

## Students' Lived Experience of Project-Based Learning

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### Abstract

Inspired by personal experiences during the study time in the Graduate Program in English Language Studies (ELS) Sanata Dharma University Yogyakarta, this research focused mainly on investigating the ELS students' lived experience of project-based learning implemented by the ELS lecturers. This study employed hermeneutic phenomenology since it described and interpreted the meanings of ELS students lived experience. The participants of this study were the three ELS students considered to be illuminating from the three different streams batch of 2015. In this study we used one-on-one in depth interview to gain the data. The findings of this study consisted of four prefigured meanings and two emergent meanings namely a) authentic learning, b) learner autonomy, c) cooperative learning, d) multiple intelligences, e) understanding others, and f) personal development. The findings of this study gave implications not only to the ELS students and lecturers, but also to the audience. Lastly, recommendations were also addressed to the ELS students as their habit formation, to the ELS lecturers as their inputs to give more feedbacks to their students, and to the future researchers.

**Keywords:** Lived experience, project-based learning.

From the very beginning of the study time until the end of the program, the ELS lecturers always asked their students to create certain projects or assignments in group or individually. The projects were various such as making presentations towards certain issues or topics, writing academic papers, designing an English course program, and many others. This phenomenon attracted our attention since lecturers did not treat their students conventionally or traditionally whereby the teachers always took control of the activities in the classroom, but they gave their students freedom to learn independently. Grant (2002) asserted that common fea-

tures to Problem Based Learning implementation are an anchor of the activity, a task, an investigation, provision of resources, scaffolding, collaboration, and opportunities for reflection and transfer. Bell (2010) also added that project-based learning is an instructional method centered on the learner in the sense that the students develop their own questions and are guided through research under their teachers' supervision.

This study focuses on how the ELS students perceive their lived experience of project-based learning. Manen's (1990) Hermeneutic Phenomenology was then employed as the most appropriate methodology

in revealing the meanings of the lived experience of the ELS students towards project-based learning. The study was limited to the three students from the graduate program in ELS Sanata Dharma University, Yogyakarta. Those three students were chosen without considering their age, gender, family background, and employment background. Additional delimitation included the limited fund and time. The participants were chosen by considering the illumination aspects in the sense that they could provide rich and meaningful stories which could be further

elaborated. Hence, this study was then to limit the focus which was on discussing the implementation of project-based learning based on the students' shared lived experience. In regards to the lived experience of the ELS students, thus, the main source of the data was mainly based on the shared stories of the students. The other limitation was the natural tendency of the participants to forget or mislead their past memories and events in the time they were being asked to remember about their experiences.

### Literature Review

#### Lived Experience

There is a wide range of focus in doing qualitative research. In this study, we chose the phenomenology methodology to inform the study, for which we provide a brief overview. Lived experience is closely related to phenomenological research. Creswell (2007, p. 57) asserts that a phenomenology study figures out the meaning for several individuals of their lived experiences of a concept or a phenomenon. Manen (1990, p. 1) on the other hand, adds that lived experience itself has a close relation to the meanings of a phenomenon in which it is trying to discover the in depth meanings beyond the phenomenon as it emerges. Hence, it is concluded that the lived experience seeks to reveal the deep meanings from the phenomenon that is lived by human beings.

In revealing the lived experience, there are five fields that we pay attention to. These five fields represent the quality of the lived experience from the participants that we try to discover or to reveal. The five fields are understanding, belief, intention, action, and feeling. Understanding deals how we discover the phenomenon and grasp the meanings through understanding them (Manen, 1990, p.40). Alvesson and

Skoldberg (2000, p. 56) also add that understanding is closely related to comprehending past experiences with empathy in each individual and it is done in the form of the in-depth understanding or comprehension. Belief, according to Totto and Coupland (2003, p. 124), is defined as principle of some statement or the reality of certain phenomena. Intention can be inferred as a plan or goal. Setiya (2014) asserts that there are three areas of intention, namely, the intention for the future, intention with which someone acts, and the intentional action. Action, according to Manen (1990, p. 154), is mainly focused on how people behave toward their reflection. Feeling refers to how people feel the experience that they have. Patton (2002, pp. 104-105) emphasizes that feeling is essentially dealing with how people perceive, feel, judge, remember, make sense, and talk about certain phenomena.

From those five fields in the lived experience, not all of them are likely to be visible or appear in gathering or collecting the data. Only the most relevant ones which can reveal the meanings of the lived experience. The aforementioned fields of lived experience are shaped or caused by the four struc-

tures namely, intentionality, historicity, ideology or belief, and awareness. Since each individual has a unique lived experience which is different from one another, the differences are then determined through the aforementioned lived experience structures.

### **Project-Based Learning**

In the fields or in the disciplines other than second and foreign language, the Buck Institute for Education (BIE), an American research and development organization, defines project-based learning as one of the teaching methods which systematically makes the students involved in learning knowledge and skills through an extended inquiry process structured around complex, authentic questions, and carefully designed products as well as tasks (Markham, et al., 2003, p.4). Solomon (2003, p.10) also points out that the project-based learning is one of the learning processes which encourage the students to be responsible for their own education. Students work collaboratively to find solutions for the problems which are close to the real life situation or authentic, based on curriculum, and often interdisciplinary. Learners study how to create or produce their own learning process and how to determine what and where information can be obtained. The students are studying and synthesizing the information and then applying and demonstrating their new knowledge at the end. Moreover, throughout the learning process, teachers take a role as managers and advisors as well.

Project-based learning (PBL) was promoted into second language education during the 1970s (Hedge, 1993). In one of the second language classrooms, PBL becomes an instructional method which systematically improves the language skills of the students, the cognitive domains and global personality skills through valuable projects

(Ribe & Vidal, 1993). Moss and Van Duzer (1998, p.1) define PBL as an instructional approach which contextualizes learning by exposing the students to questions or problems to solve or assign products for students to develop. Fried-Booth (2002, p.6) further develops a definition of PBL as student-centred and driven by the need to produce an end-product. Fried-Booth also further states that PBL is one of the tools to produce an end-product in an authentic environment with confidence and independence. Project work is led by the intrinsic needs of the learners who enlarge their own tasks independently or in small groups. This approach is to establish the links between authentic language and language in textbooks.

