JALT2023 • GROWTH MINDSET IN LANGUAGE EDUCATION

NOVEMBER 24-27, 2023 • TSUKUBA, JAPAN

Piloting PBL in a First-Year University Global Issues Class

Robert Moreau

Meiji University

Reference Data:

Moreau, R. (2024). Piloting PBL in a First-Year University Global Issues Class. In B. Lacy, R. P. Lege, & P. Ferguson (Eds.), *Growth Mindset in Language Education*. JALT. https://doi.org/10.37546/ JALTPCP2023-35

In this paper I discuss the introduction of project-based learning (PBL) in a first-year, content-based, global issues class at a Japanese university using a five-stage framework proposed by Stoller and Myers (2020). To illustrate how the framework was used, a detailed description of the processes my students engaged in during each stage is discussed followed by the results of two questionnaires completed by students. Connections between PBL and autonomous learning are highlighted. Scaffolding ideas provided for the class as well as ideas for improving the class are also suggested throughout the paper. I conclude with possible avenues for future research. It is my intention that in sharing my own, and my students' experiences, that this paper can be a practical guide for teachers looking for ideas for implementing PBL in their classrooms.

本稿では、Stoller and Myers (2020)が提唱した5段階のフレームワークを用いて、日本の大学の1年次での内容重視のグローバル・イシューを扱った授業におけるプロジェクト・ベースド・ラーニング (PBL) の導入について論じる。当該フレームワークがどのように用いられたかを説明するために、各段階において学生がどのようなプロセスに取り組んだかを詳述し、さらに学生が記入した2つのアンケートの結果について述べる。本稿は、PBLと自律学習の関連性を強調し、加えて、授業に提供された足場作りのアイデアや、授業を改善するためのアイデアを提案する。最後に、今後の研究の可能性について述べ、本稿による経験の共有が、教室でPBLを実施するための実践的なガイドとなることを目指している。

Project-based learning (PBL) can be an effective way to create student-centered learning opportunities. Through the process of learning by doing, PBL provides students with a means by which they can actively engage in their learning processes as opposed to passive learning (Gras-Válezquez, 2021). As they complete projects, students

not only develop their communication skills in the target language, but also grow as autonomous learners through the choices they need to make involving the researching, gathering, and organizing of information. Additionally, in the process of doing these tasks, PBL can involve students learning both individually and collaboratively as they engage in a combination of language and content learning activated while creating a final product over a period of time extending for more than one class period (Stoller, 2006, as cited in Gras-Válezquez, 2021).

To highlight the numerous benefits for students, I describe the introduction of project-based learning (PBL) in a Japanese 1st-year university global issues classroom. Using the five-stage framework proposed by Stoller and Myers (2020), this guide offers practical advice for teachers, based on both my own experiences and those of my students. The five stages are: 1) preparation, 2) gathering information, 3) processing information, 4) display, and 5) reflection. I begin by describing the framework (Stoller & Myers, 2020) then provide an overview of the context of the two class projects. Then I discuss the students' views of PBL based on pre- and post-task questionnaires. I conclude the paper with suggestions and ideas for further research.

Five-Stage Framework for Project-Based Learning

First Stage

The preparation stage, in which the students developed their first research ideas, covered the first two lessons of each unit. During this stage, students picked a global issue and created mind maps to organize their ideas about their topics. Because many students indicated that they had not created mind maps before, I showed some examples and had the students watch YouTube videos, which can be a good source for learners at various levels. I also provided students with examples of research goals and model research questions to assist them as they began finding information.



Using their mind maps as a guide, students discussed their first ideas and shared vocabulary with other students. They were encouraged to add information to their mind maps as they shared their ideas, and to write down any relevant questions they had about their topics. Subsequently, students generated research questions to begin gathering background information on their global issue.

Second Stage

The information-gathering stage extended over three weeks, during which time students conducted research and created key-point, memo-style notes to share information with their peers. The research and note-taking was done as homework to maximize class time. This afforded the opportunity for students to practice their explanations before class, which was recommended.

