4 who said “Indirectly, my language ability and my writing skill get increased” (P4.4).

This finding was supported by Levin (2004) who stated that the students’ language skills get improved because the students take part in purposeful communication to complete authentic activities – the tasks with real world relevance and utility, and the students have the opportunity to use language in a relatively natural context (Haines, 1989). Thus, the use of PBL in classroom could increase the students’ language skill because they learnt in real task of relevant world. While they worked on the project, they also could use specific target language in the learning process.

**Helping students to understand the material better.** Based on the experience of the participants, they could understand the material better when teacher used Project based learning as the teaching method in a Material Design course. They could understand material better because they explored in the learning process. The participant mentioned “Using Project based learning can make us understand materials better” (P1.1), and also P1 said “The project helps us to arrange the materials that are appropriate for students” (P1.10). When teacher used the Project based learning in a Material Design course, the students could understand better because they learnt to
make a teaching material which was appropriate for the students. Another participant also mentioned that “We know how to create a book and design an interesting book” (P3.2). When teacher used PBL in Material Design, they learnt to make a textbook to be interesting for students. Also another participant said “We can learn to create a book” (P4.1).

This finding was in line with Kavlu (2015) who stated that Project based learning is an effective way to help students to understand, apply and retain the information. The students who works on the projects showed that they increased their motivation and engagement in their studies. Hutchinson (1996) as cited in Kavlu (2015) also stated that PBL can help the language learners related to the task of the language in the learners’ communicative competence and make the language to be more relevant to their needs. Also, it enables the students to communicate and understand the target language as the culture context.

**Increasing students’ creativity and critical thinking.** Using project based learning in Material Design course could increase the students’ creativity and critical thinking. In Material Design course, the students learnt how to create a textbook, so it could increase the students’ creativity and critical thinking. It could also increase the students’ creativity and critical thinking because in PBL, the students took a part in learning process. This finding was stated by P2 who stated “With project based learning, we can be creative and develop our talent” (P2.2). While learning to create a textbook, they also could develop their creativity and talent by designing books to be interesting. They also had to think critically to determine the topics related to the curriculum. It was also stated by P2 who said “We must be able to think critically” (P2.6).
The finding was similar to Allen (2004) as cited in Kodriyah (2017) who stated that PBL develop the students’ problem solving and higher order critical thinking skill. PBL also provides the contact with the reality, and the students can apply the knowledge that they have learnt theoretically and the students can try to solve practical problems in the learning process (Kalabzová, 2015, p.6). In PBL students, there were involved into the learning process while working on the project which they also learnt to develop their creativity and critical thinking.

**Improving students’ team work.** Based on the finding, using Project based learning in Material Design course could improve the students’ work in team especially on the responsibility and time management. Because, they worked on the project, they also learnt to work in a team. As stated by P4, “I learn to work in a team” (P4.2), and P1 stated “in terms of individuals, using PBL can improve the skill in working on team” (P1.2). As they worked in team, they also should have a sense of responsibility. As stated by P, “Using PBL in the classroom can have a sense of responsibility” (P1.3). The use of Project based learning in the classroom was able to make the students to have sense of responsibility. Also, they had to be responsible to their work and finish the project. Besides, they had to manage their time to complete the project. P1 conveyed “For the time management, subject course use project as a final task, so we must manage our time as good as we can work on the project at the end of the semester. Besides, using PBL can help to manage the time” (P1.4). Here the participants give opinion about the point “For individual, it must be responsible and work in team” (P3.3).

The finding was supported by Kavlu (2015) who stated that PBL can build the students’ team skill. Besides, the students are able to observe how their idea, plan suggestions, and carryout the projects as the fulfillment. Henze and Nejdl (1998) as
cited in Kavlu stated that as work project, it is often done in teams, and the learners practice their capabilities for team work and collaboration. Thus, using PBL in classroom could train the students to be responsible and work in team.

**Improving skills needed for future job.** In the next finding, the use of Project based learning in Material Design course could be useful when the students became the teacher. Also, they already learnt to make and design a textbook in the college. The project based learning of teaching method could be considered for the student as a teacher use in teaching. Besides, P3 stated “Because we learn in teaching department, later it can be useful if we became the teacher later” (P3.1). P1 also said “The application in in the future can be more useful” (P1.11). The use of Project based learning in Material Design course have final result, and what they already learnt could be applied in their real life context. As stated by P2, “Subject of the course has the final result, so what we learned can be applied” (P2.1).

