



AN INVESTIGATION OF REALITY AND CHALLENGES OF PROJECT-BASED LEARNING IMPLEMENTATION

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Abstract:

This descriptive study explores the reality of applying Project-based Learning (PBL) in the context of lower and upper secondary schools in the Mekong Delta, Vietnam. It also aims to investigate the challenges English as a foreign language (EFL) teachers encounter in applying PBL in their actual language teaching classes. Questionnaires and semi-structured interviews were employed to collect the quantitative and qualitative data for this study. A total of 80 EFL teachers from 12 provinces of the Mekong Delta participated in the research, including 8 teachers purposively selected from the population for the interviews. The findings of the present research revealed that team PBL and classroom PBL were implemented most in EFL teachers' teaching contexts. At the same time, whole-school PBL was seldom conducted due to its complexity in implementation. Most teachers fully carried out the step-by-step process of PBL implementation in their teaching. The results also indicated that EFL teachers face certain challenges when implementing PBL. The major challenges included challenges related to curriculum in terms of lack of time, no specific guidance and assessment criteria for PBL implementation; challenges related to students regarding their mixed abilities, differences in interests and learning styles, and lack of necessary materials and skills for doing projects; and challenges related to teachers comprising adaptation of project activities, lack of time for student support, and controlling large classes. These results provide insightful pedagogical implications for how PBL can be more feasible, applicable, and successful in Vietnamese teaching contexts.

Keywords: project-based learning, EFL teachers, reality, challenges

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1. Introduction

English is the most favorable language to conquer by most learners in the period of global integration. It is also widely used to communicate in most areas of life such as culture, tourism, telecommunication, technology, and so on. English is even recognized as a passport to potential chances for education and future occupation (Ahmad, 2016). The far-reaching impact of English demands the selection of effective teaching methods in English teaching to enhance learners' English proficiency. Therefore, the teacher-centered approach conducted in traditional classrooms and the exam-oriented target of learning at schools are not preferred anymore. Instead, the application of a student-centered approach to creating an active learning environment for critical learners is considered as a priority.

Besides the knowledge of English, social skills like communication, collaboration, creativity, and critical thinking are important issues and essential for modern students to succeed in life and their future careers. Modern employers favor critical employees to evaluate and solve work-based problems logically and effectively. Therefore, to meet the requirements of high-qualified employees with the necessary skills at work, Project-based learning (PBL) is considered an innovative teaching method and a student-driven, teacher-facilitated approach to learning which is a crucial strategy for training independent thinkers and learners (Bell, 2010). Unlike other conventional teaching methods, PBL is believed to help learners develop language competence and social skills through projects. It allows students to actively explore, create authentic language and use language in real-life situations (Kodriyah, 2017). PBL is beneficial to the learning process and development of critical thinking and real-life skills. Hence, for language teaching and learning, applying PBL is appreciated to prepare learners for language competence and social skills through the project work to adapt to the requirements of the new era.

PBL has been employed in educational programs in numerous countries worldwide thanks to its potential value. In Vietnamese educational contexts, PBL has become the main focus in the curriculum to meet the requirements of the Vietnam Ministry of Education and Training regarding the innovation of teaching methods, following a student-centered approach, and enhancing learners' foreign language achievement since 2013. The new ten-year English curriculum and textbooks were designed and piloted in many secondary and high schools to aid students in be familiar with implementing projects and assist them to achieve fruitful outcomes in the future through learning autonomy. However, there is a fact that not all schools implement PBL in the curriculum although the project work is availably designed in every unit of the selected textbooks and not all teachers succeed in using PBL in their teaching. It is also clear that the current final assessment for high school students' achievements does not include the performance of projects instead of paper exams. This leads to the underestimation of the values of PBL and a waste of budget when PBL becomes optional, which is against the initial goals of applying the new textbooks.

Unlike the traditional teaching method, PBL, a new and innovative teaching method applied in Vietnam, requires both teachers and learners to shift their roles to

adapt in a short time. The sudden change of teachers' roles apart from ones in a conventional classroom is assumed to challenge EFL teachers a lot in a language classroom. Nevertheless, there are a few studies investigating EFL teachers' reality and challenges of PBL implementation in Vietnam in general and in the Mekong Delta specifically. Consequently, this paper aims to discover the reality of PBL implementation at schools of the Mekong Delta and EFL teachers' challenges when applying PBL in their teaching. From that, the findings can help to measure teachers' practices and evaluate the PBL implementation in the context of the Mekong Delta provinces.

The study aimed to answer the following research questions:

- 1) To what extent is project-based learning implemented by EFL teachers at lower and upper secondary schools in the Mekong Delta?
- 2) What challenges do EFL teachers encounter when implementing project-based learning?

2. Literature review

2.1 Definition of project-based learning

Krajcik and Blumenfeld (2006) stated that PBL is rooted in Dewey's insights (1959), a well-known educator and researcher. Dewey argues that students will develop personal investment and interests in the materials if they engage in real, meaningful tasks and problems in real-world situations. Many further definitions of PBL have been proposed by different researchers. Haines (1989) defines projects as *multi-skill activities concentrating on topics or themes rather than particular language goals*. Learners themselves initially choose the subject matter and appropriate working methods and decide the timings as well as the form of the project product. By focusing on achieving an agreed goal, the learning process is towards problems to solve or products to develop (Moss and Van Duzer, 1998).

In the same way, Thomas (2000) indicates that PBL includes *complex tasks, based on challenging questions or problems, involving students in design, problem-solving, decision-making, and culminating in realistic products or presentations*. PBL empowers learners to pursue their knowledge and demonstrate their new understandings through various presentations by working in groups towards a common goal (Stripling, Lovett, and Macko, 2000).

To stress the roles of teachers and learners, Bell (2010) defines PBL as *a student-driven, teacher-facilitated approach to learning*. In this definition, unlike the traditional teaching method, the active roles of learners in PBL are strongly emphasized and the teachers' roles shift into facilitators instead of delivering lectures as in the conventional classroom. The diversity of the definitions of PBL from various researchers or educators brings broad viewpoints of PBL, depending on the achieved goals.

2.2 Project implementation and procedure

PBL implementation is a complex process demanding educator, students and their families, policymakers, and community members to redefine what they believe and expect about teaching and learning (Bradley-Levine et al., 2010). PBL implementation

varies from classroom to classroom, depending on the learning goals, class size, facilities, learners' proficiency, and curriculum. Whatever requires good preparation and planning for PBL. Papandreou (1994) states that every project is the result of a sequence of activities conducted by the students, and these activities are organized into a process with certain stages. Papandreou introduces a model of the process for project work in six steps:

Step 1: Preparation: the teacher introduces the topic to the students and asks them to discuss and ask questions.

Step 2: Planning: the teacher and the students determine the mode for collecting and analyzing information, and different work is assigned.

Step 3: Research: the students work individually or in groups to gather information from different sources.

Step 4: Conclusions: the students draw conclusions based on their analysis of the collected data.

Step 5: Presentation: the students are supposed to present their final product to the whole class.

Step 6: Evaluation: the teacher comments on the students' efforts.

Additionally, Dewi (2020), in his research about project-based learning implemented by teachers in teaching English to young learners at Bali kiddy school, adapted the procedures from Papandreou (1994) to design an observation checklist as the instrument for his study's findings such as 1) *preparation*, 2) *designing a plan for the project*, 3) *creating a schedule*, 4) *conducting the project*, 5) *assessing the outcome*, and 6) *evaluation*.

With more detailed steps compared to the models above, Stoller (2002) proposes the ten-step process of developing a project in a language classroom. This model is believed to support teachers and learners in doing the project work successfully and critically facilitating the contents and learning process by PBL (Nguyen & Nguyen, 2019). The steps are briefly described as follows.

Step 1: Students and instructor agree on a theme for the project.

Step 2: Students and instructor determine the outcome.

Step 3: Students and instructor structure the project.

Step 4: The instructor prepares students for the language demands of information gathering.

Step 5: Students gather information.

Step 6: The instructor prepares students for the language demands of compiling and analyzing data.

Step 7: Students compile and analyze information.

Step 8: The instructor prepares students for the language demands of the presentation of the final product.

