

Students' Perspectives on Project-Based Learning Integration into Flipped Critical Listening Course during COVID-19 Pandemic: An Example from Indonesia

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Abstract

This research investigates students' perspectives on the integration of project-based learning into a flipped critical listening course. Twenty-eight students were involved in this study. They were the fifth-semester undergraduate students from a public university in Central Java, Indonesia, taking a critical listening course. This study used mixed-method analysis and the data collection instruments were online questionnaires and interviews. The findings of this study show that the students' attitudes in implementing project-based learning and flipped classrooms were positive even though they also reported some challenges. This finding implies that higher education institutions need to better promote project-based learning as it has positive impacts on EFL undergraduate students. Future studies should take a consideration of a more longitudinal research-based approach, such as ethnographic based or participatory classroom action research. The focus is to look at the classroom dynamics and factors that affect students' success and failure to complete the designed projects with result-based parameters.

Keywords: EFL, Critical Listening, Flipped Classroom, Project-Based Learning

Introduction

Project-based learning (PBL) is a teaching method where students learn through active analysis of real-world problems. With PBL, students identify the aim of creating a product and build a project management strategy. Often, teamwork is an essential component of PBL. Dewey (1986) argued that the project method was a widespread practice for teachers and students. He added significance to how the instructor should be the supervisor of the teaching and learning process. The teacher directs the students towards the goals based on their needs and the curriculum's objectives since all learning takes place in a specific place and time. Dewey (1986) also claimed that providing a target means thinking in a way that makes meaning. Under this concept, students build strategies by analyzing problems, developing experiments, and constructing conclusions (Pacheco et al., 2020).

Due to the outbreak of the COVID-19 pandemic, academic institutions have been forced to suspend face-to-face teaching and learning practices to prevent the spread of the virus. Accordingly, various measures were imposed, and emergency remote teaching was implemented, including in Indonesia. However, due to its unanticipated and unexpected nature, such changes were quite drastic. In this study, I would like to analyze how the PBL and flipped classroom approach could fit into the setting where students were at home during the COVID-19 pandemic.

Flipped classes allow students to utilize the recorded content online, apply new information on individual or group activities before and after class, and work at their own pace on these activities. Therefore, in-class time can be used to do discussions with the guidance of

the teacher. Since the flipped classroom strategy goes along with technology development (Chua & Islam, 2020; Garner & Chan, 2019; Han et al., 2020; Knapp, 2018; Poniowski, 2019), the PBL method's infusion to this setting might allow the students to apprehend the content during the time limitation in class. Moreover, Chua and Islam (2020) pointed out that PBL in a flipped classroom help the students to construct better learning outcomes by developing products critically.

The results of previous studies have shown that student-centered learning indicates a development in formative knowledge, critical thinking, problem-solving ability, and better learning performance. For instance, Chua and Islam (2020) argued that PBL is a potentially effective approach to obtain stronger practical problem-solving knowledge and self-directed learning. PBL is sufficient to develop experiences because it allows students to explore and enhance their technical skill and increase their learning interest (Guo et al., 2020). Not only PBL, flipped classes promote students' active learning (Bergman & Sams; 2012; Poniowski, 2019; Alten et al., 2019; Zappe et al., 2009; Lee et al., 2016; Han et al., 2020; Evseeva & Solozhenko, 2015; Garner & Chan, 2019; Fauzan & Ngabut, 2018). The students develop broad knowledge awareness, critical and independent thinking, teamwork, creativity, and communication abilities (Choi et al., 2019) with such process-oriented, context-related and student-centered strategy (Chu et al., 2017). By developing analytical thoughts, integrating them with previous experiences, and adapting to the more challenging circumstances in the future, a meta-perspective is thereby applied to students to optimize their employability skills (Kolmos et al., 2020). As teachers combine the PBL and flipped practice, they give students the opportunity to consolidate both the home and in-class learning experience (Chua & Islam, 2020; Kardipah & Wibawa, 2020). These findings have promoted the benefit of a project-based learning approach and flipped classrooms.