From the above definitions and explanations of PBL in second language and foreign language studies, the definition of PBL in this study can be summed up as a comprehensive learning which focuses on authentic problems and challenges that involve the students who work individually or in a team within meaningful activities resulting in an end outcome. Then there is a need to confirm that PBL is a possible and a useful means or tool for allowing students to improve their language, content, as well as their communicative skills.

Project-Based learning is closely associated with authentic learning, learner autonomy, cooperative learning, and multiple intelligences. It is related to authentic learning since it makes the students' learning more meaningful by connecting prior knowledge to their current study. Herrington and Herrington (2006, p. 2) assert that students in an authentic learning environment are engaged in motivating and challenging activities that require collaboration and support. Furthermore, the students also have real-life roles which are similar to the real world outside the classroom in which it

needs teamwork, negotiation, and the use of problem-solving skills. Markham et al., (2003) additionally add that in authentic learning, the students can communicate with people outside the classroom, use problem solving skills, and maximize the use of other resources to help their learning. PBL is closely associated with learner autonomy, since the students are responsible for their own learning (Little and Dam, 1998). The students should take at least some of the initiatives that provide shape and direction to the process of learning, and should communicate the progress and evaluate the targets to be achieved. Macaro (1997, p. 168) adds that autonomy is an ability learned through knowing how to make decisions. Through learner autonomy as well, the learning setting is expected to be centered on the learners (Stoller, 2006, p. 33). PBL has a close association to cooperative learning since in the learners are able to perform face-to-face promotive activities, individual accountability, group processing, effective communication, and conflict organization (Gillies, 2007 and Johnson and Johnson, 1994). Lastly, PBL relates to multiple intelligences since PBL creates a learning environment which enables the students to explore their own interests, increase their skills, and abilities, and enlarge opportunities to improve their learning potentials. This can easily encourage active uses of different combinations of intelligences. It has also been shown that each student has different intelligence strengths when doing projects (Hargrave, 2003; Mouround, et al., 1997; Welsh, 2006; Wolk, 1994).

### **English Language Studies (ELS)**

Sanata Dharma University has long been recognized for its excellent teaching and research in English Language Studies. The graduate program ELS, also known as S2 KBI (*Kajian Bahasa Inggris*) offers

unique programs that allow students to specialise in English Linguistics, English literature, English Language Education, or Technology of English Language Education.

The vision of this graduate program in ELS is that advanced learners become discoverers of truth and meaning by way of English Language Studies to promote human dignity, personal and social alike. In order to achieve the vision, ELS administer a holistic education to facilitate the stakeholders to integrate academic excellence and humanistic values for the promotion of human dignity, personal, and social alike. In doing so, ELS strives to help a human person, personally and socially become self-actualizing, i.e. excellent in one's own right by engaging in education, research and community outreach through English Language Studies.

The graduate program of ELS aims at creating graduates who possess core and supporting competence. Core competence covers conducting research in English Literature, English Linguistics, and English Education accordingly. It also covers the educational program, community service program, and current issues in English Literature, English Linguistics, and English Education. Supporting competence covers a good communication in English, a good design of learning materials, a well-developed ICT-enhanced or ICT-based learning media, and a good English teaching skill at different levels of education and different educational contexts.

The curriculum of ELS covers three elements namely, foundation course, core courses (including thesis) and elective Course. Every graduate student has to complete certain credits which include those three elements. It is also worth knowing that all the core courses in one stream or

concentration are elective in nature to the students of other streams or concentrations. Moreover, in achieving the goal of ELS, the curriculum of ELS has its own connections to the core competence as well as supporting competence of the graduates of ELS. It is achieved through the implementation of the foundation course, core course, and elective course.

### **Framework of Pre-understanding**

In relation to the ELS graduates' competence which is creating or generating graduates who possess core and supporting competence, one of the ways to actualize it is by using project-based learning. By using the PBL approach, the students are requested to conduct research on their streams, create an educational program, design learning materials, write academic papers, and many others. PBL serves as a tool for the students in which that they can actualize themselves, control their project, expose their knowledge and ability, as well as learn in more authentic situation.

In this study, we focused our interest in trying to examine the shared lived experience from the ELS students who have continuously experienced project based learning. Here, we defined the term lived-experience as digging out the meaning of a certain phenomon. Contextually, meaning in this study refers to the lived-experience of

the students towards project-based learning which is the phenomenon. The ELS students' intentionality, historicity, ideology, and awareness shape their lived experience of project-based learning which is then reflected in their understanding, belief, intention, action, and feeling. Depicting from the framework, our pre-understanding of ELS students' lived experience of project-based learning is then described as this series of four pre-figured meanings which are derived from the theories that we have discussed in this section namely authentic learning, learner autonomy, cooperative learning, and multiple intelligences.

### **Purpose of the Study**

In this study, we aimed at describing and interpreting the ELS students' lived experience of project-based learning. By doing so, we expected to obtain the essential meanings from the students' shared lived experience. Therefore, hopefully, the students could develop more advanced reflective skills so that they can succeed in their study. Furthermore, it is also expected that we could gain emphatic understanding from the students' lived experience.

In order to meet the research aim, a research question was addressed:

“What is the lived experience of ELS students of the project-based learning like?”

### **Research Methods**

This study was a hermeneutic phenomenology study. It was phenomenology since it had a close relation to description, and it was hermeneutic as it had a close relation to interpretation (Manen 1990, p.180). The participants were three illuminating students coming from the graduate program in English Language Studies (ELS) in Sanata Dharma University batch of 2015. They were from three different streams namely Dewi from education

stream, Evi from linguistic stream, and Ata from literature. Moreover, we administered an interview guideline as the instrument for collecting the data. The data for this study were all in a form of texts gathered through the interview. In doing the interview, we employed a one-on-one in depth interview. In analyzing the data, we used Creswell's, (2012) stages that consisted of six stages namely, collecting and organizing the data, coding the data, making descriptions and

revealing the meanings, reporting the findings, interpreting the findings, and validating the findings. In order to validate the findings of the research we then used member checking to ensure the trustworthiness for the study.

### **Descriptions and Interpretations**

**Dewi's Story.** Dewi, a pseudonym, was a third semester student in the Graduate Program in English Language Studies (ELS), Sanata Dharma University Yogyakarta. Her interest is in the education stream and her background education was also closely related to the English education as well. Regarding her experience in doing a project, she told us about the project in Program and Material Design (PMD) course when she was in the second semester in early 2016.

