

IMPLEMENTATION OF PROJECT-BASED LEARNING (PBL) IN TEACHING SKILLS COURSES AT THE TERTIARY LEVEL: HOW EFFECTIVE IS IT FOR ALL TYPES OF LEARNERS?

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Abstract

This paper aims to investigate the effectiveness of Project-based learning in skills courses at the tertiary level. Project-based learning (PBL) is indispensable to meet the challenges of the 21st century. With the shift from teacher-centered classrooms to learner-centered classrooms, PBL is effective in teaching skills courses. Over the years, it has gained popularity at all levels of education. Teachers have changed their roles from lecturing to becoming only facilitators by monitoring, supervising, and facilitating the learning process. Through this, they tend to give learners more freedom and make them responsible. Similarly, language learners today opt for more flexibility, autonomy, and involvement to make learning enjoyable and effective. They prefer participating in the learning process by being active in a classroom. They prefer to acquire knowledge and skills, keeping in mind their practical application. As a result, it prepares them to meet the challenges of the 21st century. However, as in all the methods used in EFL/ESL classrooms, PBL is not without pitfalls. The present study addresses the issues regarding the implementation of PBL in skills classes and how effective it is for all types of students. 17 teachers, both males, and females in a public university in Saudi Arabia were chosen to participate in the study. A survey questionnaire was administered to the participants who had implemented PBL in their classes. SPSS (Version 20.0) has been used to analyze the data. Based on the findings, the study concludes with some recommendations about how PBL can be implemented in skills classes more effectively.

Keywords: EFL/ ESL learners, learning by doing, project-based learning, problems of PBL, skills courses

1. INTRODUCTION

Project-based learning (PBL) is a teaching method that places the learners at the center of learning. It refers to the organization of the learning process based on the pedagogical principle of “**learning by doing**,” which means that learners acquire knowledge after having experienced or done something new (Kotti, 2008, p. 32).

Various authors have defined PBL in different ways. Still, at its simplest, it is “an instructional approach that contextualizes learning by presenting learners with problems to solve or products to develop” (Moss & Van Duzer, 1998, p. 2). This method encourages hands-on exploration of concepts, critical thinking skills and sustained inquiry. It allows

students to participate in refining and enhancing their language skills by completing projects both in and outside the classroom.

Tricia Hedge (1993) first introduced PBL for English language learners (ELLs) to develop their communicative competence and fluency. She defined PBL as follows: "A project is an extended task that usually integrates language skills through many activities. These activities combine in working towards an agreed goal and may include planning, gathering information through reading, listening, interviewing, etc., discussion of the information, problem-solving, oral or written reporting, and display" (Hedge, 1993, p. 276).

Project-based learning is a popular method of teaching around the globe. Teachers are very much interested in teaching using this method as it engages students and helps them learn important content and successful skills through fun, being flexible and confident. Despite all the merits of PBL, teachers find it challenging to implement this invaluable method in all types of courses.

Language teachers have promoted the application of PBL in Listening, Speaking, Reading, Writing, and Vocabulary classes. PBL supports deep learning and engagement for the students as it makes them autonomous. Thomas (2010, p.2) described PBL as an effective method of teaching that can be used in various "contexts, including racial groups and low achievers." As a result, teachers can act as facilitators providing more opportunities for students to collaborate and learn from each other. Bell (2010) concludes that PBL motivates students to be fully engaged in the process of learning and gives them a feeling of satisfaction.

1.1 Benefits of using the PBL method in an English language classroom

Many progressive educators reported many benefits of the PBL method in ESL. Some of them are mentioned below:

1. The process leading to the end product of project work provides opportunities for students to develop their confidence and independence (Fried-Booth, 2002).
2. Students demonstrate increased self-esteem and positive attitudes toward learning (Stoller, 2006, p. 27).
3. Students' autonomy is enhanced (Skehan, 1998), especially when actively engaged in project planning (e.g., choice of topic).
4. Social, cooperative skills, and group cohesiveness among students is increased (Coleman, 1992; Papagiannopoulos et al., 2000, pp. 36-37).
5. PBL improves language skills (Levine, 2004).
6. Project work progresses according to the specific context and students' interests (Kriwas, 1999, p.149).
7. Students tend to be more practically involved in the learning process.
8. PBL enhances collaborative learning.
9. It endows learners with leadership qualities.
10. It makes them more responsible.

