

THE IMPLEMENTATION OF PROJECT-BASED LEARNING IN AN ESP CLASS TO IMPROVE READING AND SPEAKING SKILLS

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Abstract

Employing a descriptive qualitative method, the study aims at describing how the implementation of Project-Based Learning (PBL) has improved students' reading and speaking skills in an English for Specific Purposes (ESP) class at Universitas Atma Jaya Yogyakarta. The contextual and real-life situations designed in PBL are expected to equip them better to practice the language and apply the content knowledge. The results of the questionnaires and interviews suggest that the students generally perceived PBL as an effective and creative method in learning. It has also helped them acquire better reading and speaking skills through the accomplishment of a variety of group projects. The improvements cover, among others, vocabulary, grammar as well as fluency and confidence in speaking. It is hoped that this research can provide benefits to researchers and FBE UAJY in general. The results of this study may provide meaningful inputs on the process of teaching and learning activities. Thus, ESP lecturers can find the most appropriate method to improve students' English skills.

Keywords: English for Specific Purposes, Project-Based Learning, reading and speaking skills

Introduction

On average, The Faculty of Business and Economics accepts more than five hundred students every semester. To meet the expectations of registered students, the faculty provides courses that are adapted to the development of science and society. In addition to courses related to Accounting, Management, and Development Economics, the faculty provides an English course as a supporting course.

English is a compulsory subject for first-semester students. All students, both from regular programs and international programs, are required to take English courses to prepare them to read English books in other subjects. The Faculty has collaborated with a book publisher, Wiley and Sons, and a computer company, Apple, so that students can download books from Wiley and Sons via iPad devices. Most of Wiley and Sons' courses and supporting books are in English. English courses are also held to prepare students to be able to perform presentations in English. So, the emphasis on English skills is the ability to read and speak.

Coming from diverse backgrounds, the students also have different English skills. Some students have studied English since they were toddlers; some have studied since elementary, junior high, or high school. For students with low English proficiency, English courses are considered an additional burden that is not needed in their studies at the university. Only later, when students have worked in foreign companies or studied abroad, they realize that English language skills can provide benefits. For example, the students can perform presentations in front of clients and communicate with colleagues from abroad. Thus, to achieve students' goal of reading and speaking in English, Project-Based Learning (PBL) has been implemented in the English classes at the Faculty of Business and Economics.

A number of researchers have implemented PBL in ESP in the business major (Salem, 2017; Syakur, Junining & Sabat, 2020; Mafruudloh & Fitriati, 2020; Rybakova & Kudinova, 2020; Syzenko & Diachkova, 2020). However, in their studies, the effects on reading and speaking skills have not been thoroughly discussed. Thus, this research aims to determine how implementing Project-Based Learning in English class at the Faculty of Business and Economics, UAJY, improves students' reading and speaking skills from the students' points of view. Furthermore, the researchers dig deeper into student acceptance of PBL in English class.

Project-Based Learning

Project-Based Learning, as defined by Thomas (2000), is a model that constructs learning through projects or activities. Although assigning a project or assignment to students is not a new phenomenon in traditional classrooms, PBL is quite different in its application. He also classified the five main criteria of PBL, namely:

1. Projects are the focus of the educational program in Project-Based Learning.
2. Project-Based Learning focuses on questions or situations that inspire students to confront science's fundamental concepts and principles.
3. Projects encourage pupils to think critically.
4. To some extent, students oversee projects.
5. Unlike in schools, projects are made cautious (according to reality).

Meanwhile, according to Kracjik (1999), the PBL approach encourages students to investigate critical and meaningful problems through examination and collaboration. Students ask questions, make predictions, organize exams, gather, and evaluate data, use innovation, build products, and share their ideas. From these definitions, in PBL, students are invited to complete projects or tasks following their learning knowledge. The project or task is designed according to the actual conditions that students will face later in their lives or work.

When applied in a classroom, PBL can provide benefits for both students and lecturers. In this section, the researchers try to explain the advantages of implementing PBL for students. According to Preuss (2002), when students complete their projects, they will reflect on their experiences with the procedures they have encountered in PBL classrooms. Furthermore, students will see links between what they are learning and what is going on in the world outside of school. Good attitudes toward the learning process, work routines, problem-solving abilities, and self-confidence are all positive benefits of PBL (Thomas, 2000).

Similarly, Green (1998) asserted that PBL participants learn more effectively and are more engaged in the learning process than those who do not participate in PBL. Because lecturers work behind the scenes while students work on projects or assignments, this situation can turn students into problem solvers who are active in working on projects. In this situation, students are not just passive recipients of knowledge.