In regards to her experience in doing PMD project, she and her group was creating an English course program for Hotel Receptionists in Yogyakarta. They firstly had to find the hotel, conduct an observation on the hotel, make a call to the hotel, deliver a cover letter, and interview the hotel staff. Not only designing the course, they also needed to present their progress to their lecturers and their friends so that they could gain inputs or feedback. By doing projects in a group, Dewi could solve the problems and share them with her friends. In addition, she also stated that by doing group project, they could enlarge the opportunity to improve their learning potentials.

Besides, she could also be more understanding to her friends and develop her personality as well. She admitted that by doing projects, she could be resilient, disciplined, open-minded, and independent. In addition, she could also be beneficial to other people by being involved in the seminar when presenting her group project.

**Evi's Story.** Evi, pseudonym, was also a third semester student in the graduate program in ELS, Sanata Dharma University, Yogyakarta. Her interest is in linguistic stream. Regarding her experience in doing a project, she told us about the project in the Critical Discourse Analysis (CDA) course when she was in the first semester in early 2015.

In regards to her experience in doing this CDA project, Evi and her group were assigned to analyze a text using the theory of CDA approach consisting of four steps. When doing the project, they needed to negotiate and distribute the theory evenly so that the members of the group could explore their own interest. After they had chosen the topic and discussed the theory, they were working on their own tasks individually, then discussed the tasks together, and revised them.

Having finished with the CDA project, Evi told us that she could be more understanding towards her friends' characters. Moreover, she also mentioned that she could gain togetherness, teamwork, new experiences, and also benefits for herself. Additionally, she felt that she became more disciplined, independent, and also critical. Lastly, she stated that her self-esteem was also increased at the same time.

**Ata's Story.** Ata, pseudonym, was also a third semester student in the graduate program in ELS, Sanata Dharma University, Yogyakarta. Her interest is in the in balliterature stream. Regarding her experience in doing a project, she told us about the group presentation project in British and American Literature (BAL) and Literary Criticism (LC) classes.

In the interview, we asked her about her memorable experiences about doing projects in her second semester. She admitted that the group presentations were in British and

American Literature (BAL) as well as in Literary Criticism (LC) courses. In the BAL class, she did the presentation with her peer. The same thing also happened in LC class. She remembered that the topic she presented in the BAL class was about Post-American Literature and in LC class was about the Eco-Criticism.

When doing her group presentation projects, she mentioned that she always worked with her peer together from the beginning

until the end of her group presentations. In addition, they also helped each other when finding problems or difficulties in the process of making their presentations. From her story, we also found that she was happy with her project since she could learn how to appreciate others, how to understand others, and how to be responsible. Lastly, she also could increase her language skills especially in her speaking and her writing skills.

### Interpretations

#### Authentic Learning

In project-based learning, authentic learning allows students to experience relevant real-world tasks. Such experience makes the students' learning more meaningful by connecting their prior knowledge to their current study. Authentic learning arises in this context since the concept of project based learning is finding solutions for problems which are close to real life or authentic situation. Moreover, Herrington and Herrington (2006, p. 2) add that when students learn in an authentic learning environment, they are involved in motivating and challenging activities or projects which need collaboration and support.

Not only working in a real-word task, the students in an authentic learning environment can also have real-life roles which are the same as the real world outside the class room and this also requires teamwork, negotiation, and the use of problem-solving skills. Even though the students seem to be the main actors in their project-based learning, the teacher or the lecturer in an authentic learning environment, acts as a facilitator to guide the students to reach their learning goals by giving support and guidance throughout the learning process.

According to Markham et al. (2003) authentic activities are one of the main features of project based learning as the students have an opportunity to connect to real world conditions while completing their projects. It also requires authentic situations and practices, for instance, having a communication with people outside their classroom, using their problem-solving skill, using their teamwork skill, and their critical thinking skill. The students also have an opportunity to use other than their textbooks, since they need to search and do research or investigation for their projects through the use of other resources such as internet, local community, advertising materials, and verbal communication in the real world.

Dewi, in her interview mentioned that she and her friends were assigned to design an English course program as well as the materials in PMD course.

*“At first, we were requested to create an English program. Then, my friends and I discussed about making English for Specific Purpose (ESP) or English for Academic Purpose (EAP).”*

After Dewi and her friends decided their English program, with the help of their friend, they chose to go to one of the hotels in Yogyakarta. They sent the cover letter, and conducted the interview with the HRD

representative as well as receptionist. At the end of their observation, they decided to specifically design an English program and create the materials for the receptionists only.

*“At that time, we were suggested by our friends to go to one of the hotels in Yogyakarta. We sent a cover letter, and we were welcomed very warmly by the hotel staff. After that, we conducted interview to the HRD representative as well as to the receptionist. At the end, we decided to specifically design and create an English program and its materials for the receptionist only.”*

Not only engaged in the authentic situation, Dewi and her group also used other resources when doing their PMD projects, especially when creating the English Materials. She stated that she and her friends used the internet in order to find the materials.

*“We admitted that it was difficult to find English materials for the receptionist since most of the materials provided are only for general English. Hence, we used the internet to help us find the materials.”*

From Dewi's experience, it could be inferred that Dewi and her friends were involved and engaged in the authentic learning environment where they had to design an English program for the hotel receptionist. Moreover, she and her friends also did communicate first with people outside their classroom to gain as much information as possible in order to support their program. In addition, she was also collaborating with her friends in deciding which English program that they were going to design. At last, Dewi and her friends also realized that the use of other resources such as the internet were very helpful in a way that they could find the materials for the receptionist.

Likewise, Evi also shared the same experience as Dewi in a different project. When she was in the first semester, she was

assigned to do research on a selected text in the CDA course. Since it was a group project, Evi mentioned that she and her friends had to discuss first before deciding the text they were going to analyze. Furthermore, they also needed to work together in deciding who would read the theories consisting of four steps.