Step 9: Students present the final product.

Step 10: Students evaluate the project.

In the current study, the model of steps in implementing PBL by Stoller (2002) and Dewi (2020) is adapted by the researcher to design the items in the questionnaire as the models are assumed to be used by most EFL teachers and closely appropriate with a typical PBL lesson in a language classroom. The steps for PBL implementation will be

double-checked in the semi-structured interviews to measure whether EFL teachers applied the procedures mentioned or by other methods.

2.3 Types of projects

Projects can be classified into various categories or types, depending on many factors, including the age of students, their levels and interests, the constraints of time and space, or the level and the extent of teachers' experience with PBL. Harris (2014) in his study mentions four types of projects which teachers experience in implementing PBL, as presented below.

Classroom PBL. PBL is a teaching method that encourages learning by actively engaging in real-world and personally meaningful projects. By participating in classroom PBL, students can develop deep content knowledge and skills like critical thinking, collaboration, creativity, and communication. This kind of PBL can be organized within one class or even as a competition and evaluation of learning among classes.

Team PBL. This can be a typical type of PBL applied by most teachers. Students form teams to solve a problem or undertake a project. Members of each team possess a diversity of complementary talents, knowledge, and experience during the problem-solving process. The students work, think, discuss, make decisions, prepare and conduct together for the final products throughout the projects. This requires collaborative skills and team management as well as the balance of roles for team members to achieve the initial goal of doing projects.

Grade-level PBL. Grade level is the level of the educational program studied by a student. Different grade levels depend on the curriculum or educational programs of schools that may consist of Early Childhood (K - 2), Upper Elementary (3 - 5), Middle Grades (6 - 8), High School (9 - 12), or Kindergarten, Primary/Elementary (1 - 5), Secondary (6 - 9), High School (10 - 12). Students normally attend 12 grades of study over 12 calendar years before graduating and entering higher education. The organization of grade-level PBL is conducted more widely than the one of classroom or team PBL when learners from various grades do and perform the projects as their achievement in the learning process.

Whole-school PBL. This kind of project provides students with additional feedback, encouragement, and ideas from beyond their small community in the classroom setting. Teams can be formed from a mixture of classes or grades to take part in the event of the whole school. To implement whole-school PBL effectively and successfully, some factors should be assured in the organization, such as the events to attract students' interests, teachers' support for team culture building and essential skills, authentic assessment, creating whole-school networks, and so on.

2.4 Project assessment

In teaching and learning, the progress and way of learning learners possess should be assessed for the effectiveness of PBL implementation. *"Much of the assessment in project-based learning experiences is authentically generated – a quality check on group progress, an assessment of content knowledge to address a driving question, or a final presentation of findings"*

(Harris, 2014). Therefore, students are assessed differently in the PBL classroom. Self-reflection, group reflection, process, and project evaluation all contribute to the quality control process of the learning experience. It is believed that the need for assessing student learning through a discussion of rubrics is essential. Harris affirms that rubrics measure the breadth of content and standards and the process of getting the content and standards. *Rubrics, either holistic or analytic/descriptive*, can identify progress toward previously identified goals and how well the group has worked together to meet the goals. Each point on a holistic scale is given a systematic set of descriptors, and the reader-evaluator matches an overall impression with the descriptors to decide a score (Brown, 2003). The analytic rubric captures levels of performance for each descriptor (Bender, 2012). The use of rubrics can be used as a *formative and summative assessment* tool throughout the learning process to evaluate how students achieve the goals of the project. Harris also emphasizes that self-reflection through journaling is an important assessment form in project-based learning.

Like with the use of rubrics, *self-reflection* can be used for a wide range of evaluation and assessment purposes. Students can reflect after a task is complete or as a part of a quality check when the project is progressing. The reflection can be about the process or the product. It can be used to derive a grade or to determine the quality of the learning experience for the groups or the individuals in the groups (Bender, 2012). The forms of reflection vary, comprising charts or rubrics or simply a journal or discussions.

In addition, Hanardi (2015) has modified an alternative model of project-based assessments in English language learning which is related to the basic competence and objectives of the lesson unit. This model is developed from *outcome-based assessment* and *authentic assessment* which is considered; as an appropriate model for PBL because they are based on activities representing a real-life setting. In outcome-based learning, learning outcomes (knowledge, skills, and competences) have to be achieved by learners in the learning process. All educational activities and resources need to be related to the intended learning outcomes to assist the learners in successfully achieving those outcomes at the end of the learning experience. *Outcome-based assessment* emphasizes the assessment of student outputs or end products to assess what students believe they have learnt and what they actually learned. *Authentic assessment* refers to the various forms of assessment involving portfolio assessment, structured assessment activities or tasks, projects, self-assessment, peer assessment, traditional tests, observation, and conferencing that reflects student learning, achievement, motivation, and attitudes on instructional-relevant classroom activities. Authentic assessments also comprise oral performances such as interviews, story/ text retelling, writing samples, projects/exhibitions, experiments/ demonstrations, constructed-response items, and teacher observations. It is concluded that portfolio, observation, self-assessment, peer assessment, and teacher feedback are all needed in PBL.

2.5 Roles of teachers and learners in project-based learning

The transformation of applying a modern teaching approach as PBL to take the place of traditional teaching methods due to the development of society and innovation of the

educational system makes the roles of teachers and learners in teaching and learning interchangeable and various.

2.5.1 Teachers' roles in project-based learning

Teachers' roles in PBL are described in different ways by different scholars.

Fleming (2000) indicates that the role of the teacher often shifts from "*content expert*" to "*supportive coach*", while Harris (2014) mentions the teacher's role moving from *content-deliverer to content-guide, from a lecturer to a facilitator*. A variety of things teachers might do to support learners in PBL classes involves direct instructions of essential resources, plans to accomplish objectives within time constraints, model, feedback, and scaffolding. Accordingly, teachers should model the steps of PBL, and provide support and guidance as needed to facilitate the learning process.

Cheng & Chan (2008) claim that teachers in PBL are also required to be a *subject expert*. They must have a depth of subject knowledge to link concepts and help students develop driving questions so that they may construct their own knowledge. Furthermore, they need to manage their classes to enhance the high level of students' autonomy and support them with prerequisite skills when necessary.

Similarly, Asma & Sabrina (2021) highlight that the teacher's role changes from *an educator who transmits knowledge, commands, and directs learners, to the one who guides and facilitates learning* since teachers create appropriate learning contexts for their students, design projects with engaging topics, scaffold materials, and assess learners' progress. Teachers have to be familiar with their learners' needs and interests. In some cases, teachers can even adjust the curriculum according to the needs of their learners.

It is certain that the roles of teachers in PBL implementation demand good preparation and adequate training so that they can take those roles flexibly and successfully. The quality of the projects that students do, to some degree, determines and reflects how teachers implement PBL in their teaching effectively.

2.5.2 Learners' roles in project-based learning

Unlike in a traditional learning environment, project-based learners become more active to use the target language following the teachers' guidance and support in their own learning process. Doing projects is challenging and requires students to do more than what they think because they have to apply knowledge instead of simply acquiring it. Students must show what they have learned (content), what they can do (demonstration), and what new skills they have developed (Fleming, 2000). To compare with the teachers' roles in PBL, the researcher points out some roles of learners when PBL is applied.

In PBL, the student's role shifts from "*recipient of information*" to "*maker of meaning*" (Fleming, 2000). Through real-world contexts and problems, students adjust and make decisions about the approaches, methods, materials, roles, and language used throughout the project toward their learning goals. Before doing the project, students attend the lessons for acquiring the key concepts by the teachers' instructions. Then, they spend more time discovering that knowledge for the group project to take greater responsibility for locating resources or assuming cooperative team roles as facilitator, timekeeper,

reporter, or recorder. Students make plans, organize, support, or carry out activities such as presentations, discussions, role-playing, interviews, and so on. The project work is only accomplished when all members of the teams complete their tasks. At the stage of the final product, students present, perform the projects, or even do peer assessment of the project work of their own and the other groups.