The finding was in line with Lam (2011) who stated that PBL was able to help the students to be well-prepared in the future in terms of both English and social skill. They could be evaluated not only on their outcome but also on their collaborative, negotiating, planning, and organizational skills.

**The Challenges Students Faced in the Implementation of Project Based Learning in Material Design Course**

The next objective of this study was to find the challenges faced by the students when teacher implemented the Project based learning in Material Design course. After conducting the interview, the researcher found some challenges faced by the students when implementing the Project based learning in Material Design course. Therefore, the challenges faced by the students in the implementation of Project based learning such as
the students’ confusion how to do the project, lack of team work and limited time allocation. Besides, each challenge is explained in the following paragraphs in detail.

**Students’ confusion on how to do the project.** The challenges when implementing project based learning in Material Design classroom was using project which could be confusing. Using Project based learning could be confusing because of the lack of explanation from teacher or lack of students’ knowledge about the project. When using Project based learning in Material Design course, the teacher did not give the example to do the project and explanation from the textbook. The finding was in line with P4 who said “Teacher does not give an example how to create the project” (P4.6). Besides, P2 also said “The teacher immediately gives the orders, but she does not give an example or the explanation in the book” (P2.7).

The use of PBL could be confusing. Regarding the statement mentioned, it was in line with Tally (2015) who stated that the students are forced to take new responsibilities for their assignments which they have never had before. Mostly, the students experience the difficulty by trying to understand what the material is. Greening (1998) as cited in Tally (2015) asserted that sometimes the students struggle to connect what they need to know to what they already know. Bereiter and Scardanakua (1989) as cited in Tally (2015) stated that the students are now expected to be responsible on their own learning and employ the reflective and critical thinking skills. Also, the students may be raised in a traditional classroom, so when teachers use PBL in classroom, they will face the difficulty and confused.

**Lack of team work.** Material Design course are conducted in groups. There could be many problems faced by the students when working the project in groups. Working on project made the group member not to have the major contribution on
doing the project. P1 said “In the project of material design course, not all members have major contributions” (P1.6). There were also the team members who were lazy to do the work. Besides, it could hinder the group to the completing project early, and some members in group could not be creative enough to design the project. The statement mentioned was stated by P3 who said “If there are the team members who are lazy, it is difficult to make the project finished early” (P3.3). Likewise, P2 added “Most of my members are not very creative” (P2.8).

The finding mentioned was in line with Kavlu (2015) who stated that as PBL requires teamwork, some dispute or clashes may happen. Also, it may be difficult for teachers to realize these features in the PBL implementation. Also, it was hard to assess how much each learner contributed to a group project while some students learnt and tried to work. Additionally, PBL could be difficult for students if some students might not have equal work contribution in doing the project. Some of the students might have big contribution while others were not. Regarding the problem mentioned, it could cause heavy burden for the students who had big contribution working on project. Besides, it was also difficult for teachers to identify the students’ work and contribution when working on project.

**Limited time allocation.** Doing a project could take a lot of time. Besides, it sometimes did not take a lot of time if in material design course, the students made a textbook on time. Also, they had to find out the learning material, edit the context, design the cover, and print the book. In regards to the statement mentioned, P1 said “The challenge faced in project based learning takes a lot of time” (P1.5). P2 also said “There are many projects in the end of semester because the time is too short, and we have to make a good and correct the final assessment” (P2.9). When working on the
project, usually there was the time when students could do the consultation with teacher about the project which they were working on. Based on the statement mentioned, the consultation time in material design course did not take a long time but it was too short to discuss the material well. As stated by P1, “The time for having a consultation is really short” (P1.7).

The finding was in line with Tally (2015) who stated the planning is time consuming and does not always produce what you want. In addition, Bell (2010) asserted that at the end of each work session, the students report on whether they have met their goals for the day. Besides, the students had to use their work time effectively and stay focused on-task to succeed. Hence, goal setting could also help the students to learn in managing their own time.

Implementing the project based learning in Material Design course had given the benefits to the students. The benefits of using PBL could develop many helpful skills for the students such as improving students’ language skill, helping students to understand material better, increasing students’ creativity and critical thinking, improving students’ team work, and improving skill needed for future job. Besides, there were also some challenges faced by the students faced when teacher implementing PBL in Material Design course. Therefore, using PBL was difficult for the students when they did not really understand about the project itself and when teacher did not explain the project in detail. From the statements mentioned, it leaded to the difficult to work in team, and the time was short to finish the project.