*“My group consisted of four people and we needed to discuss the text first. Since in CDA there were four steps according to Ferkarl, we also discussed who would read the step A, B, C, and D.”*

To confirm whether they had correctly analyzed their text, they also did research on internet to help them strengthen and support their argument. Evi stated that

*“since CDA is subjective, we needed to do research on internet to make sure that we had correctly analyzed the text. It was also to help us strengthen and support our argument.”*

Ata, the third participant, shared differently about her experience in doing a project. Her project was more about doing group presentation in the BAL and LC classes. She mentioned that in her BAL and LC classes she gave a presentation with her peer. At the first time, both of them searched the materials based on the topic given by their lecturer on their own. In addition, they also needed to arrange the time to meet each other to discuss and develop their topic. When doing the presentation as well, Ata needed to use video or images to support her presentation with her peer.

*“The process was we find our materials, we also needed to find video or images, to support our presentation in class.”*

*“After that, we needed to arrange our time to meet each other, then we shared our topic what we were going to present. When we both had agreed, we then develop the topic and prepare the presentation.”*



Based on their individual experiences it can be interpreted that when they were doing their own projects, they had been involved in the authentic learning environment which requires real-world tasks, authentic situation, collaboration, teamwork and negotiation in different ways. It is also in line what Herrington and Herrington (2006, p. 2) have previously stated that in authentic learning students are engaged in activities which require collaboration as well as support. Woo, Herrington, Agostinho, and Reeves (2007) further explain that in authentic learning the students have real-life roles that require teamwork and also negotiation. Markham (2003) also adds that project based learning invites the students to be involved in the authentic situations such as communication with people outside the classroom and the students also have their opportunity to use other resources such as internet, local community to help their project.

### **Learner Autonomy**

In project-based learning learner autonomy is shown through the project work. The students or the learners are allowed to choose their own topic of the project and are allowed to be involved in planning and creating their project and the process of learning with support from their teachers. It can be said that the autonomy of the learning or the authority is provided so that the students can maintain their learning from the beginning of the study to the end of the course program.

Not only can the students maintain their learning, but they also are expected to take at least some of the initiatives that allow them to shape and direct them to the process of learning and enable them to communicate the progress of their project, and evaluate their targets. Moreover, learner autonomy also teaches the students to have an ability

to make decisions through their learning. Macaro (1997, p. 168) further adds that autonomy is an ability to be in charge of one's own language learning and an ability to know the value of taking responsibility for one's own objectives, content, progress, methods, and techniques of learning.

Additionally, through the implementation of project-based learning, the classroom environment can generate more learner and learning-centred settings. With the autonomy of the learners, they can also possess their responsibility for their learning. In addition, the learners are also expected to be more motivated, to feel more competent, and more self-determined. Hence, at the end of their project, the students can also gain their own interest and can succeed in their learning.

Dewi, in her shared experiences in doing her PMD project, stated that she needed to present their group's progress to the lecturer based on their presentation topics.

*"At the beginning, firstly we divided the presentations including the materials to be presented. After that, we needed to present our progress based on our presentation topic."*

Additionally, since they had to present a weekly presentation about their progress, they had to meet each other to prepare their group's progress to their lecturer. She also mentioned that when doing the project, she was the leader of her group so that she could take initiatives to work on the project with her friends, *"...since my friends leaned on me, then I always asked them and invite them to work on our projects."*

In terms of a learner-centred setting or environment, Dewi also mentioned that after they designed the materials which were reviewed by the lecturer, she and her friends presented their progress in front of the class starting with the introduction, the theories, and the design.

*"...After designing the materials and being reviewed by the lecturers, we presented our progress in front of our classmates started with the introduction, the theory and the design of the program."*

In addition, she also added that through presentation in front of their classmates she and her friends could gain a lot of suggestions rather than just from their lecturer. It was because she felt that her friends' suggestions were more detailed and more critical than the lecturer's.

*"Actually, I felt that I gain so many suggestions from my classmates. So it was like an open discussion. My classmates gave more inputs for our group than the lecturer. In my opinion also, the inputs from my friends were more critical and more detailed than the lecturer's. For example, my friends asked about how we arranged the meeting for the program. However, my lecturer rather focused on the theory. So, we felt that it was not that detailed and less realistic."*

Lastly, Dewi added that during the completion of her PMD group project, she also found difficulties with her friends. However, she always tried to overcome the problems with her friends.

*"Let say, compared to other groups, indeed our group was not the best. But we every time we faced or we found problems, we always tried to solve it together."*

Evi, differently shared her experience when doing projects in the graduate program in ELS. Although she was not specifically mentioning her experience in terms of learner autonomy, we could gain some important points from her story. Firstly, she mentioned that during her study time in the ELS, she felt that she was given freedom to find sources to help her understand the theories. Moreover, she also

added that she needed to actively ask questions to her lecturer if she could not understand her lecturers' explanation.

*"In ELS, indeed the lecturers seem to master the theories, but they let us to find other sources to support our learning."*

*"... but if we did not ask question, they let us to actively ask them questions and they let us to actively find learning sources."*

Likewise, Ata, mentioned that when doing projects in ELS, she indeed found difficulties with the friends. However, most of the time, she and her friends did not ask her lecturers much, rather they had greater portion to work on their projects. Furthermore, implicitly, we found out that an initiative was depicted from her story as she mentioned that her friend did ask her to work on their group presentation project in BAL and LC classes. Lastly, when she had done her group presentation, she also told us that she could gain comments from her friends through classical discussion.

*"Most of the time, we did our project by ourselves, I meant me and my group."*

*"So, the one that asked me to work on our presentation was my peer. She initiated to divide our own parts, then I agreed with her, and she asked me which part I wanted to discuss."*

*"In class, we were discussing our materials. So, we gain some enlightments in class from our friends."*

Based on their shared experiences, we infer that in the ELS, mostly the projects given by the lecturers includes the class discussion and learner-centred environment. In other words, the lecturers give greater portion to their students to learn and to find learning sources by themselves. Hence, the students can explore their own ability. In addition initiatives are also important to start working on projects so that they could complete and submit their Projects on time. Lastly, in every project, the students are requested to communicate their progress by giving a presentation in front of their classmates and their lecturers as well engaging in discussion so that they can

obtain as many suggestions as possible from both their lecturers and their friends.

In line with their shared experiences, Stoller (2006, p. 33) mentions that in project based learning, the classroom environment can generate more learning and learner-centred settings. Additionally, with learner autonomy in PBL, students are responsible for their own learning. Markham et al. (2003) further add that through projects learners can control their learning from the beginning of the study to the end of their course program. Moreover, Little and Dam (1998) also emphasize that the students should take at least some initiatives that provide shape and direction to the process of learning, and should communicate their progress and should evaluate the targets to be achieved.