With another view of the students' roles in team projects, Johnston (20 05) proposes a shift from the role of the passive student to the active one with five roles including (1) *ready learner* - holding realistic expectations and is qualified, (2) *coachee* - applying concepts and seeking help when needed, (3) *contributor* - contributing to classmates' learning experience, (4) *team member* - participating in teamwork, and (5) *academic scholar* - learning the required content. What roles learners take while doing projects requires them to make use of their available talents and potential abilities in team projects. All roles and responsibilities throughout the projects indeed assist students to develop 21st-century skills such as critical thinking, creation, communication, and collaboration.

2.6 Teachers' challenges in implementing project-based learning

In PBL implementation, teachers are believed to encounter certain challenges when applying it in their teaching. Marx et al. (1997) indicated teachers' problems when they implement PBL comprising *time, classroom management, control, support of student learning, technology use, and assessment*. These challenges mainly relate to teachers' issues during the process of PBL implementation. However, the challenges of implementing project work not only come from teachers but are also associated with other various factors.

Harris (2014) conducts a study at a suburban middle school outside Pittsburgh, PA to examine middle school teachers' perceptions associated with the implementation of PBL and explore the challenges teachers perceive they face when implementing PBL with forty-nine teachers who respond to a questionnaire designed to collect data on their perceptions and are asked to rate challenges they face. The study shows that *time, meeting state accountability requirements, addressing the standards, implementing the project within the schools' schedule, and designing the project-based experience* are the most challenging when implementing PBL.

Aldabbus (2018) carries out research with a total of 24 pre-service teachers in 8 primary schools, in the Kingdom of Bahrain participating in this study during the academic year 2016 - 2017. The research instruments to gather the data are both questionnaires and semi-structured interviews. The findings of the study reveal that more than three-quarters of the participants are unable to implement PBL with their students. A set of challenges teachers encounter in PBL implementation is described as follows.

Challenges related to teachers. Teachers are often under pressure with time consuming because they must complete certain topics in a certain planned time by MOET while conducting PBL takes more time than other teaching methods. In addition, they lack experience and confidence in conducting PBL in a class by deciding the topics by

themselves and assessing projects. Also, skills of management and monitoring the progress of students during the projects challenge teachers, especially in crowded classes.

Challenges related to students. Group work management is the main challenge. Some students want to dominate the work without letting other teammates take active roles in the projects while others want to direct the projects toward their interests. Consequently, unwillingness to continue working with the same group exists. Moreover, the differences in technology use and skills to assess the information for the projects, and various interests and focuses on achieving high marks rather than acquiring skills are challenges for students when implementing PBL.

Challenges related to curriculum. The curriculum is not sometimes based on something authentic. Therefore, teachers find it difficult to adjust what can be taught meaningfully. Additionally, not all topics in the curriculum are appropriate for conducting the projects, so teachers should adapt the content of the lessons to the objectives of the lesson.

Challenges related to schools. Schools do not offer the necessary materials and facilities required for projects due to the limitation of the budget. Besides, some school administrations prefer simpler methods of teaching to avoid noise, spend less money, and comply with the teaching plan provided by the Ministry of Education. Either they do not welcome any shift or they put more pressure on teachers with inflexible schedules.

Challenges related to parents. It has been observed that some parents underestimate the value of PBL, and are not keen to offer the necessary materials to their children. On the other hand, some parents do the project for their children instead of just providing them with the required materials and facilities that enable them to conduct the project. The study shows that various challenges they face in applying PBL include *choosing significant content, time management, monitoring and assessment, and lack of facilities.*

In Vietnamese teaching contexts, particularly in the Mekong Delta, the South of Vietnam, Nguyen, and Nguyen (2019) conducted a study, namely *Implementing Project Work in Teaching English at High School: The Case of Vietnamese Teachers' Challenges*. Thirty-three EFL teachers from sixteen high schools in both rural and urban areas of the Mekong Delta, Vietnam are recruited as the participants of this study. A questionnaire and an in-depth interview are employed to collect both quantitative and qualitative data. The challenges investigated in this study include time pressure, group work management, project design and adaptation, student support, and project assessment. The main findings of the study indicate that teachers encounter major challenges in *time management, the adaptation of project activities, student support, and project assessment*. These results provide useful implications for how innovative approaches can be successfully applied in Vietnam.

3. Methodology

3.4 Participants

A total of 80 EFL teachers at different lower and upper secondary schools from twelve provinces of the Mekong Delta, and the South of Vietnam were selected following the

convenience sampling technique to participate in this study. After administering the questionnaire, 8 out of 80 participants were purposively invited for the semi-structured interviews. The selection criteria were based on the highest rate of participation of provinces from the participants of the questionnaire, which accounted for 10% of the total population. The profile of interviewees varied in gender, years of teaching experience, and workplace to assure the generalization of the results.

3.2 Research instruments

In order to seek the answers to the research questions, the researcher combined two instruments in this study including a questionnaire to investigate how PBL is implemented at secondary and high schools of the Mekong Delta in Vietnam, the challenges EFL teachers encounter when using PBL in their classes, and semi-structured interviews to gain further information about teachers' reality of applying PBL in their own teaching and their challenges during the application of PBL.

3.2.1 Questionnaire

To collect quantitative data, a questionnaire, in English and Vietnamese versions, was adapted and designed based on some related resources such as Harris' (2014), Aldabbus's (2018), Nguyen and Nguyen's (2019) studies, and the procedures of PBL implementation by Stoller (2002) and Dewi (2020).

The questionnaire consisted of two main sections, namely reality of PBL implementation and EFL teachers' challenges when implementing PBL. Particularly, the first section was divided into three sub-sections seeking out which of the four types of *team PBL*, *classroom PBL*, *grade-level PBL*, and *whole-school PBL* used, their frequency of using in each semester and ten statements about the procedures teachers conduct in PBL implementation which designed in the five-point Likert scale (1 - strongly disagree, 2 - disagree, 3 - neutral, 4 - agree, 5 - strongly agree).

The last section of the questionnaire with 27 items was classified into five clusters of challenges, including (1) *challenges related to teachers*, (2) *challenges related to students*, (3) *challenges related to curriculum*, (4) *challenges related to schools*, and (5) *challenges related to parents*, and applied the five-point Likert scale to examine the respondents' agreement on the provided statements.

The questionnaire was pilot-tested with 10 teachers who shared similar teaching contexts with the target participants before it was officially delivered to the participants. The data collected were run on the Statistics Package for the Social Science (SPSS) program version 20.0 to check its reliability with a Cronbach alpha value of 0.81, which implied that the questionnaire was a reliable instrument to carry out for data collection in this study.

3.2.2 Interview

After collecting the data from the questionnaire, the semi-structured interview to deeply double-check the findings of the questionnaire was used to gain qualitative data. The interviews were carried out through phone calls or other social networks, namely Zoom,

Messenger, or Zalo. The interviews were conducted in Vietnamese, recorded, transcribed, and then translated into English for analyzing the data afterward.

3.2 Research design

This study was a descriptive design with a mixed-methods approach. To find out the results of the mentioned research questions, both quantitative and qualitative data will be collected through a questionnaire and in-depth interviews. Mixed-methods research is for the broad purposes of breadth and depth of understanding and corroboration (Cresswell, 2012) and is viewed as the third methodological movement that is in response to the limitations of the sole use of quantitative or qualitative methods (Doyle et al., 2009).

This combined design of the study allows the researcher to explore the reality and challenges of PBL implementation in-breadth and in-depth. Particularly, the questionnaire was designed with a Likert scale and used to collect quantitative data. Then, the semi-structured interview was also employed to gain deeper insights into teachers' reality of using PBL in their own teaching and their challenges when implementing PBL. Through the interviews, the researcher was able to gain the participants' opinions, comments, and explanations for their actual PBL implementation. As a result, the researcher collected further valuable evidence and in-depth data for the study.

4. Results and discussions

4.1 Results

4.1.1 Results from the quantitative data

The data gained from the questionnaire were subjected to the SPSS program for data analysis. The weighted means of each cluster and each item were calculated to interpret the results. Teachers' levels of agreement on the clusters and items in the questionnaire were analyzed, interpreted, and based on Pallant's (2005) descriptors involving five levels, namely very low degree (ranging from 1.00 to 1.80), low degree (ranging from 1.81 to 2.60), moderate degree (ranging from 2.61 to 3.40), high degree (ranging from 3.41 to 4.20), and very high degree (ranging from 4.21 to 5.00).