To assist students, sample notes were provided, highlighting the benefits of clear well-organized, memo-style note-taking. Also, the benefit of keeping notes visual for their interlocutors to better understand the main points was discussed. Students were encouraged to primarily use English sources for their research, but they could also use sources in their native language if they lacked confidence. Other suggestions for assisting students with their research will be discussed in a later section below.

In each class, students had at least two discussion sessions, approximately five minutes each per topic, to discuss their ideas. I found that these sessions can provide teachers with opportunities to introduce a variety of supplementary activities based on the needs of the class. For example, I introduced activities in which students took notes while listening to a partner. They then recounted the information back to the presenter, giving them a meaningful listening activity, as well as an opportunity to check their understanding of their partner's content. Another activity had students move away from simply presenting information to each other by having them discuss topics on a more personal level, such as which of the topics discussed seemed to have the strongest connection to the students' home country or age group. Finally, students could explore the meaning of new vocabulary together if enough time remained.

Third Stage

The third stage, which ran concurrently with the information-gathering stage, was for processing information, which can involve activities such as journaling and outlining. After gathering information, making notes and engaging in discussions with their peers, the students were given about 20 minutes in each class to work on their 150 to 300-word

research journal, which could be finished for homework if necessary. This activity gave the students a chance to reflect on and write about their findings. I gave three prompts for the journal: a summary of the week's key points, a short reflection on their findings, and their goals for the next week. Students were encouraged to think about how their current findings connected to their previous research in order to build their own research story connected to completing their projects. In the final week of the processing stage, students were given time to work on any final revisions for organizing information they had already collected for their projects instead of having to write a new research journal.

I created a learning log in Microsoft Word for students to document their progress during stages two and three. This log allowed them to insert digital pictures of their notes, write research journals, and track the sources they used. The web addresses of these sources were included on the logs as clickable links. These logs, completed by the students at home, created a useful record of the students' progress throughout their work on the project, and also could be easily submitted to the teacher upon completion of their project. Periodic, informal checking of notes was conducted in class as students shared information. Feedback and advice for improvement were provided when necessary. I found this tool to be very useful and would like to recommend that, or something similar, for teachers who might want to incorporate PBL in their classes.

Fourth Stage

The penultimate stage of the framework is what Stoller and Myers (2020) called the display stage where students present their work. For the first project, students did a peer review of another's work. I provided guidelines to help students give feedback to each other. For the second project, the students gave poster presentations.

An activity I call "project talk" was conducted for the blog writing project, which is described in the next section. In this activity students made a quick mind map summary of their project and then presented the information to other students within a time limit. Students engaged in one-on-one conversations to maximize the number of participants speaking and listening simultaneously. This active, mingling activity gave students an extra opportunity to discuss their written projects orally and allowed them to review their work before moving to the next stage.

Fifth Stage

For the reflection cycle, I followed Stoller and Myers' (2020) guidelines of having students reflect not only on the product they had completed, but also on their



development as language learners. To allow ample time for writing the reflections, this was given as homework with question prompts as a guide. The reflection form was provided as a Microsoft Word file, which students could both download and submit online. See Appendix A for the self-reflection handout.

An alternative way to use this reflection activity is to split it into two sections, a preparatory section in which students create mind-maps relating to the reflection prompts, and then the actual written section. The mind map section could be used as an additional spoken activity in which students share stories of their development. The mind maps could also provide a way for students to organize their thoughts before writing their reflections.

The Projects

I felt that it was important for the projects introduced to be simulations of possible real-world projects. Therefore, for the first project, students wrote individual blog posts using Microsoft Word, which was chosen for its ease of use. For their second project, the students created poster presentations in groups of three or four. Each project took six weeks from start to finish.