### **Cooperative Learning**

It is inevitable that in project based learning, the students are requested to do their projects with their peer or partners. In other words, working in a project based environment require cooperative learning setting as well. Gillies (2007, p, 246) asserts that cooperative learning requires working together among group members to achieve the shared purposes. Moreover, in cooperative learning as well, to increase the awareness of the students' learning, they should be able to reflect and communicate their experiences in learning with their peers or partners, or friends (Kohonen, 1992).

Moreover, Gillies (2007) and Johnson & Johnson (1994) mention five important elements for successful cooperative learning. First, there should be positive interdependence meaning the students should create the goal, but this can only be achieved if all of the group members commit to finish the projects together. Second, there should be face-to-face promotive interaction meaning that the

students have to provide effective guidance to their friends by having discussion, exchanging sources, reasoning, and giving feedback. Third, there should be individual accountability which means even though the students are working on group projects, each of the members should be given individual tasks fairly so that each of them can give contributions. Fourth, interpersonal and small group skills should also be taken into account. Lastly, there should be group processing meaning that they have to keep their positive working relationship and keep their respect when collaboratively working with their peers to achieve their group goal.

Gillies (2007) and Johnson & Johnson (1994) mention that in cooperative learning, there should be face to face supportive interaction which means that the students have to provide effective assistance by having discussion, sharing moments, exchanging sources, and giving feedback. In line with what Gillies and Johnson & Johnson have stated, Dewi, in her shared experiences, mentioned that in doing PMD projects, she needed to engage in a discussion with her friends before designing the English program and the materials.

*“For example, when we needed to design the program as well as creating the materials for the receptionist, we needed to discuss it first so that each of us could give comments.”*

Moreover, she also emphasized that when doing the group projects, each of them can also help and support each other when they have problems.

*“When doing projects, if we were confused, there were our friends who could help us so that we could share the problems.”*

From those extracts, it could be inferred that when doing her group projects, Dewi and her group supported each other by giving thought through group discussion so that they could solve their problems and

could determine which materials they were going to create or design. Additionally, each of them could be a help if one of them finds a problem during the completion of their projects.

Likewise, Evi corroborated that Dewi had mentioned previously. Evi stated that “When doing projects, if A knew about this theory, he or she could offer specific support. The same thing also happened when A knew about the findings, he or she could similar support”. Additionally, she also added that

*“We often debated each other’s argument in our group discussion. For example, if in my opinion this was right, and if this was the right analysis. My other friends might have different opinion and they would support their argument. We often debated our own argument so that we could know whose arguments were the strongest. Since there were four people in my group, so there would be who chose whose arguments.”*

Looking at those extracts, we can interpret that Evi and her group did support each other by giving arguments in their group discussion. This will also help them find whose arguments were right or wrong to support their projects. Although they engaged in debate with each other, they could finally find the most appropriate analysis for their project.

Ata, in her interview, mentioned that when doing group projects, she and her friends often discussed their group presentation materials and shared their understanding. They could also help each other when one of them found difficulties during the process of making their group presentation. Ata stated that

*“If in group presentation, we could share our understanding towards the presentation materials”.*

*“So, at that time, my friend needed a video to support our presentation, hence, I helped her find one. The same thing also*

*happened when I was difficult to find examples to support my presentation, she also helped me find some and find ideas as well.”*

Based on those extracts, it can be said that Ata and her friends were back to back in helping and in supporting one and another. Additionally, during their group project, they also built a good teamwork so that they both can finish their group presentation well.

Individual accountability, as mentioned by Gillies and Johnson & Johnson (2006) should also be taken into account when dealing with cooperative learning. In doing a project, individual accountability can be defined as each of the members has to be given proper tasks so that each of them can provide contributions for their group. During the first and the second interviews we found that when doing group projects, Dewi, Evi, and Ata did indirectly or unconsciously implement or apply individual accountability in their group.

Dewi, mentioned that when doing group projects, they can share and distribute the tasks evenly. She also said that the reason why she liked her group was because she could cooperatively work with her friends by sharing tasks. She mentioned that

*“So far, when I was in my group, we could share the tasks. Moreover, doing projects in groups was also joyful, Mas. We could share the tasks for example, you do this, and you do this.”*

From that extract, it can be said that individual accountability happened through giving the tasks equally to each members of the group. We then also infer that when giving responsibility to do the task to the member of the group, there should also be a willingness and an agreement from each member so that each of them can work maximally on their own task.

Similarly, Evi, also shared the same experience as Dewi. When doing her group

projects Evi mentioned that after deciding the text that they were going to analyze, they shared the tasks. In addition, they needed to work on their own task individually. After each of them had found the red line, they had to arrange the time to meet each other again in order to discuss the progress of their project. She stated that

*“After that, we had divided the tasks. Then, we typed our work on our own. When we had gained the red line, we developed it. Since it was impossible to meet each other just to type our work, we needed to arrange the time again to have our group discussion.”*

In the extract above, it is clear that with the lack of time to meet each other or to have group discussion, individual accountability was highly important to support the group project. For Evi, since they had difficulties to meet each other, her group decided to divide the tasks to each member of the group so that each of them could finish their project. In addition, by having individual accountability to complete the group project, it is evident that each member of the group can learn how take relevant roles of responsibility.

Ata further confirmed similar points as Dewi and Evi. She recounted how they searched materials for their group presentation. She and her peer needed to individually find their own materials and to make their own power point presentation part. Furthermore, she also mentioned that when editing their group presentation power point, they did it individually since each of them knew their part better. We can infer that trust is also needed when dividing the task to the group member. Ata in her group presentation projects, implicitly trusted her peer to work on their materials. Similarly, her peer also trusted Ata to work on her part as well. She stated that

*“So we searched for our materials by our own, and we created our power point*

*presentation part. ... We also edited our presentation individually since we knew our part better, so when I met her, we compiled our presentation together.”*

In sum, even though not all of the five elements in cooperative learning mentioned by Gillies and Johnson & Johnson (2006) appear, the projects that the three participants worked on were giving them lessons to promote each other's learning through discussion and to individually give contributions to the group project by being given the tasks individually.