4.1.1.1 Types of PBL

For this cluster in the questionnaire, the participants were required to select the types of PBL, including classroom PBL, team PBL, grade-level PBL, and whole-school PBL which they implemented in their real teaching with a scale of 1 for Yes and 2 for No for each type of PBL. The total number of responses for each type of PBL determined the type of PBL which the teacher participants conducted most and least. As can be seen from Figure 1, team PBL experienced the highest rate of implementation selected by 72 participants (90%). This type of PBL was closely followed by classroom PBL with 62 options (77.5%). It can be seen that the type of whole-school PBL made up the reversed rate compared with classroom PBL, with only 18 teachers using it (22.5%). Regarding grade-level PBL, 45 EFL teachers applied it in their actual teaching, which occupied 56.3%. These results

indicated that there was a significant implementation of team PBL by most EFL teachers at lower and upper secondary schools in the Mekong Delta. The teachers also applied classroom PBL in their English teaching, although there were still 18 cases of not using it. In addition, the type of grade-level PBL was applicable because it was implemented at more than half of the schools of the participants. However, the least implementation of PBL by EFL teachers at lower and upper secondary schools was obvious whole-school PBL.

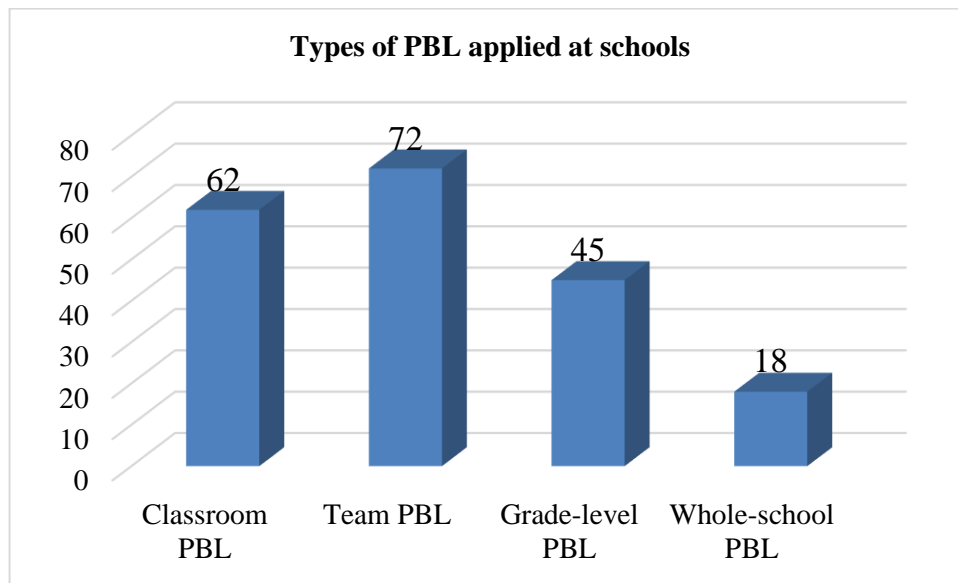


Figure 1: Types of PBL EFL teachers implemented at their schools

4.1.1.2 Frequency of PBL implementation

The number of times EFL teachers applied four types of PBL aforementioned in their teaching at their schools per semester was reported by the scale including 1 for 0 time, 2 for 1 time, 3 for 2 times, 4 for 3 times, 5 for 4 times, 6 for 5 times, and 7 for more than 5 times. This scale was determined based on the sample program distribution of English textbooks 11 provided by a high school in one province of the Mekong Delta. Table 1 summarizes the number of times the participants conducted each kind of PBL at their schools.

Table 1: Results for the number of times when types of PBL were applied at schools

Types of PBL	0 times	1 time	2 times	3 times	4 times	5 times	More than 5 times	Total for implemented times
Classroom PBL	13	25	11	8	5	2	5	56
Team PBL	6	12	11	9	5	5	15	57
Grade-level PBL	28	27	7	3	1	2	2	42
Whole-school PBL	47	17	4	0	1	0	1	23

As presented in Table 1 above, four types of PBL were used at least once a semester, specifically, classroom PBL with 25 responses (33.75%), team PBL with 12 (15%), grade-level PBL with 27 (36.25%), and whole-school PBL with 17 (21.25%). The implementation

of PBL observed in Table 1 was mainly conducted from one time to three times. Only a few EFL teachers used PBL in teaching four or five times each semester. Strikingly, 15 EFL teachers applied to team PBL more than 5 times a semester which made up 21.25%. Of the four kinds of PBL, team PBL (57), classroom PBL (56), and grade-level PBL (42) got the highest number of times for implementation, which aligns with the results from the first part above when these three kinds of PBL were applied in most schools. On the contrary, it is not surprising that whole-school PBL was recorded as the one having the lowest rate of implementation (23). This revealed that whole-school PBL was not preferred and conducted often at schools in the Mekong Delta. The program for teaching English 11 textbooks was obviously distributed for project-based sections in each unit five times a semester. Therefore, the results demonstrated that EFL teachers did not fully implement PBL for each unit in the textbook following the program distribution. However, there were still a few teachers organizing extra project work during the semester.

4.1.1.3 The procedures of PBL implementation

The Cronbach's alpha for this cluster ($\alpha = 0.84$) was relatively high which indicated that the items of the cluster were reliable. The mean score of the cluster pointed out that the participants in general expressed a high level of agreement with the statements of the steps that PBL was implemented ($M = 3.70$).

Table 2: Descriptive Statistics of Teachers' procedures of PBL implementation in English teaching

Items	Mean	SD
When implementing PBL, ...		
1. I provide my students with the topic/ situation for their project and activate their background knowledge.	3.94	.85
2. I discuss with my students about the final outcome of their project and set the goal for it.	2.09	.84
3. I structure the project body, decide on what information students need, how to find them, and agree on assessment criteria.	3.91	.94
4. I prepare my students for the language demands of information gathering.	4.10	.88
5. I help my students gather relevant information for their project.	3.83	.82
6. I support my students in compiling and analyzing the information.	3.91	.90
7. I keep track of each group's progress through discussion, monitoring and recording evidence of progress.	3.81	.92
8. I help my students prepare for the presentation of their project products.	3.91	.84
9. I let my students present their projects in front of the class.	3.70	1.01
10. I encourage my students to give feedback on each other based on the rubric previously agreed and provide them with effective feedback for their projects.	3.79	.88
Total	3.70	.57

Firstly, the data presented in Table 2 above showed that the teachers initially supplied their students with the topic or situation for the project work and then activated the background knowledge of students ($M = 3.94$). This revealed that EFL teachers followed the first leading step of PBL implementation in their teaching. However, they had a low

degree of agreement that they and their students discussed the final outcome and the objective for the project as they did not fully conduct these two activities with their classes at this second step ($M = 2.09$). Moreover, the teachers, as instructors, structured the project with their students and provided them with agreed assessment criteria before the project work was carried out ($M = 3.91$). The next step in the procedures of implementing PBL was also assured by EFL teachers when they prepared students for the language demands of information gathering ($M = 4.10$). Besides that, the students were supported in gathering, compiling, and analyzing the collected information by EFL teachers ($M = 3.83$ and $M = 3.91$, respectively). In addition, the teachers also play roles as monitors during the development of the project since they followed and recorded evidence of each team's progress ($M = 3.81$). The teachers also agreed with the statement that they continued supporting their students by preparing them for the demands of the presentation for the final project ($M = 3.91$). Regarding the step for the evaluation of the project, the teachers showed a high level of agreement that they let the final group projects be publicly performed and received feedback from peers and instructors ($M = 3.70$ and $M = 3.79$, respectively). Generally speaking, EFL teachers mostly carried out the suggested procedures for PBL implementation in their classes, although the second step for setting the goal and final outcome before the project processing was not implemented very often.