I selected a blog post for the first project because that allowed for creativity, student choice, and did not burden students with a strict academic style of writing. Students worked independently for this first project so that they could easily make their own research decisions and work at their own pace. Regarding the research theme, the students chose a human rights issue, as the Universal Declaration of Human Rights was the first topic covered in class. The rationale was that as students shared and discussed their research findings each week, they would have a common frame of reference while still retaining a degree of freedom in choosing their topics.

For the second project, students worked in groups of three or four and created a poster presentation based on a global issue of their choosing. I decided to do this project next because it allowed students to build on the research and note-taking skills they had developed while working on the blog project, with the extra dimension of negotiating how to divide and present the research, as well as how to best organize the information on their posters. Also, in contrast to the first blog-writing project, the display stage of this project emphasized spoken communication. I placed the students in groups to ensure a balance of English levels and nationalities. For the poster presentation project students could choose to make posters of their own design as long as the poster papers used had a minimum size of A1.

Context

The class discussed in this paper was a 1st-year, global issues course at a large university based in Tokyo, Japan. The class met for a total of 14 weeks, 12 of which had time reserved for doing the activities involving the two projects being discussed in this paper. These classes, 100 minutes in length each, were organized as follows; during the first 30 minutes of class time, students warmed up and developed their vocabulary and listening ability in English by completing worksheets and having discussions in small groups based on global issue themed videos. The videos were selected from various university and news organization pages on YouTube. The worksheets were created by the teacher. For the remaining class time students did activities connected to their project work.

The Students

The English level of the majority of the students in this course was around the B2-B1 level of the Common European Framework of Reference for Languages (CEFR), with a small minority at the C1 level. There were 32 students enrolled in the class, of whom 30 participated in the study. Thirteen participants were male, 15 were female, and two chose not to indicate their gender. The make-up of the class by nationality included 16 Japanese students, six Korean students, four Chinese students, two Singaporean students, one German student, and one person from Hong Kong. All participants voluntarily gave consent to use data from the questionnaires and self-reflections for the purposes of this paper. Permission to use student data was granted by the relevant department of the university where this class was held. All student data in this paper are presented anonymously, with pseudonyms used in place of the students' real names.

Questionnaires

Receiving feedback from students is important when considering ways to create and improve learning opportunities in the classroom; thus, students completed two questionnaires. The pre-task questionnaire provided background information such as the students' nationalities. It was also used to learn about the students' experience with PBL as well as their perceived confidence in speaking about global issues in English. The second questionnaire dealt more specifically with the students' attitudes towards PBL, and their development as a result of working on the projects. Both questionnaires are provided in Appendix B.



In the following section, selected student answers will be examined and connections between PBL and certain aspects of language learning found in the literature, specifically autonomous learning, will be discussed. The students answered all of the questions in English. In reporting the student comments, I corrected the spelling errors to allow for ease of reading, but did not correct the grammar so as to preserve the students' voices.

Student Responses

Thirty students completed the pre-task questionnaire with 24 students reporting that they preferred working independently; yet on the post-task questionnaire, their answers differed, showing a change in attitude. For the question, "Which project did you like better, the first blog project (individual), or the second poster project (group)?" four students preferred the individual project while 22 students preferred the group project. This may be attributed to individual differences. For example, Katie reflected:

While I enjoyed the group project and had lovely group members with whom I could work and communicate well, I still preferred the first project. I believe this might be simply due to personal preference, as I tend to prefer individual projects over group projects.

Student comments regarding their preference for the poster project were interesting in that they reveal some benefits for introducing group projects into a PBL syllabus. Seventeen of the 26 students stated that they enjoyed the opportunities that group work gave them to share information with each other. Richard commented, "It is good for me to cooperate with other group mates. I could expand my perspectives." Carol also shared this sentiment, "By discussing about our theme with my group members, it really helped to understand deeply compared to Blog project." The advantages of group-based projects were also highlighted by Little, Dam, and Legenhausen (2017) who pointed out that research in cooperative learning showed that "groups of equally inexperienced learners are capable of performing tasks that no group member could perform alone" (pp. 12-13).