In addition, Krajcik (1999) lists four benefits of PBL for students. For starters, students can gain a comprehensive comprehension of both the topic and the learning process. Second, students can learn to address difficulties together. This type of collaboration or cooperation entails the exchange of ideas to find answers to questions. Students must be able to cooperate with people from all backgrounds to be successful in the real world. Third, this method promotes a self-directed and accountable learning process. Fourth, this strategy actively involves students in a variety of tasks to suit their unique learning demands.

Furthermore, Krajcik (1999) states that there may be three advantages of implementing PBL for lecturers. First, lecturers may find implementing this approach fun, exciting, and motivating, because the teaching process will be different every year. Thus, the lecturers enhance the process of exploring new projects or assignments to deal with new students. Second, in PBL, lecturers continuously receive new ideas so that they become lifelong learners. Third, classroom management becomes simpler because when students are interested and involved in the learning process, the possibility of disciplinary problems will be less.

English for Specific Purposes

English classes held for first-semester students and repeat students at FBE UAJY can be categorized as English for Specific Purposes. Johns (1991) states that English for Specific Purposes is an English learning program based on the proportion that all language learning must be designed for specific learning and use appropriate objectives for certain groups of students. The learning process is designed in such a way for certain groups of students to assist their goals in using the language being studied. According to Orr (2002), English for Specific Purposes can be understood as a branch of language learning that studies and teaches elements of English to help students carry out specific tasks for specific purposes.

English for Specific Purposes is not the same as English for General Purposes, as taught in most English classes. English taught at elementary school, junior high school, and senior high school is an example of English for General Purposes, where students from various attitudes and backgrounds will use English in different situations from the real world. Furthermore, according to Orr (2002), ESP is taught as a language package explicitly made for communities or groups of students with exceptional language needs. The target participants of the ESP class are students who have the same background, who have specific language needs. For example, participants in ESP class at FBE UAJY.

When offered to students in the first semester and repeat students, English for Specific Purposes becomes more specifically labeled with English for Academic Purposes. Students learn English to help with their academic learning. At FBE UAJY, English classes are held to help develop students' reading and speaking skills in English. Students must be able to read economics texts written in English.

Students are also urged to improve their English presentation skills. As a result, lecturers must create learning models that compel students to work in English on a constant basis.

Another characteristic of English for Specific Purposes is originality. According to Johns (1991), originality was considered a student need in the past, which was demonstrated by students and the language used in real life in the context in which students produce and understand English. Then, this originality has developed into discourse originality. Furthermore, that originality has developed again into the originality of strategies and activities in the learning process.

Reading and speaking skills

Of the four English skills, the ability to read and speak in English are the skills that are prioritized to be mastered by students in English classes at FBE UAJY. The ability to read English is prioritized to be mastered to help students understand English textbooks. Meanwhile, speaking skills are required for students to perform presentations in English. Presentations are made not only in other courses but also presentations when students are already working later.

Reading can be the key to success in various activities inside and outside the school context. Good reading skills also provide a solid foundation for students to improve their language and expand vocabulary. The following are the concepts developed through reading, according to Nuttall (1996):

1. The concept of meaning.
2. Meaning transfer from one concept to another.
3. Pass on the author's message to the reader.
4. How do we derive meaning from reading?
5. The role of readers, writers, and texts in the process.

Reading skills will be more challenging in English for Specific Purposes class because students are faced with more specific reading material. Vocabulary and terms encountered will also be more specific, according to the knowledge learned by students. For example, FBE UAJY students will read literature related to economics, accounting, and management more often. Harmer also stated that reading more original articles can reduce students' motivation, and usually, less successful reading experiences cause reluctance to read in the past (Kavaliauakiene & Kaminskiene, 2001). Therefore, teaching reading skills in ESP class challenges the creativity and abilities of lecturers or instructors.

The ability to speak is an ability that requires speakers to be productive in producing words and phrases that ultimately lead to communication. According to Lee and Van Paten (2003), there are three methods to teach speaking skills. First, the teacher provides language knowledge. Second, students produce outputs that are still focused on the correct form. Third, students produce communicative outputs, which are based on assignments. Teaching speaking skills in ESP classes requires lecturers or instructors to create an exciting atmosphere for students to speak English.

Method

This study was a descriptive qualitative study that examined students' perceptions of the implementation of PBL. Qualitative research focuses on the

understanding of the participants, including their opinions, perspectives, and attitudes (Nassaji, 2015). This type of study was considered suitable as it sought to investigate students' opinions and recommendations.