4.1.1.4 Challenges of EFL teachers when implementing project-based learning

In this section, five clusters of challenges comprising *challenges related to teachers*, *challenges related to students*, *challenges related to curriculum*, *challenges related to schools*, and *challenges related to parents* were mentioned in the questionnaire for the participants to report the challenges they face in using PBL with the five-point Likert scale. The mean scores of the five clusters were compared in the table below.

Table 3: Mean scores of five clusters of teachers' challenges when implementing PBL

Clusters	N	Mean	SD
Challenges related to teachers	80	3.39	.80
Challenges related to students	80	3.47	.83
Challenges related to curriculum	80	3.63	.87
Challenges related to schools	80	3.22	.93
Challenges related to parents	80	2.87	.89
Total		3.37	.70

In Table 3, in general, EFL teachers found PBL implementation challenging but it was not related to all suggested aspects ($M = 3.37$). Specifically, challenges related to curriculum and challenges related to students were the most challenging as the mean scores were $M = 3.63$ and $M = 3.47$, respectively. The cluster for challenges related to teachers themselves was nearly thought as the challenging factor ($M = 3.39$). However, in applying PBL for English teaching, the teachers neutrally agreed with the statements about challenges related to schools ($M = 3.22$) and challenges related to parents ($M = 2.87$). Each cluster of

challenges EFL teachers encounter in their teaching was analyzed and reported in detail as follows.

a. Challenges related to teachers

Table 4: Descriptive Statistics of challenges related to teachers when implementing PBL

Items	Mean	SD
<i>I face challenges in PBL implementation because...</i>		
1. ... it takes time for me to adapt topics and activities to suit students' proficiency.	3.86	1.04
2. ... I don't have enough resources other than textbooks to design project activities for students to implement.	3.33	1.12
3. ... I lack experience in PBL implementation.	3.34	1.09
4. ... it is difficult to control large classes during their project presentations.	3.76	1.10
5. ... I find it hard to allocate equal tasks for group members effectively.	3.29	1.12
6. ... I lack time to train necessary skills (e.g, teamwork, presentation, IT, problem-solving, etc) for students to complete their projects.	3.49	1.08
7. ... I don't know how to evaluate the effectiveness of PBL.	2.70	1.08
Total	3.39	.80

The Cronbach's Alpha produced for this cluster was $\alpha = 0.86$, which was high and reliable. As shown in Table 4, the mean score of this cluster ($M = 3.39$) indicated that the participants had a moderate level of agreement on the challenges related to their own issues they encountered. Firstly, the teachers agreed that adapting the topics and activities for students' levels challenged them when using PBL since not every project-based section designed after each unit was appropriate for students ($M = 3.86$). Furthermore, the teachers neutrally agreed with the statement that they did not have sufficient available resources to design activities for the project work ($M = 3.33$). With the fast shift of applying a new teaching method like PBL, EFL teachers gave a moderate degree of agreement that they lack experience in implementing PBL ($M = 3.34$). Besides, the teachers found the big size of classes challenging to perform the projects effectively ($M = 3.76$). In terms of assigning teamwork tasks, EFL teachers had a neutral agreement that it was difficult for them to allocate equal tasks for each group's members efficiently ($M = 3.29$). Additionally, it is believed that EFL teachers also dealt with a lack of time for training students' necessary skills for doing projects such as presentation, IT, and problem-solving skills ($M = 3.49$). However, in terms of project assessment indicated in the last item, the teachers found it not too challenging in PBL implementation as the mean score of this item was only 2.70. This revealed that the teachers were still confident in assessing students' projects although a few teachers seemed to be uncertain.

Lastly, to find out whether external factors, regarding teachers' teaching experience, had an impact on teachers' agreement on the challenges they encounter during the process of PBL implementation, a One-way ANOVA test was computed. The test was run to compare the mean scores of groups including (1) 1-to-5-year teaching experience, (2) 6-to-10-year teaching experience, and (3) over-10-year teaching experience. The result indicated that there were no statistically significant differences

between group means as determined by one-way ANOVA ($f = 2.65$, $p = 0.07 > 0.05$). Correspondingly, the participants' agreement on the suggested challenges when applying PBL is the same, taking teaching experience into consideration.

b. Challenges related to students

Table 5: Descriptive Statistics of challenges related to students when implementing PBL

Items	Mean	SD
<i>I face challenges in PBL implementation when my students ...</i>		
8. ... have mixed abilities.	3.73	.95
9. ... have differences in interests and learning styles.	3.80	.97
10. ... have inter-group conflicts.	3.41	1.09
11. ... lack project materials to implement the project.	3.51	1.09
12. ... lack IT skills for accessing the information and implementing the project.	3.36	1.13
13. ... lack problem-solving skills.	3.39	1.06
14. ... are not used to learning through projects.	3.45	1.05
15. ... do not make efforts to prepare their projects.	3.30	1.08
16. ... do not highly appreciate the importance of project implementation.	3.29	1.08
Total	3.47	.83

The reliability of this cluster was $\alpha = 0.92$, which was relatively high. This revealed that the items for this cluster of challenges related to students were reliable. The teachers expressed a high level of agreement on the challenges related to students that they encounter in teaching since the mean score was 3.47.

First of all, the data illustrated in Table 5 pointed out that students with mixed abilities ($M = 3.73$) and differences in interests and learning styles ($M = 3.80$) were considered as the most challenging to EFL teachers in applying PBL. Moreover, the teachers agreed that their students had problems in group work because there were conflicts among group members during the project ($M = 3.41$). Besides that, the lack of materials for doing projects from students was agreed by EFL teachers ($M = 3.51$).

Regarding students' skills in doing the project work, the participants neutrally agreed with the statements that students were not good at IT skills and problem-solving skills for conducting the projects ($M = 3.36$ and $M = 3.39$, respectively). In addition, students were also thought not to get used to learning through projects since the mean score of item 14 was 3.45.

Besides that, learners' attitudes toward learning through PBL were also a concern. EFL teachers neutrally agreed that students did not indeed make their best efforts to prepare the projects ($M = 3.30$). Furthermore, the teachers had a moderate level of agreement with the statement that students underestimated the importance of PBL implementation ($M = 3.29$).

c. Challenges related to curriculum

As analyzed and reported above, the data indicated that challenges related to curriculum were concluded as the most challenging to EFL teachers when they used PBL in their

teaching at schools. The gained data for detailed items were demonstrated in Table 6 below.

Table 6: Descriptive Statistics of challenges related to curriculum when implementing PBL

Items	Mean	SD
<i>I face challenges in PBL implementation because ...</i>		
17. ... available project tasks designed in textbooks are not authentic and appropriate for my students' levels.	3.31	1.13
18. ... the curriculum does not offer more time for project presentations.	4.06	.99
19. ... the curriculum has no specific guidance to implement PBL.	3.63	1.02
20. ... the curriculum does not mention assessment criteria to evaluate students' learning outcomes.	3.51	1.11
Total	3.63	.87

The Cronbach's Alpha of 4 items produced was $\alpha = 0.83$ which could be considered reliable. The teachers possessed a high degree of agreement on items about the challenges related to the curriculum during the PBL implementation ($M = 3.63$). The results from Table 6 showed that the available project tasks designed in the new textbooks were not authentic and suitable for students' backgrounds with a moderate level of agreement from the teachers ($M = 3.31$). In addition, it can be concluded that EFL teachers were not provided enough time for PBL implementation from the curriculum ($M = 4.06$). Also, it is agreed that specific guidelines of how to implement PBL ($M = 3.63$), and assessment criteria for students' learning outcomes given in the curriculum ($M = 3.51$) challenged EFL teachers in using PBL. Generally, the teachers reported the challenges related to curriculum they face in teaching English at the high level, regarding lack of time, lack of guidance, and assessment criteria from the curriculum.

d. Challenges related to schools

Table 7: Descriptive Statistics of challenges related to schools when implementing PBL

Items	Mean	SD
<i>I face challenges in PBL implementation because ...</i>		
21. ... my school does not offer necessary materials and facilities required for projects.	3.30	1.17
22. ... my school does not give financial support for implementing projects.	3.61	1.10
23. ... my school administrators do not highly evaluate the effectiveness of PBL implementation	2.88	1.08
24. ... my school does not provide me with flexible schedules.	3.10	1.14
Total	3.22	.93