That group projects require some negotiation was also revealed in student comments. Janice reported, "I liked the group poster project because we can share the roles. Unlike personal blogs where I gathered all the information myself, I was able to create posters from more aspects and make presentations that gave a deeper understanding of the topic." This indicates that students are aware that PBL can engage them in tasks that go beyond language learning, such as employing real-life skills to complete their work such as deciding which tasks each student will be responsible for in completing a project. In connection to this I would like to point out that students were encouraged to work on

their projects using English as much as possible during class time and to only rely on their native language when they reached an impasse. This view is supported by Little, Lam, and Legenhausen (2017), who explained that "producing the [target language] in speech or in writing—is especially important because it requires deeper language processing and greater mental effort than input" (p. 14).

As fostering learner autonomy is a key aspect of PBL, the question, "To what degree do you feel that the two projects helped in your development as an independent learner?" warrants examination. Janice stated:

Gathering information and creating blogs and posters with myself and my peers was a very new experience for me as an independent learner. It was challenging at first, as I was not sure how to approach the topics I had set up to make the learning more fulfilling. However, through the two projects, I gained a perspective that allowed me to capture many angles of things that will be useful in my life in the future.

In her reflection, Sybil highlighted new skills being used through her experience with PBL, "I learned how go get some information in foreign materials. I also learned the importance of showing statistic materials and images to support my ideas. It is essential to help people to understand easily." Another question asked students for their views on whether doing independent research increased their interest in global issues, of which 20 out of 26 students chose "very much," which contrasts sharply with zero students indicating that they preferred to learn about global issues from a textbook.

In terms of the students' perceived improvements to their English abilities through PBL, 18 out of 26 students selected "agree" or "strongly agree" on the Likert scale. A quick analysis of the students' written responses highlights skills they feel they specifically developed: speaking (16 students), writing (five students), vocabulary (six students). Students also indicated that they improved their research skills. In her response, Betsy wrote, "I think these projects have improved my writing skills and my ability to collect information in English." Patsy makes a connection between research and English development, "Because as I research the information, I have to make a summary by myself and put my thinking in the project. While [doing] this process, I thought that my English skills have improved."

Regarding the question that appears on both the pre- and post-task questionnaire, "To what extent are you confident with speaking about global issue topics in English?" 16 out of 30 students chose one of the three lowest ratings on the pre-task questionnaire, including four students choosing the lowest rating. On the post-task questionnaire however, only one student selected the lowest rating and 24 out of 26 students



indicated a score of four or more on the six-point Likert scale. This acknowledgement of confidence in speaking can be seen as an indicator of increased student motivation (Hashimoto, 2002).

Finally, students answered a question about the framework. They were given a list of the stages and asked, "How helpful was this method in developing your ideas and completing your project?" Only one student answered that it was "not so helpful" while 16 students out of the 27 answered that it was "very helpful." It would be interesting to follow up on why the students made the choices they did. However, when making the questionnaire, I felt that the students were already being asked to write a lot in other sections and it would not be appropriate to ask them for more information at that time.

Discussion

As can be seen from the information written above, the Stoller and Myers (2020) framework can give clarity to the implementation of PBL, and students responded well to the challenges of doing PBL activities. PBL provides students with opportunities to discover things for themselves, thus fostering autonomous learning. Therefore, depending on the class level, teachers have the choice to opt for a minimal set of guidelines, even while working within the framework discussed in this paper, to encourage students to further personalize their projects (Barfield & Nakayama, 2023).

Although the class discussed in this paper dealt specifically with global issues, any class in which students are involved in working on research projects could organize projects using the stages described above. However, there can be difficulties involved for the students.

The information gathering stage can be challenging for students. If this is the case, students can be instructed on how to come up with specific search terms for a given topic in order to create context, thus narrowing a search, and a short classroom activity could be introduced to practice this together. Another suggestion is to allow students to use English prompts with an application such as ChatGPT. Artificial intelligence programs can provide students with useful vocabulary, as well as other information such as the names of organizations connected with the issue. Students need to be made aware that this is only a starting point and that they would still need to do further research to ensure the legitimacy of the information. If the students are of a lower level they can also be instructed as to how to add a CEFR level to their prompt in order to filter the ChatGPT response to a level they can more easily understand.