While previous studies commonly focus on analyzing PBL, flipped classroom, or both approaches in the context of conventional class mixed with online setting, in this study I would like to focus on Indonesian undergraduate students' perspectives on PBL and flipped classrooms in the context of emergency remote teaching during the recent COVID-19 pandemic. This study aims to fill the gap by involving 28 students from the fifth semester at the English language education major in a public university in Indonesia.

Literature Review

Project-Based Learning

Project-based learning is a teaching method intended to give students the ability to effectively improve their knowledge and skills by giving them meaningful projects. As a response to this situation, the implementation of more cognitively demanding tasks that discuss various real problem-solving is always advocated (Blumenfeld, 1991). It is a process that allows students to learn and consider the highest level at Bloom's key content while practicing an active performance in their learning. Within the active learning model, several studies have indicated that PBL is one of the appropriate ways of delivering an efficient competency-based curriculum that combines self-learning, information, problem-solving skills, and innovation (Chua & Islam, 2020). Students need to do much more than remembering information to respond to complicated projects and produce high-quality work. It requires critical thinking, problem-solving, collaboration, and communication between peers. The principles of problem-based learning can be drawn back to the progressive movement, especially to Dewey's belief that teachers should teach by acknowledging students' basic abilities to explore and improve.

PBL puts the individual enthusiasms and needs of students at the forefront of learning (Morgan, 1983). A student-centered method like PBL will stimulate engagement through experiences that are adaptable to all the students, opportunities to collaborate with others, and a more involved activity in the overall learning process (Blumenfeld et al., 1991). In addition, PBL will increase trust and collaboration between students and teachers through teacher-student interactions. According to Chua and Islam in 2020, “students undergoing project-based learning indicated a significant increase in fundamental formative knowledge, enhanced problem-solving abilities, and the production of better learning artifacts”. This will make a huge difference in the experience of teachers and students through the reconstruction of how the students learn, how the teachers teach, and how they can connect with each other, which can affect how the teachers notice the effectiveness of the teaching and learning process. Other than that, the project-based learning approach is often challenging for both teachers and students. So, teachers should provide a platform as a direction of learning and facilitating methods to improve the project-based learning experience of students in the class.

Flipped Classroom

Since the 2000s, flipped classrooms have drawn much interest to be a popular teaching and learning model among researchers and the teaching community. The flipped classroom is a learning method in which the topics discussed during the class are instead stored virtually to students in order to maximize the amount of time available for practice and discussion in class (Baker, 2000; Bergmann & Sams, 2012; Wu, Shieh, & Yang, 2017; Lee, 2016; Shih, 2017; Fauzan & Ngabut, 2018; Garner & Chan, 2019; Poniatowski, 2019; Stohr et al., 2019; Wang, 2019; and Alten et al., 2019; Han et al., 2020). There are various terms for flipped classrooms, including flipped learning, inverted classrooms, reversed instruction, and blended learning (Bergmann & Sams, 2012). When introducing a flipped classroom, Baker (2000) created a series of priorities for teachers to remember; find an approach to make it suitable for a certain course, reduce the time spent in the classroom, open up class time with active methods for learning, critical and creative thought focus more on comprehension and implementation than the knowledge itself or basic thought, give more control over the students' own learning, provide the students with their own learning responsibilities, and give students more chances to learn from their peers. Baker's (2000) flipped classroom model proposes the transformation of teachers' role and the way in which the students are taught in the class. In a lecture-based classroom, the teacher is the one in the spotlight, while in the flipped classroom, the teacher's position is more of a guide and the students become the subject. This active learning approach aims to increase the quality and proficiency of the learning process (Zappe et al., 2009; Lee, Lim & Kim, 2016; Fauzan & Ngabut, 2018; and Alten et al., 2019).