### **Multiple Intelligences**

The last pre-figured meaning to appear in the logical truth discovery is multiple intelligences. In project based learning, it is expected that the learning setting can allow the students to explore their own interests, increase their skills and abilities and enlarge opportunities to improve their learning potentials. It is also evident that each student has different intelligence strengths, especially in doing group projects.

Hargrave, 2003; Moursound, et al., 1997; Welsh, 2006; and Wolk, 1994 further add that in project based learning, the students are given a chance to freely choose options of learning which enable them to level up their skills and abilities to improve their potential in their learning process. This theory also implies that learners or students have different strengths. Hence, different approaches of teaching which offer individuals opportunities to respond appropriately with varied learning styles and strategies.

During the first and the second interview, we admitted that it was not easy to unearth their experience about the multiple intelligences. However, finally, we could draw some points or examples from the three participants. Although they shared different things about their experience in doing their project, we infer that in doing

group projects, the students can likely explore their own interest and enlarge opportunities to improve their learning potentials.

Dewi mentioned that when working on the project, specifically when her group needed to present their progress, she and her friends had to read and understand their own part well. She was also sure that when she read the materials well, her friend would reciprocate. Moreover, she commented that before their presentation, each of them maximized their part and when tasks were given, they also tried to finish their tasks well. She stated that

*“When we worked on our task, for instance presentation, you get this chapter, and we really read our part, Mas. I also read my part well. And, we also had divided who had this point, and this point as well. So that each of us read our part and maximize it before we did our presentations. Moreover, when the tasks were given, we also did our tasks.”*

*“Since my other two friends were also diligent, I also needed to be diligent as well. The main point is, we should maximize our effort, Mas.”*

This implies that when doing their project, each of the members was given a chance to enlarge their opportunities to improve their learning potentials by being given the tasks. Moreover, they unconsciously improve their learning potentials by giving their best when doing their presentation or by maximizing their effort. This can also be a good way to measure one’s capability in his or her learning process.

Evi, shared a different point of view regarding multiple intelligences. She mentioned that when doing her CDA group project, their group agreed to divide the four steps evenly to each members of the group since every step has its own difficulties. She stated that “in CDA, there are four steps.

For example, I got the step one, the second step was my other friends. Since each of the steps has its own difficulties, and we could choose which part I could be able to read and understand.”

From Evi’s statement it emerges that each of the members in her group has different interest on the four steps and that was the basis of the distribution of them. Moreover, it is likely that the greater the personal interest, the greater the effort towards the task goal. The same thing also happened in Evi’s group. Each of them has his or her own interest in the four steps so everyone in the group can give their maximum contribution on each step that they had chosen.

Ata confirmed that in dividing the presentation topics, she needed to communicate with her peer first and made an agreement.

*“I asked her, which one she wanted, and she chose this one, then I chose this one. But we worked on our topics together.”*

Moreover, she also mentioned she knew that she and her partner had different strengths and weaknesses. However, they both always did their best in doing their group presentation project. She stated that

*“I was aware of our capability. We both know where we were good at. Most importantly, we always did our best by maximizing what we had in ourselves.”*

Lastly, she told that in terms of presentation, she was also aware that she and her friends had different strengths and weaknesses in doing presentation. She illustrated that her partner might be good at the introduction part, she herself might have strengths in the final section. In addition, this could also help distribute the workload. She stated that

*“However, in terms of the way presented our part it might also be different. Perhaps my friend was good at*

*the introduction or the explanation part. Or it could be about the distribution of the topic that we both liked."*

From the extracts above, we could interpret that Ata had actually been aware of what she and her friends could do during their group presentation project. They both had different interest in terms of their

presentation topic showed by how they exercised their preferences in choosing. Moreover, she also realized that she and her peer had different skills in presenting their presentation and this was demonstrated in how they arranged the order of speakers in their presentation sessions.

### **Emergent Meanings**

#### **Understanding Others**

The first emergent meaning that appeared during the data gathering or the data gathering was understanding others. When working on the group projects, most of the time, the participants work together with their peers or partners in order to achieve their learning goals. Hence, it also involves communication as well as good team work so that they can work cooperatively. Moreover, understanding others in doing group projects provides a warm and supportive environment in which the students can experiment constructively with new ways of relating to others, share personal experiences, express fears and concerns, and gain support and feedback.

Contextually, during the texts gathering, we found out that understanding others in this research refer to how doing projects affected them to be more understanding in terms of their friends' needs and also characters. Dewi in her shared experience, states that through PMD project, she could learn to understand her friends' needs. She further illustrated that one of her friends lived in *Kulonprogo* and she needed to go back and forth to campus. Hence, in this circumstance, Dewi needed to arrange the time with her friend. She stated that

*"From the PMD project, I could learn to be more understanding to my friends' needs. For example, one of my friends stayed in Kulonprogo, and I needed to arrange the time discuss our project."*

Furthermore, through doing PMD project, she could also understand her friends'

character since they had been together for one semester. Hence, Dewi, could be closer to them.

"From PMD project, I could be closer to them since we were always together for one semester. Moreover, I could understand their character as well."

From those extracts, it could be concluded that through doing the PMD project, the participants, particularly Dewi, can achieve the learning goal as well as improve her view point towards her friends. She could not always selfishly force or insist her friends to follow her needs. Rather, she should also understand that her friends also have their own needs or business. Moreover, by understanding her friends' characters, Dewi knew how to act appropriately when she is with her friends especially in doing their PMD project so that interpersonal conflicts can also be avoided.

Similarly, Evi mentioned that by doing her CDA group project, she could feel the sense of togetherness, team work, new experiences as well as benefits for herself. She was also able to understand her friends' characters. She emphasized that through project-based learning she understood the way her friends worked, their characters, and their personalities.

*"In group, I could know my friends' characters. In fact, each of us is different from one and another. Hence through project based, I could know how A, B, C, worked, and their personalities as well."*

Lastly, not only did Dewi and Evi mention they could understand their friends,

but Ata also corroborated this. She stated that *“Yes, I was not selfish at that time. I could even know my friend’s character better than before. So, I should be more understanding I guess.”*

In doing group or team project, understanding one and another is highly important, as what Abarca et al., (2000, p. 40) mention that effective teams require and share many common characteristics. Being respectful to other team members is highly essential for team effectiveness. Valuing the strengths of teammates, while minimizing their weaknesses, promotes team cohesion. Cooperating as a team also requires trust from all the members of the group. They kept focusing on the project, believing in each other, striving to the end goal, arguing less and exploring more. This leads to effective team work in doing or creating a project.