Therefore, in English language instruction, PBL is a means for students to improve their language and critical thinking skills. Of course, the setting of PBL is quite different than a

traditional classroom. Students are required to be more creative and engaged. They reflect and share their work with group members, making them more accountable and responsible.

1.2 Rationale of the Study

Speaking and writing skills are the main productive skills for second and foreign language settings. These skills reflect students' understanding, learning and knowledge of using authentic language. Language teachers are aware that students are often weak at productive skills in ESL. On the other hand, teachers also find teaching productive skills rigorous. Hence, the researchers were interested in conducting a study from teachers' perspectives to determine how effective PBL is in skills classes, especially in teaching productive skills and how effective it is for all types of learners.

1.3 Objective of the Study

Although some learners say that project-based learning helps them develop collaboration and teamwork skills and increases the level of responsibility in learning, it has some drawbacks. Hence, the researchers have shown that PBL does not apply to all learners and cannot be effective in all courses.

1.4 Research Questions

- 1.Can project-based learning be applied in all skills courses?
- 2.Is project-based learning effective for all types of learners?

2. LITERATURE REVIEW

Numerous studies have been conducted on project-based learning and its benefits. Studies show that it has been implemented in language classes. Project-based learning is highly in harmony with the development of digital literacy among learners (Nani & Pusey, 2020). Project work encourages students to gather more in-depth knowledge and sharpen their skills in research. Essien (2018) concluded the importance of PBL in her study by showing how PBL connects academic situations to the real world by offering a stimulation of certain problems in the classroom.

Moreover, students feel motivated to develop creativity by doing projects and solving problems (Anazifa & Djukri, 2017; Kean & Kwe, 2014). PBL gives the opportunity to create an active student-centered form of instruction which is characterized by student autonomy, constructive investigation, goal setting, collaboration, communication, and reflection within real-world practices by presenting learners with problems or a certain situation and motivating learners to identify and carry out the solutions. It provides opportunities for students to carry out learning activities by working on collaborative projects (Basilotta Gomez-Pablos et al., 2017; Choi, Lee & Kim, 2019; Kokotsaki et al., 2016). PBL enhances students learning quality in terms of enthusiasm, confidence, creativity, and self-directed and collaborative learning ability. It also motivates and satisfies teachers while teaching. (Astawa et al.,2017). Kavlu (2017) stated in her study that PBL helps students improve their skills in English in a real-world context and make

the EFL classroom more colorful and attractive. Since technology is involved, learners are creative and up to date (Gonzalez et al.,2017).

Hussain (2021), in his study states that it has gained popularity and thus has been explored in various contexts and at all levels of education. According to his study, it helps students investigate authentic problems and come up with solutions to use in real life. Moreover, it also improves their problem-solving, critical and creative, communication ability to adapt to changes, and self-evaluation (Khoiri et al., 2013). PBL emphasizes the importance of group learning, group collaboration, and taking on social responsibility which are practiced in bringing about the goal accomplishment.

In a PBL classroom, projects drive the learning, and a meaningful and authentic project is the key to the success of the PBL method. Hell et al. (2006) suggested that autonomy strengthens students' ability to construct new knowledge because autonomy allows students to use their prior knowledge and experience, which, in turn, facilitates the construction of new knowledge.

In PBL, a meaningful project is well planned to ensure a clear link to standards and learning outcomes, so a teacher's role becomes crucial. The teacher must build relevant projects that situate the learning in a meaningful challenge, scenario, or investigation. Of course, the teacher must teach the learners the necessary content and skills to master it.

Nevertheless, teachers can create rubrics and other assessment tools to ensure that specific vocabulary terms, language structures, and functions are demonstrated in the final product, whether a presentation, brochure, or other projects. It is advisable that teachers do not control projects but rather leave many things determined by students (Alan & Stoller, 2005).