The cluster reliability ($\alpha = 0.83$) was quite high and reliable. From the data shown in the table above, it can be said that challenges related to schools did not challenge EFL teachers too much in applying PBL ($M = 3.22$). First, the participants neutrally agreed that their schools did not provide essential materials or facilities for doing projects ($M = 3.30$). Besides, it is seen that most teachers did not receive financial support for implementing projects from their schools since the mean score of this item was 3.61. However, it can be

realized that the evaluation of the effectiveness of PBL implementation from school leaders did not influence much on the process of using PBL in EFL teachers' teaching ($M = 2.88$). Moreover, the teacher participants showed a moderate level of agreement with the last item that they were not supplied with flexible schedules ($M =$ Overall whole, challenges related to schools in PBL implementation were reported at the average level, indicating that those were not very influential factors in EFL teachers' PBL implementation.

e. Challenges related to parents

Table 8: Descriptive Statistics of challenges related to parents when implementing PBL

Items	Mean	SD
<i>I face challenges in PBL implementation because ...</i>		
25. ... students' parents have negative attitudes towards PBL implementation (e.g, unwillingness to offer children time and finance for conducting the project).	2.95	.95
26. ... students' parents only support assignments related to grammar and skills rather than doing projects.	3.04	1.11
27. ... students' parents conduct the project instead of letting children complete by themselves.	2.61	1.06
Total	2.87	.89

The Cronbach's Alpha computed for the cluster was $\alpha = 0.81$ which was quite high and the items of this cluster could be considered reliable. From the data gathered from Table 8, it can be believed that challenges coming from parents did not prevent EFL teachers from implementing PBL as the total mean score was only 2.87. In other words, students' parents did support conducting the projects instead of having negative attitudes towards PBL implementation because the teachers neutrally agreed that students' parents had negative attitudes towards doing projects ($M = 2.95$). The teachers also believed that most students' parents did not solely support grammar and skill assignments rather than projects ($M = 3.04$). Additionally, parents did not intervene in their children's conducting of the projects as the mean score for item 27 seen in the table was only 2.61. Consequently, challenges related to parents which EFL teachers encounter were just at the medium level.

4.1.2 Results from qualitative data

The interview to collect qualitative data consisted of six main questions arranged in the order moving from *the evaluation of PBL, types of PBL, frequency of PBL implementation and skills applied with PBL, steps of PBL implementation, challenges or difficulties when implementing PBL, and suggestions for better implementation*. However, there were still some sub-questions added during the interviews to support the clues for clarification depending on the interviewees' responses. After conducting step by step for doing a thematic analysis following Braun & Clarke's (2006) 6-step framework cited by Maguire & Delahunt (2017), the researcher found the general results that showed the interviewees

appreciated the values of PBL and they were willing to implement PBL further because it was appropriately used. The participants also pointed out a variety of information about the reality of PBL implementation and the challenges they face in their teaching. Generally, the data collected from the interviews supported the questionnaire results.

4.1.2.1 Reality of project-based learning

First of all, the responses from the interviewees were reflective of the top two out of four types of PBL applied. Team PBL was confirmed to be implemented as a priority in the contexts of the classroom and doing projects among classes was sometimes applied by EFL teachers for various reasons. Nevertheless, whole-school PBL was hardly used in most schools in the Mekong Delta. Teacher 7 commented that:

“Well, each type has its own requirements for organization, arrangement, object, and scale of organization and evaluation. However, in the general situation in each school, the type of team PBL should be applied more because it is easy to implement. Teachers only organize and apply immediately to their class in charge of teaching, evaluating, and observing the progress of students. If possible, the class PBL should also be applied because sometimes teachers will teach multiple classes so they can also do projects between classes. The remaining types of PBL are a bit difficult because they are related to the school, the general study plan, the budget, and the project attendees are too broad.” (Teacher 7)

Related to the frequency of PBL implementation, three interviewees strongly supported applying PBL in their teaching when they were in charge of teaching the piloted textbook which has been designed with a specific project-based section after each unit. Teachers 1, 4, and 8 conducted PBL in every unit as stated,

“... After each lesson unit, I have to do the project without skipping any lesson because I also see the importance of this project implementation although if I do a project part, I always have to find 1-2 extra hours to teach them ...” (Teacher 1)

“... For the class I am in charge of teaching, I always apply PBL, almost after each lesson according to the program in the book, but I will be flexible depending on the content of the lesson, topics, or conditions permitting it to be diverse. do large and small projects to create excitement for the students and arouse their own critical thinking skills in daily life.” (Teacher 4)

“... I appreciate the application of the project and also want my students to approach foreign languages in a new and more interesting way. Therefore, I try to apply PBL after each unit in the textbook. I must say try because you know, the curriculum doesn't allow much time to do it. ...” (Teacher 8)

Meanwhile, the other five EFL teachers applied PBL every three units or once a month since they could not afford to conduct PBL more frequently due to the limitation of time and schools' schedules. For example, Teachers 2 and 6 shared:

"Uhm, after finishing 3 units, I will give them a week to finish composing. After one week, they will give presentations. ..." (Teacher 2)

"... Therefore, I usually choose a unit, choose an interesting topic, and then let the students do it, on average about once every 3 weeks or sometimes a whole month. ..." (Teacher 6)

Regarding skills taught when applying PBL at schools, speaking was mentioned as a skill which all interviewees selected to design and organize project work in English teaching. Furthermore, reading or writing was occasionally applied with PBL as teachers mentioned in their speeches as follows.

"Often students are weak in speaking skills, so I will let them practice speaking more, preferring speaking because there is not a single session or opportunity at school for them to speak English a lot. Therefore, I create conditions for them to have an environment and an opportunity to practice speaking. Thereby, they can improve their English-speaking ability better." (Teacher 2)

"It will usually be the speaking part, or it is just an activity related to a presentation or an interview, in general, the speaking part is usually a lot. ..." (Teacher 5)

In terms of the procedures for PBL implementation, the interviewees typically follow step by step for conducting such a method. Teachers gave the topic to students to brainstorm before the group work started. The deadline and outcome were also informed and agreed upon by the teacher and students. Furthermore, the teachers played different roles of facilitators, instructors, supporters, or advisers during the development of the project. The presentation and evaluation of the final projects were implemented for the project work all the time. For instance, Teacher 5 said,

"Well, first I will choose the topic and then tell them to prepare, then I will divide the group for them to plan their own projects together. I pre-determine the grading criteria, presentation format, and submission deadline, usually one week. Then mostly they work independently together, finding information, synthesizing, and designing the final project. At that time, I also often ask them if they have any difficulties so that I can support them. Before giving a presentation, I sometimes give it a try if I have time and let the groups adjust. On the day of the presentation, I let them comment on each other first and then I finalize." (Teacher 5)

4.1.2.2 Teachers' challenges when implementing PBL

The participants generally indicated that certain challenges were mainly from external factors. One of the interviewees affirmed that she had no difficulties using PBL in her teaching because she loved challenges to develop her skills and do her best with her own experience. The challenges the teacher participants mentioned were mostly related to learners and curriculum. Besides that, two interviewees pointed out that the challenges they faced were also related to teachers.

a. Challenges related to learners

PBL is considered a student-centered teaching method that requires learners to take active roles in learning, especially learning a foreign language. However, most interviewees indicated that their students' language competence was the most challenging factor in English teaching when they applied PBL because the students did not achieve sufficient vocabulary and skills to meet the requirements of doing projects. This led to students' dependence on the Google translation website without understanding or applying the knowledge they learned, just memorizing the translated contents for the presentations as Teacher 1 highlighted in her speech.

"... Besides, students are influenced too much by the internet, from Google translation. Those who have a bit of ability understand how to apply, so the results are quite good, but the students with a low level can't evaluate it, just blindly use Google translation and then just memorize it to do the project. Then they also present the content like that, but in fact, they only use Google translation, not write by themselves. Some students are too weak to have that situation because their level is too low. Actually, it's still their intention to solve the problem and respond to the topic, but they write Vietnamese and then put it on Google translation to switch to English and then memorize the lesson for presentation. ..."
(Teacher 1)

Furthermore, to conduct the project work, the students had a lack of time for preparation. They must study many subjects at the same time, which somehow affected the quality of the projects or they just tended to complete the projects without caring about the practices of learned knowledge as well as their progress through PBL. Teacher 4 said,

"I think that there are times when they focus too much on the product and do not pay attention to how to use the language they have learned to express, thereby not achieving the goal of effectively practicing the knowledge they have learned."