Numbers of study analyze that the flipped classroom method includes access to media and technologies for students to experience in the classroom, which leads to activities, collaboration, and interaction (Garner & Chan, 2019; Jenkins, 2015; Jeonghyun et al., 2020; Bergman & Sams, 2012). In addition, the usage of digital integration tools is incorporated into educational practices; laptops, mobile devices such as smartphones and tablets, social media sites and networks, web apps, the internet, etc. Flipped classroom learning phases can be classified into three stages: pre-class preparation, in-class activities, and post-class learning. So, students coming to the class have already been familiar with the learning content and use class time to ask questions and discuss problems (Garner & Chan, 2019). Taken together, in general, the flipped classroom approach incorporates adjustable environments, professional educators, learner-

centered approach, deliberate content, progressive learning, self-regulated learning activities, engaging and effective learning experiences, and seamless learning platforms (Shih & Tsai, 2017; Wang, 2019; Wu, Shieh, and Yang, 2017; Garner & Chan, 2019; Stohr et al., 2020).

Project-Based Learning and Flipped Classroom in an Online Setting

Dewey (1986) had been promoting projects in the early 1900s designed to allow students to build their abilities. Educators have been designing PBL practices for years, involving students choosing the subject of their interest, examining the topic, analyzing and experiencing their analyses in ways such as a report, a paper, or a poster (Torre, Vleuten & Dolmans, 2015; Guo et al., 2020; Kolmos, Holgaard & Clausen, 2020; and Perez et al., 2020). These outcomes are called projects. By using a project-learning approach, students are empowered to discuss authentic real-world problems which can enhance the learning experience. “Research has supported that active learning strategies result in higher student engagement and greater learning gains as compared to traditional instructor-centered methods” (Zappe, Leicht, Messner, Litzinger, & Lee, 2009, p. 3).

PBL doesn't really need technologies to be used; however, PBL is essential to minimize costs of learning, increase learning efficiency and provide more project-based learning experiences by taking advantage of internet technology (Shih & Tsai, 2017). With the transformation to remote learning, teachers should require building various elements into classes and offer asynchronous and synchronous components. Flipping the class is one way to approach this. Numerous studies integrating PBL and flipped classroom (Wu, Shieh, & Yang, 2017; Shih, 2017; Stohr et al., 2019; Wang, 2019) have used internet technology (Chu et al., 2017; Balan, Yuen & Mehrtash, 2019) to carry out projects. The integration of technology enables teachers and learners to transform teaching and learning processes from being highly teacher-dominated to student-centered (Evseeva & Solozhenko, 2015). It offers the students a lot of possibilities to study anytime and anywhere. Due to the available and accessible resources in e-learning settings, they can learn at their own pace. In the time limits allocated for assignments, the students can review the material anytime they need it, search for the content they need online or seek a teacher or peer support due to discussions and forums. Continuous internet access helps students to retain their learning whether they skip classes due to sickness or for other causes. In a word, such combined approaches are directed at increasing teaching quality and learning performance (Shih & Tsai, 2017). Students have more chances to communicate with peers and may obtain more from project work.

In the recent emergency remote teaching where the students and the teachers are not physically present in a traditional classroom environment, appropriate instructions are needed with the help of technology tools such as online discussion platforms, video conferencing, and virtual assessments. Thus, this study investigates students' perspectives of a flipped-classroom approach to facilitate online project-based learning in a Critical Listening course. This study is guided with the following research question: What is Indonesian undergraduate students' perspective on the integration of PBL into the flipped critical listening course during the COVID-19 pandemic?

Methodology

Setting and Participants

In this study, the participants were the fifth-semester undergraduate students from an English language education department in a public university in Indonesia. A total of 28 students (20 females, 8 males) from the critical listening course were recruited to be participants in this research. This class implemented PBL and an online-flipped class approach that was conducted online during the COVID-19 pandemic. This course used various video-conferencing platforms that allowed the students and the lecturer to communicate virtually on a weekly basis. The course consisted of 16 meetings and lasted for six months. The data of students' perspectives on the PBL implementation in the course was collected and analyzed upon the completion of the course. A post-study interview was also conducted. Five students participated in the interviews (three females, two males).