Numerous studies have been conducted on the implementation of PBL in language classes. Teachers who use Project Based Learning see higher attendance rates and more evidence of student engagement (Thomas, 2000). Previous research on PBL had extensively focused on the implementation of PBL in speaking classes (e.g., Kassem, 2018; Othman & Shah, 2013; Shin & Azman, 2014; Sy, Adnan, & Ardi, 2013) and on the reading skill (Huang & Sun, 2012; Lin, 2017). It has also been implemented on teaching vocabulary and listening. For example, Fard and Vakili (2018) studied the effects of PBL on the vocabulary learning of Iranian EFL learners and concluded that PBL could significantly increase the learners' knowledge of vocabulary. Similarly, a study by Lin et al. (2004) points out the improvement seen among the students through PBL in listening classes. It was speculated by Larsson (2001) that PBL is effective with productive language skills. Contrary to this study, the study results by Lin et al. (2004) show that the implementation of PBL in listening classes helped the students retain knowledge, be actively involved, and enhance incidental learning.

However, a study conducted by Cintang, Setyowati & Handayani (2018) stated that PBL has its drawbacks. In a heterogeneous group, there remains a gap when students have various levels of abilities. This happens when the group formation is not appropriate. In the same study, it is highlighted that for PBL, teachers should be well trained first. Lack

of proper experience on the teachers' part may throw teachers into an overwhelming situation. They also face impediments regarding time management. They should be skilled enough to manage time effectively to guide the students to complete the project on time. (Cintang, Setyowati & Handayani, 2018). This view is supported by Habok & Nagy (2016, p.3), who claim that PBL is a 'highly time-consuming activity and requires great attention to detail.' Another drawback Aldabbus (2018) pointed out is that teachers always have to think about time constraints. They are more concerned about completing the course. Moreover, some teachers are reluctant to carry out PBL because they are not sure whether to focus on the process of conducting the project or the end project. (Aldabbus, 2018). All these studies have highlighted the benefits and the problems while implementing PBL in classrooms, but none of the studies have focused on the crucial aspect of PBL if it is effective for all learners. Therefore, this paper aims to investigate whether PBL is effective for all types of learners in language classes.

3. METHODOLOGY

3.1 Participants: For this study, both male and female teachers from various nationalities in a public university in Saudi Arabia were chosen. 17 teachers participated in this study. The range of their teaching experience is from 5 to 15 years.

3.2 Instruments: The research participants were administered a survey questionnaire of 12 closed items. The questionnaire was based on teachers' experiences who had used PBL in their classes. All ordinal variables in the questionnaire were prepared on a 5-point Likert Scale, starting from strongly disagree to strongly agree.

3.3 Procedure The questionnaire was constructed on Google forms. The link was forwarded to teachers through emails. Within ten days, the data was collected.

3.4 Data Analysis After gathering the data, it was analyzed statistically using SPSS (Version 20.0). A tabulation of descriptive statistics: minimum, maximum, mean, and standard deviation was prepared to determine teachers' perspectives on the challenges of PBL in their classes.

3.5 Hypothesis of the Research

The current study validates the effectiveness of Project-based learning in skills classes and the challenges teachers face while implementing it. Based on the observation of the teachers, the researchers have formulated this hypothesis that the implementation of PBL is not always effective in skills classes though it has numerous benefits. If project-based learning cannot be effectively implemented in all classes, the learning process gets affected, making learning doubtful. In other words, it can be said that due to the ineffectiveness of the proper implementation of PBL, students do not get the full benefit and fail to perform well. Hence, the aims of the whole pedagogy are lost, and there are many challenges to achieving its goals.

3.6 Limitations of the Study: This study has some limitations. Only 17 teachers were chosen to participate in this study. If there had been more participants, the results might have been different. Another delimitation is that some non-skills courses needed to be investigated to conclude that PBL is effective for all types of courses. Apart from this, the perspectives of the weak students needed to be investigated to find out if PBL is effective for all types of students.

3.7 Ethical Consideration: The names of the participants in the study have been kept anonymous. The participants were assured that the confidentiality of the respondent would be maintained. This questionnaire would be used only for data collection and analysis.

4. DATA ANALYSIS AND INTERPRETATION

After gathering the data, it was analyzed statistically using SPSS (Version 20). A tabulation of descriptive statistics: minimum, maximum, mean, and standard deviation was prepared to determine the teachers' views regarding the effectiveness of PBL in their classes.