"... the lack of preparation time: because students have to study many subjects at the same time, they still have not really invested and spent a reasonable amount of time on their products." (Teacher 4)

Additionally, the students' attitudes towards PBL also challenged the teachers when applying PBL. Most students were reported to keep the mindset of gaining high scores rather than focusing on the process of developing their essential skills and language proficiency. Also, the students have not yet highly evaluated the value of PBL, so they did not show positive attitudes toward learning. For example, they did not prepare the project assigned or they did not appear on the presentation day. These really made learners not achieve the true goals of learning through PBL. The interviewees mentioned,

"... It's also difficult to gather students. I let them perform the projects in extra hours, but only those who are interested come, sometimes when they're weak, they don't appear enough." (Teacher 2)

"... the difficulty also comes from the attitude of students, students are like some teachers, afraid of new things, less willing to change, have the mindset of learning to get points, and sometimes having the unwillingness to do projects." (Teacher 3)

Finally, teamwork skills were also problematic when the students did the projects. The division of roles in doing projects was considered as an unfair issue because the high-achieving students seemed to work a lot while the others did nothing. As a result, the interactive and collaborative skills among them somehow influenced the projects. Teachers 4 and 7 reported,

"... working in groups: some students will feel it is unfair that the work is not divided equally as the good students often have to do a lot while some students do nothing, thus leading that even group cooperation will be problematic." (Teacher 4)

"...In addition, during the teaching process, I also encountered some other difficulties and challenges. For example, the students' abilities are not equal, sometimes the members can't share the work well and duties fairly. Since then, the project work is not really effective, sometimes the students are dissatisfied and depressed. ..." (Teacher 7)

Obviously, the findings from the interviews were consistent with what was explored in the questionnaire. PBL boosts the skills and development of learners in learning English. However, the learning objectives and outcomes cannot be achieved if the students had such attitudes and problems. This requires the teachers' orientation and scaffolding in the teaching and learning process.

b. Challenges related to curriculum

Doing projects takes more time than other traditional teaching methods. Therefore, the duration and design of curriculum from schools or leaders in some ways impact the implementation of PBL. If the curriculum did not involve more time for PBL implementation, in such a limited time, the teachers would face challenges related to time

pressure, and they could not cover the project-based tasks. Consequently, the teachers must look for extra hours out of the timetables to let their students do the projects. This also challenged teachers when the learners did not show up. In addition, the contents presented in the selected textbooks were not always appropriate for doing projects, so the teachers must select carefully and search for additional activities to implement PBL better as the interviewees mentioned,

"...As for the program framework is not clearly planned, how to do it, the time spent on the project is not much, 45 minutes for 1 project period is not enough, you have to work overtime. ..." (Teacher 2)

"... teachers must find out which content is appropriate and will officially apply them to projects because sometimes the topic of the lesson is not suitable, not every lesson can do projects." (Teacher 3)

c. Challenges related to teachers

The teachers highlighted that they suffered a lack of professional training straight to the project-based section. When the new textbook was applied following a new teaching approach like PBL, teachers themselves did not gain much experience or even did not experience it before. However, the training from MOET or the Department of Education and Training locally provided them with general training for the whole book, especially focusing more on skills rather than the project-based section. As a result, the teachers have not yet implemented PBL in their teaching effectively since they themselves discovered, searched, designed, and organized it in various ways without the common guided framework. From that, they were not self-confident enough to implement PBL very often. Teachers 3 and 7 shared their thoughts,

"... In addition, the professional training that focuses specifically on the section related to projects has not been carried out yet, so teachers have difficulty in applying PBL because they are not confident enough in their professional capacity." (Teacher 3)

"...Then there is no specific PBL model for each skill, so teachers spend a lot of time designing projects, tutorials, and grading criteria. This self-indulgence can lead to unsuccessful organization, not creating interest and attraction for students to do projects, they just do it for the coping or scores. ..." (Teacher 7)

Generally, the challenges encountered when implementing PBL were relevant to learners, teachers, and curriculum, which was in line with the results from the questionnaire. They reflect the roles of teachers and students in PBL and the school leaders or curriculum makers. These challenges need to be considered for more effective implementation of PBL.

4.2 Discussions

4.2.1 EFL teachers' reality of PBL implementation

To answer research question 1 about the reality of PBL implementation at lower and upper secondary schools in the Mekong Delta, the teachers' reported practices of PBL were investigated through three clusters involving types of PBL, the frequency of PBL implementation, and the procedures of PBL implementation. Research question 1 was answered by the findings of quantitative and qualitative data analysis from the questionnaire and interviews. Generally speaking, the results obtained from the questionnaire and interviews were consistent.

4.2.2 Types of PBL

In terms of the types of PBL, including team PBL, classroom PBL, grade-level PBL, and whole-school PBL, team PBL was affirmed as the most popular kind of PBL, which the majority of EFL teachers applied in their teaching contexts through the questionnaire. The findings from the interviews added that implementing team PBL was the most feasible and manageable way to conduct and organize projects with a limited number of students in the classes the teachers were in charge of teaching. Besides that, the other kinds of PBL, such as classroom PBL and grade-level PBL, were also implemented at their schools. The data from the interviews revealed that some teachers occasionally made a competition by doing projects among classes in the same grade or among grades they teach, but it was not very often. Nevertheless, the whole-school PBL was reported to be hardly used in most teaching circumstances of EFL teachers as this kind was complex to conduct due to the influences of other factors like school support, sponsored finance, a large number of participants for the project, and students' timetables. From the collected data and the findings, it can be said that there is an agreement between the study of Harris (2014) and the current study when they indicated that the three types of PBL involving classroom PBL, team PBL, and grade-level PBL were preferred to be frequently conducted.

4.2.3 Frequency of PBL implementation

The results from the data analysis also indicated that the types of PBL mentioned above could be mainly implemented from one to three times per semester as the scales for these frequency levels were selected by most of the teacher participants. Obviously, the PBL implementation after each unit from the textbooks must be 5 times per semester as regulated in the program distribution. Therefore, it can be concluded that the teachers did not wholly cover the PBL implementation as divided. The interviewees explained that they could not afford to implement PBL more due to the limitation of time from the program distribution and students' language competence. Only a few EFL teachers used PBL in teaching four or five times a semester. Meanwhile, there were still some teachers using the top types of PBL more than five times. The reason for that could be the flexibility in teaching when EFL teachers organize different projects. This was also confirmed and shared by the interviewees, who were willing to apply PBL to every unit toward developing students' skills and progress in learning. They took turns letting students do

small or big projects, depending on the topics of units, so that the students were gradually familiar with PBL and more interested in doing projects for the lifelong development of their skills. This can be inferred that these teachers must serve their personal time for preparation and looking for extra hours for implementing the project work because the provided program distribution only offered one period, equivalent to 45 minutes, for Looking back and Projects sections in the textbooks.

The results for this part to determine the frequency of PBL implementation were compatible with the types of PBL used. They showed that the most applied kinds of PBL were conducted with the most frequent density. It meant that of the four types of PBL, team PBL and classroom PBL were implemented most at the participants' schools with the highest number of times selected. In addition, it is understandable when the whole-school PBL was recorded as the type used with the lowest level of frequency. The findings from the questionnaire and interviews were opposed to the results of Harris' (2014) study. The findings in Harris' study found that grade-level PBL was frequently implemented most, followed by classroom PBL, while team PBL reached the third highest of all types of PBL. Unlike these findings from Harris, the current study revealed that team PBL experienced the highest ranking of implementation and frequency, which was followed by classroom PBL and grade-level PBL.