The study participants were students of FBE UAJY taking English courses in Class D. In this class, 25 students were from the Accounting, Management, and Development Economics Study Program, FBE UAJY. They were students who repeated English class. The English class at FBE UAJY consists of 14 meetings. In one semester, students were given two projects. They were asked to make two investment portfolios. In working on the two projects, students were divided into small groups. Students were also required to read reading materials such as newspaper articles, journals or books, to support data and information in making investment portfolios.

Questionnaires were given to obtain information about student responses to the implementation of Project-Based Learning in English classes. The questionnaire consists of two parts. In the first part, participants were asked to choose their answer from four Likert-scale options between "strongly disagree" to "strongly agree." In the second part, participants were asked to answer open-ended questions regarding their input on implementing Project-Based Learning in English classes. The questionnaire was given at the last meeting of the English class. Before distributing the questionnaire to the participants, the researchers explained how to fill out the questionnaire. In addition, participants were allowed to ask each question item in the questionnaire. Questionnaires were distributed to the class, and participants took 15 minutes to complete them. The questionnaire was returned to the researchers on the same day, and the return rate was 76%.

The interview process was carried out after the participants were selected based on the questionnaire responses. Four participants were selected to participate in the interview session. All interview participants were willing to participate in the interview to carry out the interview process. Each interview session lasted about 14 minutes, and each interview session was audio recorded. Then the audio recordings of the interviews were transcribed and analyzed by the researchers.

Findings and discussion

Implementation of PBL

This study used questionnaires and interviews to obtain student responses regarding implementing Project-Based Learning in the English class. Table 1 shows students' responses regarding the implementation of Project-Based Learning in English classes.

Table 1. Students' responses regarding the implementation of PBL

No.	Questions	Strongly disagree	Disagree	Agree	Strongly Agree
		1	2	3	4
1.	I consider that the ability to read and speak English is essential.	0%	15.8%	5.3%	78.9%
2.	I enjoy completing projects given in English class.	0%	5.3%	89.4%	5.3%
3.	The first project (family financial planning), which was carried out in the English class, followed the knowledge I had learned.	0%	5.3%	73.7%	21%
4.	The second project (38 billion Rupiah investment portfolio), carried out in the English class, was according to the knowledge I had learned.	0%	15.8%	57.9%	26.3%
5.	The first project (family financial planning) that I did in English class motivated me to read articles, journals, and books in English that were relevant to the topic I was working on.	0%	26.3%	57.9%	15.8%
6.	The second project (38 billion Rupiah investment portfolio), done in English class, motivated me to read articles, journals, and English books relevant to the topic I am working on.	0%	21%	63.2%	15.8%

As shown in Table 1, the data analysis showed that students positively responded to the implementation of PBL in English classes. A total of 18 students (94.7%) were happy to complete the projects given in the English class. When asked about the relevance of the project topic with the knowledge they have gained in the class, the students also indicate high relevancy as shown in questions number 3 and 4. The projects have also increased their motivation in reading any relevant literature in helping them accomplish the project, as indicated by the responses to questions number 5 and 6.

From the interviews, the results indicate that students had a positive attitude towards the implementation of PBL in the English class. It was also found that most of the students had not had any experience in implementing PBL in their classes. Thus, for them, the method offered novelty and they expressed that this was an engaging, sound, unique, and creative experience. This was a new thing where they could learn English based on real situations, not just theory, and there was something they learned. The previous findings are outlined in the excerpt below.

I think the class was unique and creative. You made the class not only theoretical but also useful. (R4 – interview)

Another participant, R1, also addressed how the topics were applicable and relevant to their context.

It's interesting. I personally can develop my English proficiency, especially my ability to speak English in my daily life. One may be good at reading or translating, but it may be challenging for him to speak in real-life situations. (R1 – interview)

The results of this study support previous research conducted by Blumenfeld et al. (2001), which stated that by working on projects in class, students could conduct a long and in-depth study of a question, and they can produce something, which in turn has the potential to motivate students and help them to understand better the knowledge they are learning. However, it should be noted that the projects given must keep students' learning motivation high. As happened in English class D, the challenge level of the second project was higher than the first project. Thus, students remain motivated to carry out activities that support completing the projects they are working on. This can be seen from classroom observations where students remain actively involved in class and groups.

These findings are also consistent with those of Shin (2018), who found that PBL increased students' willingness to learn English, encouraged them to pay more attention in class, and helped lecturers ensure that activities were applicable to real-life situations. Wongdaeng & Hajihama (2018) also state that PBL increases learners' enthusiasm to learn English by allowing them to participate actively in the learning process.