	N	Minimum	Maximum	Mean	Std. Deviation
1. I apply project-based learning (PBL) to my students.	17	1.0	5.0	4.000	1.1180
2. Project-based learning is effective for all types of students.	17	1.0	5.0	3.529	1.2805
3. All types of courses can include project-based learning.	17	1.0	5.0	3.353	1.3666
4. PBL promotes deep learning and autonomy among students.	17	2.0	5.0	4.176	1.1311
5. All students can improve their language skills, especially communication and presentation skills, through project-based learning.	17	2.0	5.0	3.882	1.0537
6. PBL helps students with employable and life skills	17	3.0	5.0	4.294	.6860
7. The productive skills Speaking and Writing can be taught successfully in PBL	17	2.0	5.0	4.000	.9354
8. Implementation of PBL for productive skills is challenging.	17	1.0	5.0	3.941	1.0880
9. All students cannot collaborate successfully while doing written tasks in PBL.	17	2.0	5.0	3.647	1.1147
10. All students cannot cope with the productive skills in PBL	17	2.0	5.0	3.882	1.1114
11. Teachers need the training to apply PBL to their students.	17	1.0	5.0	4.588	1.0037
12. All teachers in PBL give their students a meaningful and authentic project in class.	17	1.0	5.0	3.000	1.1726
Valid N (listwise)	17				

5. DISCUSSION AND FINDINGS

Out of the 12 variables, 8 of them supported that PBL promotes successful learning but with challenges. The participants supported this as they scored more than 3.5 on a 5-point Likert scale. These are as follows: 1. (M= 4.00, SD= 1.118), 2. (M=3.529, S.D= 1.2805), 4. (M= 4.176, S.D= 1.1311), 5.(M= 3.882, S.D.= 1.0537), 6. (M= 4.294, S.D= .6860), 7. (M= 4.000,S.D= .9354),8. (M= 3.941, S.D= 1.0880), 9. (M= 3.647, S.D= 1.1147), 10. (M= 3.882, S.D.= 1.114), 11. (M= 4.588, S.D= 1.0037). The rest 2 variables scored less than 3.5. Their mean and standard deviation were recorded and shown in the following way. 3. (M=3.353, S.D.= 1.3666). 12. (M= 3.000, S.D = 1.1726). Only items 3 and 12 scored less than 3.5, while all the other items scored 3.5 and above. It is to be mentioned that no variables had less than 3, which means that participants agreed with the view that PBL is effective in language classes. However, items 8, 9, and 10 show that teachers support the idea that implementation of PBL is challenging for productive skills and students cannot collaborate successfully while doing written tasks in PBL. It becomes a daunting task for teachers to implement PBL in their classes. From teachers' perspectives, learners find it difficult to cope with productive skills. In items 3 and 12, most participants shared the view that all courses cannot include project-based tasks, so meaningful and authentic projects cannot be given in all types of courses.

The findings of this study show that teachers support the idea that PBL is essential in language classes as it promotes learning and enhances skills. This idea is similar to the idea stated in a study where PBL is considered to make the learners autonomous and make classes student-centered. (Basilotta Gomez-Pablos et al., 2017; Choi, Lee & Kim, 2019; Kokotsaki et al., 2016). Moreover, it also improves learners' problem-solving skills, critical and creative skills, communication skills, ability to adapt to changes, and self-evaluation (Khoiri et al., 2013). PBL opens doors for working in collaborative projects and familiarizes them with employable and life skills. They improve their language skills, especially communication and presentation skills. This is supported by Thomas (2000), who claims that teachers who use Project-based learning see higher attendance rates and more evidence of student engagement. With teachers' beliefs and commitments, learning can be made successful (Cintang, Setyowati & Handayani 2018).

The challenge which teachers face is the implementation of PBL in productive skills. PBL is not without obstacles, as the findings of this study show. The results show that all students cannot collaborate in writing skills. This view is similar to the study of Cintang, Setyowati & Handayani (2018). It is pointed out that there remains a gap in a heterogenous group when students have various levels of abilities/mixed abilities. This happens when the group formation is not appropriate. Some students might have a higher level of ability than others. The low-level achievers find it difficult to keep pace with the high achievers. For this, teachers must identify the learners' level of capabilities.

Similarly, teachers also need to be trained to apply PBL to their students. Teachers who have never implemented PBL in their classes might worry about the time constraints and think more about the end project. They also feel that if students have too much freedom in class, it might become challenging to supervise the class effectively (Aldabbus, 2018).