### **Personal Development**

The second or the last emergent meaning emerged during the texts gathering is personal development. Personal development in this research contextually means the changes or the developments that the participants felt or gained when doing their projects. Each of the participants shared differently about the development that they obtained through the completion of their projects.

According to The United Kingdom Association of Business Practitioners (ABP) (2010, p. 7) personal development refers to developing and improving aspects of a person which include fields such as education, motivation, feelings, health, skills, abilities and more. ABP also asserts that as life and the environments are changing nowadays, it is important to continue developing as a person in order to improve as individuals and to be able to adapt to the change of situations. Personal development involves an individual to

generate goals which define a point that can be achieved through setting the goal and plan. This also enables progress and assessment which allows a person to gain feedback in relation to change and development.

On the evidence presented here, it can be concluded that after doing projects in the ELS, the participants felt that, they not only changed their view point towards their friends, but their personalities also developed at the same time. They could be tougher or more resilient, more independent, more open minded, and more disciplined. Their self-esteem and self-efficacy increased at the same time. Additionally, they also felt they could be critical thinkers, could increase their language skills ability, and could be beneficial to other people by being involved in the seminar.

Dewi mentioned that when doing her projects, she could increase her self-esteem as well as her self-efficacy by becoming a tough woman. In addition, she could also be more open-minded during and after the project. She mentioned that she could be tougher in terms of doing her assignment and she could handle the pressure. She further stated that she became a less-panicky student when dealing with her projects or her assignments. She also became less stressful and became wiser in dealing with her problems. In coping with her projects and her assignments, she could handle the pressure well.

*“I felt I became tougher since I could be less panicky when dealing with papers, and less stressful. Moreover, I felt like I was getting wiser each day . Not only was I getting wiser, but I could also handle the pressure.”* Being more open-minded became the next thing she mentioned. During the completion of her PMD project, she stated that after meeting and working with her friends she



could be more open to them. Moreover, she could also accept her friends' opinions or arguments and could realize that she could not insist that her friends should accept her expectation.

*"After PMD project, I could be more open to my friends since I worked with them" Moreover, I could accept my friends' arguments or opinions and I realized that I could not insist my expectations to my friends."*

In the same way, Evi expressed how through doing projects, she could be independent, discipline, and could increase her self-esteem. She stated that through doing projects, she could be more independent since she had to do research, find good theories, and many other related things. She stated that "Obviously, I became more independent. Since we had to conduct research, find theories by ourselves". In terms of discipline, she felt that her discipline increased. She explained that when she studied in the graduate program, she often did many projects individually and in group. Hence she felt more disciplined compared to when she was an undergraduate student. She stated that "I felt I became more disciplined. It was very different from when I was an undergraduate student". Related to her self-esteem, Evi added that by doing projects, she could be resilient. She concluded that no matter what the conditions were, she had to be really tough when dealing with projects and the deadline.

*"I became resilient. For instance, when you felt sick, you needed to keep struggling to finish the projects and the deadline. No matter how busy you were, you really had to be tough and strong."*

Like the others, Ata also asserted that she became more disciplined in her daily routines after working on her group project. She uttered that "I see... Yes, I felt I became more disciplined now."

Dewi, mentions that after doing PMD projects, she and her friends could present her groups' paper in the LLTC seminar in last October in the ELESP Sanata Dharma University Yogyakarta. She commented that doing projects could also bring benefits not only for her, but also for her friends. She stated that "by doing projects, we were able to present our paper in the LLTC seminar. So I felt like this also gave us benefits". Dewi implies that after doing her PMD project, she could expand not only her ability but also that of her friends' to inform other people outside their classroom setting about what they have learned related to their project. Hence, people could also know, how they design or create an English program and learning materials for English for Specific Purposes.

Differently, Evi, stated that by working on projects, especially her CDA projects, she could increase or improve her critical thinking skills. She mentions that unconsciously she could be able to analyze the texts critically by not only looking at the main ideas, but also she could find the power imbalances within the texts. She uttered that

*"Unconsciously, we could analyze the texts. In other words, we could analyze the texts critically. Usually, I only analyze the texts based on their main ideas. Now, I could also find the power in balance in the texts as well."*

*"Not only in analyzing the texts, I could also think in a broader sense. Moreover, I could also be more critical in facing a problem."*

From this, it can be interpreted that through her CDA project, she could improve her way of thinking and her ability in analyzing the texts. In addition, she could also change her habit when she read certain texts by not only looking at their main ideas, but also looking at the deeper sides.

Regarding critical thinking skill, Tretten and Zachariou (1995, p.8) mentioned that students, working both individually and cooperatively, can feel empowered when they implement effective work habits and use critical thinking to solve their problem. Moreover, they also assert that students are also able to learn and or strengthen their work habits, their critical thinking skills, and their productivity. Throughout this process, students may gain new knowledge, new skills, and positive attitudes.

In addition, Ata, mentioned that when doing her group presentation, she could increase not only her knowledge, but also her language skills especially her speaking and writing skills. She said that her public speaking skill improved by doing a lot of group presentations. She further added that she could present materials for about one hour with a varied range of vocabulary.

She uttered that

*“I could enrich my knowledge. And by doing presentation, I could practice my public speaking skill. So, I could present my presentation for about one hour since I like speaking. I could also broaden my knowledge and my vocabularies.”*

*“I felt like I became more fluent both in speaking and writing. I used to stop using English before entering ELS. However, since studying in ELS, I had to use my English since there were a lot of assignments and presentations requiring the use of English. Automatically, I felt the positive changes in me.”*

In line with Ata’s extracts above, Fragoulis (2009) and Bell (2010) state that there are six benefits of implementing PBL in teaching English as Foreign Language. One of them is by applying or implementing project based learning, the students can have an optimal opportunity to improve and to develop their language skills.