Improvements in reading and speaking skills

In addition to students' general perspectives on the implementation of PBL, their responses in the questionnaires show how it has affected their reading and speaking ability.

Table 2. Students' responses on the improvement in reading and speaking ability

No.	Questions	Strongly disagree 1	Disagree 2	Agree 3	Strongly Agree 4
7.	My English vocabulary has improved after reading English articles, journals, and books to support the projects I am working on.	0%	15.8%	63.2%	21%
8.	My ability to understand reading in English improved after reading articles, journals, and books in English to work on projects in class.	0%	26.3%	52.7%	21%
9.	The presentations I do in class improve my speaking ability in English.	0%	5.3%	42%	52.7%
10.	My confidence in speaking English increases after I work on projects in class.	0%	10.5%	52.7%	36.8%

No.	Questions	Strongly disagree 1	Disagree 2	Agree 3	Strongly Agree 4
11.	My fluency in speaking in English improved after doing presentations.	0%	15.8%	57.9%	26.3%
12.	My choice of vocabulary in speaking English developed after I worked on projects in class.	0%	10.5%	79%	10.5%
13.	My grammar knowledge for English improves after working on projects in class.	0%	10.5%	68.5%	21%

Table 2 shows students’ responses on the improvement in reading and speaking ability after attending English classes that implement PBL. In reading skills, the improvement covers some aspects, such as vocabulary and reading comprehension. Moreover, students also stated that the implementation of PBL has also enhanced their speaking skills, particularly their confidence, fluency, vocabulary, and grammar. Students’ confidence and vocabulary seem to be the most significant among the other aspects.

Based on the results of the interview, students responded that their reading skills improved because they had to read three passages in English for each project. Students also stated that their speaking skills improved because they were required to conduct discussions and presentations in English. In addition, they also stated that their English vocabulary and grammar improved. The engagement with the topic and the oral presentations have also increased not only the students’ understandings of materials but also confidence in speaking as seen in the excerpts below.

I think it has increased my reading skills, for example when reading the money models. In speaking, I was afraid to speak. But now, I am more confident after I experienced delivering presentations. (R3 – interview)

It has increased my vocabulary level and grammatical competence. We are now confident as we know what we’re talking about. (R4 – interview)

The above findings corroborate what Zare-Behtash & Sarlak (2017) found. They discovered that PBL encouraged students to speak English more when working on projects. Lee and Van Paten (2003) also suggest that speaking should be taught by providing students with communicative outputs, which can be accommodated by PBL. However, Dewi (2020) suggested a challenge in measuring the improvement of students’ reading and speaking skills. It certainly needs a more transparent and meticulous procedure to clearly capture the students’ progress.

Conclusion

Based on the results of this study, the implementation of Project-Based Learning has improved the reading and speaking skills through the accomplishment

of a variety of projects. It became possible as students experienced learning in English classes which prepare them to use the language contextually. In general, students showed a positive response to the implementation of PBL. Projects that students work on help them improve their reading skills in English as they are required to read English reading materials and study them individually and in groups. Furthermore, these projects also help students improve their speaking skills in English because they had to discuss and make presentations in English.

It is hoped that this research can provide benefits to researchers and FBE UAJY in general. The results of this study may provide meaningful inputs on the process of teaching and learning activities in the English class. Thus, ESP lecturers can find the most appropriate method to improve students' English skills. The researchers suggest that empirical research be conducted to investigate further the correlation between the implementation of Project-Based Learning and the level of improvement in students' English skills. The researchers recommend that further studies focus on determining the projects in English classes that implement Project-Based learning.