4.2.4 The procedures of PBL implementation

For this cluster, the researcher adapted the procedures from Stoller (2002) and Dewi (2020) as justified in the literature review. The findings of the present study showed that EFL teachers generally followed the suggested steps of PBL implementation from Stoller (2002) and Dewi (2020) and played their different roles in using PBL well reviewed by Fleming (2000), Harris (2014), and Asma & Sabrina (2021). As instructors, the teacher participants took the first leading step in implementing PBL by providing students with the topic or situation with the agreed assessment criteria. The teachers then kept their roles as instructors, supporters, advisors, monitors, or supervisors when they structured the projects with their students and still kept track of the students' project work and assisted them with necessary skills such as information gathering, compiling, and analyzing, presentation, problem-solving skills, and so on. The findings from the interviews again supported the results of this study gained from the questionnaire. They revealed that the evaluation of the final project was fully conducted as the teachers organized the presentation day for project performance with various forms and feedback by peers and the instructors were also given. However, the step for setting the goal and final outcome before the project work started was not implemented very often. The reason that may underpin this could be the initial agreement between the students and instructor at the beginning of the course, so the students were familiar with the goals and assessments for similar projects. Therefore, the teachers skipped this step sometimes while conducting PBL in their classes. On the whole, EFL teachers mostly carried out the suggested procedures for PBL implementation in their classes.

4.2.5 EFL teachers' challenges in PBL implementation

The results to answer research question 2 about the challenges EFL teachers encountered in implementing PBL at lower and upper secondary schools in the Mekong Delta pointed out that of the five clusters of challenges mentioned, EFL teachers faced challenges related to curriculum, learners, and teachers themselves most in their real teaching.

a. Challenges related to curriculum

The teacher participants mentioned that they encountered major challenges related to the curriculum. The shortage of time due to the limited program distribution was the biggest barrier for EFL teachers to carry out the innovative teaching method as PBL frequently and effectively. This also influenced the teachers' preference for using the types of PBL and the density in which PBL was applied in teaching. In addition, EFL teachers agreed that the curriculum did not supply specific guidelines for implementing PBL that could support the teachers to gain a common framework as the orientation of PBL implementation for teaching the new textbook used. PBL is innovative and new to teachers, particularly those working in the countryside or remote areas where students tend to study passively with the conventional teaching method. However, the data also revealed that the assessment criteria for PBL implementation were not provided in the curriculum, which led to various teachers' evaluations and assessments of students' learning outcomes.

b. Challenges related to students

PBL is considered a student-centered approach, so learners play an important role in deciding the success of PBL implementation. Nevertheless, students with mixed abilities and differences in interests and learning styles challenged EFL teachers a lot in using PBL in their teaching. This required the teachers to design the lessons with PBL carefully and flexibly. Through the results from the interviews, it is emphasized that the student's English language competence was the most challenging factor for teachers in the process of implementing PBL in their classes. When the students could not afford to meet the requirements of doing projects, they felt stressed or bored of doing them or just investing in the projects simply without caring about developing skills through the project work. Besides that, it is reported that the lack of necessary skills for doing projects for the students, including teamwork skills, IT skills for accessing information and implementing projects, and problem-solving skills also prevented teachers from applying PBL in their teaching effectively. This might be explained by the time limitation and a lack of skills from teachers to increase student support more.

c. Challenges related to teachers

The roles of teachers changed and varied in PBL implementation as consultants, supporters, supervisors, facilitators, and so on. Therefore, teachers also contributed to the effectiveness of using PBL in teaching. However, the participants in the current study believed that they encountered certain challenges with their skills in implementing PBL. The adaptation of project topics and activities without various resources was confirmed

through the interviews to make the teachers take more time because the available project-based sections were not appropriate for the students' proficiency all the time. Additionally, the teacher participants also thought that they lacked time for student support with essential skills like problem-solving, teamwork, or presentation skills so that learners could do the projects well. The participants in this study were believed to lack experience in implementing PBL, so it was difficult for them to control large classes in their project presentations. These were consistent with what the teachers stated in the interviews.

On the whole, the present study pointed out that EFL teachers encounter major *challenges related to the curriculum*, including lack of time, no specific guidance and assessment criteria for PBL implementation; *challenges related to students* regarding mixed abilities, differences in interests, and learning styles, and lack of necessary materials and skills for doing projects; and *challenges related to teachers* comprising adaptation of project activities, lack of time for student support, and controlling large classes due to insufficient experience. These findings were in line with the ones from Harris' (2014), Aldabbus' (2018), and Nguyen and Nguyen's (2019) studies. The current study, however, did not align with the previous studies of Harris (2014), Aldabbus (2018), Nguyen and Nguyen (2019) when it indicated that project assessment was not reported as the most challenging to most EFL teachers.

5. Conclusion, implications, and limitations

This research paper has attempted to investigate the implementation of PBL in EFL classrooms in the context of lower and upper secondary schools in the Mekong Delta, Vietnam. The research findings properly reflect the reality that team PBL and classroom PBL were indeed carried out in a language classroom with the highest density. At the same time, grade-level PBL and whole-school PBL are less preferable. Especially the results from both quantitative and qualitative data indicate that the whole-school PBL is seldom implemented in the mentioned context because of the impacts of other factors including budget, controlling a large number of participants, time management, and the complexity of organizing such a project. Additionally, close results for the procedures of PBL implementation by Stoller (2002) and Dewi (2020) are also gained when the present study reveals that the teachers virtually conduct the step-by-step process of PBL implementation. The findings of this study also show that EFL teachers encountered certain challenges in their teaching when using PBL including *challenges related to curriculum*, *challenges related to students*, and *challenges related to teachers*. Applying a new teaching method requires teachers and learners to be well-equipped with skills and knowledge as they greatly contribute to the success of PBL implementation. Thus, the findings of the current study propose some practical implications to facilitate the process of applying an innovative teaching method like PBL, as presented below.

- The culture of implementing PBL at schools is suggested to be widely spread through workshops, seminars, and more professional training (Aldabbus, 2018). It is highly recommended that more appropriate training for the project-based

section should be supplied to teachers by the Ministry and the Department of Education and Training so that teachers are equipped with adequate skills to conduct the project work confidently and effectively. The training should focus more on how to apply PBL in various ways, how to organize the activities, and how to assess the students' projects by modeling and providing authentic materials and specific guidelines.

- PBL should be regulated as a compulsory activity for all schools in Vietnam (Tu & Thao, 2019). To reach this goal, it is sure that the educational system needs to prepare learners with the knowledge, necessary skills, and readiness to shift to an innovative teaching method like PBL. This requires the management organizations to consider expanding or adjusting the common study plan and curriculum.
- The administrators of schools are expected to offer flexible schedules for learning, financial and spiritual support and permission for the whole-school PBL to be conducted to create a meaningful learning environment for learners.
- To motivate students to do projects, display areas for distinctive projects and rewards for the best performance or products are needed (Aldabbus, 2018). These changes certainly make the students have positive attitudes toward learning and different evaluations of the important roles of PBL.
- EFL teachers should be well-prepared and equip themselves with the knowledge and awareness of learning new teaching methods with various effective activities to enhance the quality of their teaching. They also need to be creative in organizing the forms of projects, enthusiastic for student support, and fair in assessing students' projects.

Although the data procedures for this research were carried out carefully, and the researcher did her best to achieve the study's aims, some unavoidable limitations still existed when this study was conducted. First, the data for the current study were mainly from the questionnaire and interviews without being verified through various sources or instruments including direct classroom observation, lesson plans, diaries, or interviews with students. The reality and challenges in teaching were just self-reported practices of EFL teachers, so the limitation in terms of the reliability in this study could not be avoided. Second, regarding the sample population, since the specific investigation was carried out with 80 EFL teachers from 12 provinces of the Mekong Delta, involving eight teachers for the interviews and the density of participation from the provinces was not equal, the generalization of the findings has to be limited to the similar context. The data gathered would have been more valid, accurate, and reliable with more participants. Finally, as stated about the place of residence of the researcher and the participants over the Mekong Delta, the interviews were just conducted online with eight teachers from eight provinces through Zalo, phone, or Messenger. Correspondingly, the interviews seemed unnatural and comfortable for the interviewees to share their opinions. Face-to-face interviews would have been more insightful and reliable for the qualitative data of this study.

Conflict of Interest Statement

The authors declare no conflicts of interest.

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