Students can also face challenges when trying to read difficult articles. In this case I have shown my students how translation software might be used sparingly. For example, using translation software with only the introductory paragraph of an article can give the students a general idea of the content of that article before they continue to read it in English. Another suggestion is to dedicate some class time to various reading strategies, such as predicting, skimming, and scanning, which can assist students when they are looking for articles and help them find the most pertinent information in the articles they choose. In classes where students lack the ability to read authentic texts, the teacher may choose to introduce texts adapted to the level of the class.

In stages two and three of the frameworks, students actively speak about their research to each other and this can be difficult, especially at lower levels. In this case, a kind of vocabulary-based warm-up can be introduced. Students work with a partner and toss a virtual "invisible ball" to each other. The first person can say a vocabulary word. The partner then says the translation in their native language, or if unable to understand the word, can ask for a translation. After students work with only words, they can move up to sharing sentences. Another warm-up idea is for students to take a few minutes to summarize the key points of their research into a mind map and then give short 1-minute summaries to various partners before speaking at length about their topics.

Issues

Activities rarely proceed without some issues, and introducing PBL in a classroom is no exception. In their responses to the question, "Did you encounter any problems while doing the individual or group projects?" five students indicated that they had experienced difficulties, while 21 indicated that they felt there were no troubles to report.

One of the issues experienced by the students dealt with a group member dropping out of the class. One student commented about having difficulty with the projects due to English ability. A further two students indicated that they had had problems in creating posters. I consider that these issues could be learning points for these students. The group that lost a student, for example, did very well in producing a poster presentation on par with the other groups in the class. As far as issues with English ability and difficulties in producing the final product, having an awareness of such problems, and being able to write about them in a reflection canbe the first step to improvement.

Regarding the question about difficulties itself, I feel that it could be improved by allowing the students a broader range of choices, for example by asking if there were major or minor problems. The possibility exists that students were reluctant to mention



any difficulties that they felt they might not have been serious enough to warrant an affirmative answer.

Conclusion

Project-based learning is an effective and adaptable way of engaging learners in activities that can foster their development as independent learners, and the framework proposed by Stoller and Myers (2020) can provide an effective way of introducing PBL activities in a classroom. The experiences described in this paper are specific to one particular classroom context; however, many forms of scaffolding and guidelines can be introduced at each stage of the framework depending on the students' level of proficiency in English.

Classes in which PBL has been implemented may also offer various opportunities for further research. For example, a particular area of student development, such as discussion or reading skills, can be focused on. Also, student development within collaboratively completed projects might be compared to projects worked on individually. Finally, more research could be done in exploring the connection between project-based work and student autonomy in regards to the learners taking more control of their learning process and development by introducing systems for self-evaluation and self-reflection to be done throughout each stage of the project.

Bio Data

Robert Moreau is an assistant professor at Meiji University. His research interests include academic writing, critical thinking, and autonomous learning. His current focus is on project-based learning, which he has presented on internationally. <r_moreau@meiji.ac.jp>

References

- Barfield, A. & Nakayama, A. (2023). Collegially exploring engaged meaningful learning: Stories, perspectives, dialogue, and issues. *The Learner Development Journal*, *7*, 128-156. https://doi.org/10.37546/JALTSIG.LDJ7-8
- Gras-Velázquez, A. (Ed.). (2021). *Project-based learning in second language acquisition: Building communities of practice in higher education*. Routledge.
- Hashimoto, Y. (2002). Motivation and willingness to communicate as predictors of reported L2 use: The Japanese ESL context. *Second Language Studies*, *20*(2), 29-70.