References

- Aldabbus, S. (2018). Project-based learning: Implementation & challenges. *International Journal of Education, Learning and Development*, 6(3), 71-79. www.ejournals.org
- Andrews, J., & Rapp, D. (2015). Benefits, costs, and challenges of collaboration for learning and memory. *Transnational Issues in Psychological Science*, 1, 182-191. Doi:10.1037/tps0000025
- Blumenfeld, C., Soloway, E., Marx, W., Krajcik, S., Guzdial, M., & Palincsar, A. (2001). Motivating project-based learning: Sustaining the doing, supporting the learning. *Educational Psychologist*, 26(3 & 4). Lawrence Erlbaum Associates, Inc, pp. 369-398.
- Calhoun, E.F. (1994). *How to use action research in the self-renewing school*. Alexandria, VA: Association for Supervision and Curriculum Instruction.
- Collins, J. (2009). *Higher-order thinking in the high-stakes accountability era: Linking student engagement and test performance*. Unpublished doctoral dissertation, University of Missouri.
- Dewi, M.S. (2020). The effect of project-based learning and learner autonomy on students' speaking skills. *Journal of Educational Research and Evaluation*, 4(1), 82-89. <https://ejournal.undiksha.ac.id/index.php/JERE>
- Frank, M., Lavy, I., & Elata, D. (2003). Implementing the project-based learning approach in an academic engineering course. *International Journal of Technology and Design Education*. Kluwer Academic Publishers, pp 273-288.
- Gay, L.R., & Airasian, P. (2003). *Educational research: Competencies for analysis and application* (7th Ed.). Columbus, Ohio: Merrill Prentice Hall.
- Glickman, C.D. (1992). The essence of school renewal: The prose has begun. *Educational Leadership*, 50(1), 24-27.
- Green, A. M. (2015). *Project-based-learning: Moving students toward meaningful learning*. ERIC Database, ED422466.
- Johns, A. M. (1991). English for Specific Purposes (ESP): Its history and contributions. *Teaching English as a Second or Foreign Language* (2nd Ed., edited by Marianne Celce-Murcia). New York: Newbury House, pp 67-80.

- Kavaliauskiene, G., & Kaminskiene, L. (2009). Proficiency in reading, writing, and translation skills: ESP aspect. *Vertigo Studios*, pp 171-184.
- Krajcik, J., Czerniak, C., & Berger, C. (1999). *Teaching science: A project-based approach*. McGraw-Hill College, New York.
- Lee, J., & VanPatten, B. (2003). *Making Communicative Language Teaching Happen* (2nd ed.). New York: McGraw Hill
- Mafruudloh, N., & Fitriati, R. (2020). The effect of project-based learning to the students' speaking ability. *Celtic: A Journal of Culture, English Language Teaching, Literature and Linguistics*, 7(1).
- Nassaji, H. (2015). Qualitative and descriptive research: Data type versus data analysis. *Language Teaching Research*, 19(2), 129–132. <https://doi.org/10.1177/1362168815572747>
- Nuttal, C. (1996). *Teaching reading skill in foreign language*. (2nd Ed.). Oxford: Heinemann.
- Orr, T. (2002). The nature of English for specific purposes. *English for Specific Purposes* (edited by Thomas Orr). Alexandria, Virginia: Teachers of English to Speakers of Other Languages, Inc., pp. 1-6.
- Preuss, D. A. (2002). Creating a project-based curriculum. *Tech Directions*, 62(3), 16–19.
- Rybakova, E., & Kudinova, T. (2020). Project activity in teaching ESP. *Advances in Economics, Business and Management Research*, 128.
- Salem, A. (2017). Engaging ESP students with brain-based learning for improved listening skills, vocabulary retention and motivation. *English Language Teaching*, 10(12). <http://doi.org/10.5539/elt.v10n12p182>
- Shih, W., & Tsai, C. (2017). Students' perception of a flipped-classroom approach to facilitating online project-based learning in marketing research courses. *Australasian Journal of Educational Technology*, 33(5), 32-49. <https://doi.org/10.14742/ajet.2884>
- Shin, M. (2018). Effects of project-based learning on students' motivation and self-efficacy. *English Teaching*, 73(1). <http://doi.org/10.15858/engtea.73.1.201803.95>
- Syakur, A., Junining, E., & Sabat, Y. (2020). The implementation of project-based learning (PBL) model towards the result student's TOEFL in 7th semester of Brawijaya University. *Journal of Development Research*, 4(1), 41-46. <https://doi.org/10.28926/jdr.v4i1.97>
- Syzenko, A., & Diachkova, Y. (2020). Building cross-cultural competence in a foreign language through technology-enhanced project-based learning. *Amazonia Investiga*, 9(27). <http://dx.doi.org/10.34069/AI/2020.27.03.45>
- Thomas, J. W. (2000). *A review of research on project-based learning*. Retrieved 18 January 2018 from <http://www.autodesk.com/foundation>
- Wongdaeng, M., & Hajihama, S. (2018). Perceptions of project-based learning on promoting 21st century skills and learning motivation in a Thai EFL setting. *Journal of Studies in the English Language*, 13(2), 158-190. <https://so04.tci-thaijo.org/index.php/jsel/article/view/113931>
- Zare-Behtash, E., & Sarlak, T. (2017). The effect of project-based learning (PBL) on the components of speaking ability of Iranian EFL beginner learners. *Journal of Applied Linguistics and Language Research*, 4(3), 119-130.