From the findings, it is evident that PBL has some demerits. There are pitfalls in every successful method in ESL. PBL is not an exceptional case. Implementing PBL in all courses may not be easy because PBL requires much time to solve complex problems. Due to lack of time, the unavailability of material/content and the organization and administration of project-based learning can be time-consuming (Helle et al. 2006). The following points are considered the problems of project-based learning.

- There is a risk that a project may not be rigorous enough and may not meet the needs of all students.
- Students might face challenges in collaborating with group members. (Hussain, 2021).
- All students may not have the same level of involvement in completing the project. Most of the time, the strong student is in charge of doing everything, and the rest of the students hardly contribute.
- In PBL, all students are required to meet a high level of rigor as they investigate and learn. Due to this, many students might face difficulty in completing the project.
- Some PBL projects have a demanding problem expressed through a driving question that helps motivate sustained inquiry (Larmer, Mergendoller, & Boss 2015). The challenge and question are open-ended and complex, and learners must have a higher order of thinking. Therefore, this sometimes may hinder the success of the average student.
- Teachers may not be well trained to implement PBL in their classes.
- Most of the time, teachers are concerned about finishing the course rather than focusing on the projects given.
- It is challenging for teachers to monitor the progress of individual students and check if everyone has the same level of involvement.
- Sometimes due to the lengthy process in PBL, students might lose their motivation.
- Due to a lack of expertise and training, all teachers may be unable to give students meaningful tasks.

6. RECOMMENDATIONS

PBL can be successfully carried out in the class with proper teacher guidance.

Teachers need to be more trained to implement PBL in their classes. They should have some hands-on workshops or training programs that help them set up PBL in the classrooms with greater integration and achieve a successful reflection of learning. Such workshops or training programs should include but not be limited to the following key components:

Teachers need to allow students to explore their skills in Project-based learning and encourage students to have a better understanding of it.

Students should be encouraged to learn according to their individual learning styles.

If some projects are difficult to execute, teachers can help the students by modifying the projects and aligning PBL with clear goals according to the curriculum.

By dividing the heterogeneous groups of students, the inequality of the students' capabilities can be solved using varied teaching methods.

Teachers' beliefs and commitment are essential for the effective implementation of PBL for the students.

Teachers must plan and create detailed PBL lesson plans and choose appropriate techniques and tools to enhance PBL.

Teachers should set up rubrics and portfolios for assessment.

Good cooperation among the students has to be fostered.

Teachers should not be very strict or pressure the students to carry out their projects.

From time to time, teachers should supervise and monitor students' progress giving them constructive feedback.

PBL should best be implemented in courses when there are no time constraints.

Apart from the suggestions mentioned above, experts and linguists suggest some projects which are as follows:

Activities such as collaborative presentations, discussion roundtables, and jigsaws within a project can ensure interdependence, face-to-face interaction, individual and group accountability, and group processing (Fisher & Frey, 2014).

Web-based projects have been shown to demonstrate a multitude of positive language learning attributes: they result in authentic communication, they are flexible in the subject matter, fostering collaborative learning (Kitao, 2002; Kitao & Kitao, 2001).

Student-produced audio and video products have always been excellent EFL language learning projects that require learners' participation in various ways. Due to the advancement in technology and the drop in cost of audio-video hardware and editing

software, such projects have become an even more powerful teaching and learning method in ESL classrooms.

7. CONCLUSION

PBL emphasizes authentic activities, so it provides the opportunity for learners to experience authentic situations in the learning environment. Using various employability skills such as critical thinking, communication, and creativity, Project-Based Learning is done collaboratively and within groups. PBL incorporates student voice and choice as well as inquiry. It makes them self-regulated and more responsible. Learners tend to gain knowledge and skills to apply them practically. It prepares them to face the challenges of the 21st century. It engages and motivates them to solve problems directly. The current classroom environment promotes a student-centered classroom, so PBL is indispensable to it. The transformation of rote learning to learning by doing engages students in active learning. However, there are pitfalls in every successful method in ESL. PBL is not an exceptional case. It has its drawbacks. It may not be an easy task to implement PBL in all courses. Yet, PBL is not only a powerful learning method for learners, especially the motivated ones, but with careful attention, it can specifically meet the needs of English language learners. In the case of assessing specific standards that address collaboration and communication, PBL is the best fit method. It needs practice, training, and patience from teachers and learners. Students and teachers must plan carefully and adjust unexpected developments throughout the processes to connect them to the world of English with its maximum benefits.

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