### Conclusion

Overall, there are six meanings worth stressing from this study. Those meanings then are divided into two sections namely pre-figured meanings which consists of four meanings derived from the logical or conceptual truth and emergent meanings which

consists of two meanings derived from the empirical truth. The pre-figured meanings are authentic learning, learning autonomy, cooperative learning, and multiple intelligences. The emergent meanings are understanding others and personal development.

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### References

- Abarca, J., Bedard, A., Carlson, D., Carlson, L., Hertzberg, J., Louie, B., et al. (2000). *Introductory engineering design: A projects-based approach*. Retrieved November 15, 2016, from <http://itll.colorado.edu/geen1400/index.cfm?fuseaction=Textbook>
- Alvesson, M. & Skoldberg, K. (2000). *Reflexive methodology: New vistas for qualitative research*. London: SAGE Publication
- Association of Business Practitioners. (2010). *Self awareness and personal development*. Liverpool: British Business Professional Skills Development.
- Bell, S. (2010). Project-based learning for the 21st century: Skills for the future. *The Clearing House*, 83, 39-43.
- Cresswell, J. W. (2007). *Qualitative inquiry and research design: Choosing among five approaches*: 2<sup>nd</sup> ed. California: SAGE Publication, Inc.
- Cresswell, J. W. (2012). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research*. 4<sup>th</sup> ed. Boston: Pearson Education, Inc.
- Fragoulis, L. (2009). Project-based learning in teaching of English as a foreign language in Greek primary schools: From theory to practice. *English Language Teaching*. 2(3) 113-119.
- Fried-Booth, D. L. (2002). *Project work*. Oxford: Oxford University Press.
- Grant, M. M. (2002). Getting a grip on project-based learning: theory, cases, and recommendations. *Meridian: A Middle School Computer Technologies Journal*, 5(1). Retrieved April 15, 2015 from <http://www.ncsu.edu/meridian/win2002/514/project-based.pdf>.
- Gillies, R. M. (2007). *Cooperative learning: Integrating theory and practice*. Thousand Oaks, CA: SAGE Publications.
- Hargrave, O. S. (2003). *We are all learning here: Project-based learning in the classroom*. MA Thesis. Pacific Lutheran University.
- Hedge, T. (1993). Key concepts in ELT. *ELT Journal*, 47(3), 275-277.
- Herrington, A., & Herrington, J. (2006). What is an authentic learning environment? In A. Herrington & J. Herrington (Eds.), *Authentic learning environments in higher education* (pp. 1-14). Hershey PA: Idea Group.
- Johnson, R. T., & Johnson, D. W. (1994). An Overview of cooperative learning. In J. S. Thousand, R. A. Villa & A. I. Nevin (Eds.), *Creativity and Collaborative Learning*. (pp. 31-44). Maryland: Paul H. Brookes.
- Johnson, C. (2003). *A perspective of the effectiveness of project based bilingual curriculum in personal empowerment of the adult English language learner: A case study*. (ERIC Reproduction Services No. ED 482 588).
- Kohonen, V. (1992). Experiential language learning: second language learning as cooperative learner education. In D. Nunan (Ed.), *Collaborative Language Learning and Teaching* (pp.14-39). Cambridge: Cambridge University Press.
- Little, D., & Dam, L. (1998). *Learner Autonomy: What and Why?* Retrieved from [http://www.uv.mx/portalcadi/svaldivia/JALT\\_98.pdf](http://www.uv.mx/portalcadi/svaldivia/JALT_98.pdf)
- Macaro, E. (1997). *Target language, collaborative learning and autonomy*. Great Britain: Multilingual Matters.
- Manen, M. (1990). *Researching lived experience: Human science for an action sensitive pedagogy*. Canada: The University of Western Ontario.
- Markham, T., Mergendoller, J., Larmer, J., & Ravitz, J. (2003). *Project based learning handbook*. Canada: Buck Institute for Education.
- Moss, D., & Van Duzer, C. (1998). *Project-based learning for adult English language learners*. (ERIC Reproduction Services No. ED 427 556).
- Moursund, D.G. (2002). *Problem-Based Learning and Project-Based Learning*. Retrieved from

- <http://darkwing.uoregon.edu/~moursund/Math/pbl.htm>
- Moursund, D., Bielefeldt, T., & Underwood, S. (1997). *Projects: Road Ahead*. Retrieved from [http://www.iste.org/content/navigationmenu/research/report\\_s/the\\_road\\_ahead\\_background\\_papers\\_1997\\_/projectbased\\_learning.htm#Characteristics](http://www.iste.org/content/navigationmenu/research/report_s/the_road_ahead_background_papers_1997_/projectbased_learning.htm#Characteristics)
- Patton, M.C. (2002). *Qualitative research and evaluation Methods*. California: Sage Publication, Inc.
- Ribe, R., & Vidal, N. (1993). *Project work*. Scotland: Macmillan.
- Setiya, K. (2014). Intention. *Stanford Encyclopedia of Philosophy*. Retrieved on 5 January, 2016, from <http://plato.stanford.edu/entries/intention/>
- Smith, D.W. (1944). *Husserl and intentionality*. Boston: Reidel Publishing Company.
- Solomon, G. (2003). Project-Based Learning: a Primer. *Technology & Learning*, 23, 10-20.
- Stoller, F. (2006). Establishing a theoretical foundation for project-based learning in second and foreign language contexts. In G. H. Beckett & P. C. Miller (Eds.), *Project-Based Second and Foreign Language Education: Past, Present, and Future* (pp. 19-40). USA: Information Age Publishing.
- Tatto, M.T. & Coupland, D.B. (2003). Theoretical and Measurement Concerns. *Advances in Teacher Education* 123-182. Retrieved from <http://ed-share.educ.msu.edu/scan/te/mttatto/ch6te.pdf>, accessed on January 2st, 2015.
- Tretten, R. & Zachariou, P. (1995). *Learning about project based learning: Assessment of project-based learning in Tinkertech schools*. San Rafael. California: The Autodesk Foundation.
- Welsh, J. A. (2006). *An exploration of project-based learning in two California charter schools*. Ed.D Thesis. University of Southern California.
- Woo, Y., Herrington, J., Agostinho, S., & Reeves, T. (2007). *Implementing Authentic Tasks in Web-Based Learning Environments*. Retrieved from <http://www.educause.edu/EDUCAUSE+Quarterly/EDUCAUSEQuarterlyMagazineVolum/ImplementingAuthenticTasksinWe/16183>