- Little, D., Dam, L., & Legenhausen, L. (2017). Language learner autonomy: Theory, practice and research. Multilingual Matters.
- Stoller F. L. (2006). Establishing a theoretical foundation for project-based learning in second and foreign language contexts. In G. H. Beckett & P. C. Miller (Eds.), *Project-based second and foreign language education: Past, present, and future* (pp. 19-40). Information Age Publishing.
- Stoller, F. L., & Myers, C. C. (2020). Project-based learning: A five-stage framework to guide language teachers. In A. Gras-Velázquez (Ed.), *Project-based learning in second language acquisition: Building communities of practice in higher education* (pp. 25-47). Routledge.

Appendix A

Question Prompts for the Self-Reflection Form

- 1. Reflect on your week-to-week performance for this cycle. How did you do in making notes, sharing research, speaking in English, and log writing? Also comment on the full-class discussions.
- 2. Reflect on your final website product. How did you do in preparing the website? What did you do well? What problems did you have? How did you like the second cycle (group websites), compared to the first one (individual blogs)?
- 3. Reflect on your development during this cycle. How have your English, research, and other skills developed? What was the most interesting thing for you to learn about? Why? What would you like to learn more about?
- 4. Goals for the future. What would you have done differently to make this project better? What skills do you think you need to improve on? What actions can you take to make these improvements?



Appendix B

Results of the Two Questionnaires

Table B1

Selected Results of the First Questionnaire, Given Before the Start of the First Project, N=30

Question 1	Which of the following is true for you? You can choose more than one answer if applicable.							
Answer choices	I have done projects in school in my native language		I have done projects in school in English		I have never done projects as part of my school work			
Results	n = 14		n = 14		n = 10			
Question	To what degree do you like working independently?							
2	1 represents not at all, 5 represents very much							
Scale	1	2	3	4	5	6		
Results	n = 0	n = 3	n = 5	n = 10	n = 6	n = 6		
Question 3	To what extent are you confident with speaking about global issue topics in English? 1 represents not at all, 5 represents very much							
Scale	1	2	3	4	5	6		
Results	n = 4	n = 9	n = 3	n = 6	n = 4	n = 4		

Table B2Selected Results of the Second Questionnaire, Given After the Completion of the Second Project. N=26

Question 1	Which project did you like better, the first blog project (individual), or the second website project (group)?							
Answer choices	Individual Project			Group Project				
Results	n = 4			n = 22				
Question 2	To what degree do you feel that the two projects helped in your development as an independent learner? 1 represents not at all, 5 represents very much							
Scale	1	2	3	4	5	6		
Results	n = 0	n = 1	n = 1	n = 4	n = 13	n=7		
Question 3	Do you feel that your English skills improved as a result of working on these projects?							
	1 represents not at all, 5 represents very much							
Scale	1	2	3	4	5	6		
Results	n = 0	n = 1	n = 1	n = 6	n = 11	n=7		
Question 4	Do you feel that doing independent research on a topic of your choice increased your interest in Global Issues topics more than if you just learned about them from a textbook assigned by the teacher?							
Scale	I prefer to learn from a textbook	Not much	A little	Very much				
Results	n = 0	n = 0	n = 6	n = 20				



Question 5	In this class, we followed a set step-by-step method in developing our projects: A) Mind-mapping to get first ideas B) Researching and sharing research notes with others C) Writing short weekly journals about your research D) Making a final product (blog, poster) E) Reflecting on the project To what extent was this method of working in this class helpful in developing your ideas and completing your project?					
Scale	Not so helpful	A little helpful	Helpful	Very helpful		
Results	n = 1	n = 2	n = 7	n = 16		
Question 6	Did you encounter any problems while doing the individual or group projects?					
Scale	Yes	No				
Results	n = 5	n = 21				
Question 7	To what extent are you confident with speaking about global issue topics in English? 1 represents not at all, 5 represents very much					
Scale	1	2	3	4	5	6
Results	n = 1	n = 1	n = 0	n = 10	n = 9	n=5