The course integrated five interrelated activities: critical thinking, intensive listening, extensive listening, teaching listening, and researching listening. Usually, the lecturer explained everything during the class and after that, the students actively did activities and projects individually or with peers outside the class. There was a WhatsApp group for this course and the lecturer was included. This aimed to communicate things about the class. Besides, this course also used a Learning Management System (LMS), Schoology to collect materials, assignments, discussions, projects, and tests. With the transformation from conventional learning to remote learning, teachers should be required to build various elements into classes and offer asynchronous and synchronous components. Flipping the class is one way to address this objective. So, the project-based learning and flipped classrooms were implemented in an online setting. The students did both synchronous learning in class and asynchronous learning outside class. The flipped classroom is not only described as reversing what happens in the classroom and out of it. It is not about where activities take place, but how the center shifts from teachers to students. It can be applied to both the online and conventional classroom. In this case, the guided project format is a tool for them to do supplementary learning. The core is that the activity focuses from the instructor to the students to engage and center on higher-level learning outcomes.

Data Collection and Analysis

In this study, I used a mixed method. It is a sampling technique that involves the collection of both quantitative and qualitative data, the combination of the two data sources, and the use of various designs (Creswel, 2018). Mixing the approach would have beneficial and complementary detail (Johnson & Crhistensen, 2012). The data collection instruments of this study were online questionnaires and interviews. The questionnaire consisted of 20 optional questions and 15 open-ended questionnaires used to see the students' general perspective of PBL in a flipped classroom setting in the Critical Listening course. After the data from the questionnaire were collected, five participants had been chosen to have an intense interview. The interview was conducted to explore the students' viewpoints and boosted the quantitative data.

Content analysis was used to analyze focus group interviews and open-ended questionnaires in order to boost quantitative information. I focus the investigation on the assumption that the compilation of different types of data better gives a more comprehensive view of the study issue than just quantitative or qualitative data alone. The coding process is a key success of content analysis (Hsieh & Shannon, 2005). The coding method of content analysis involves organizing massive amounts of content into a smaller type. The research starts with a large sample to generalize the findings and then, in the second phase, it relies on qualitative, open-ended interviews to gain specific views from participants to better understand the initial

quantitative survey. To begin this analysis, I will determine the study issue and choose a sample for the analysis. Next, the text must be encoded into reasonable content categories. By reducing the text to categories, I will concentrate on coding particular terms or patterns that inform the study question and compare them in order to create relations, statistically evaluate them and draw analytical conclusions from them. The questions were divided into five categories which represented the students' perceptions of PBL flipped classroom in Critical Listening course; teacher and student's role, overall learning experience, motivation, benefits, challenges, and recommendation (see Table 1).

Category	Description
Overall learning experience	Students' excitement with the use of the approach in doing activities, projects, and assignments
Benefits	Students' group interaction, collaborative learning, meaningful projects
Challenges	Students' challenge towards time management, difficulties of the projects, communication, and technical issue
Recommendations	What needs to be improved in the implementation of PBL method

Table 1. Questionnaire

The interview consisted of a set of open-ended questions investigating the students about their beliefs and attitudes about their experiences of the implementation of PBL in flipped classroom. For instance, one question was "What do you think about implementing a PBL flipped classroom in speaking class?". Other questions are, "How is the process of doing PBL tasks in flipped classrooms?", "What is the benefit of PBL?", "What are the difficulties of doing PBL tasks?", and "Do you have any suggestions about PBL implementation in flipped classrooms, especially in Critical Listening course?".

Findings

In general, the results showed that students had a positive attitude toward the implementation of project-based learning in flipped Critical Listening class. According to the result of the questionnaire instrument, it was observed that about 96.4% of the students indicated that they liked the implementation of project-based learning in flipped Critical Listening course. The rest was neutral. However, there were some variances in responses to the investigation of these five points (i.e., overall learning experience, benefits, challenges, and recommendations) among students. The detailed analysis is shown after the project description.

Project Description

Since the COVID-19 pandemic had affected the educational system, the Indonesian government decided to temporarily close educational institutions to reduce the spread of the disease. In response to this, distance learning was used to reach students remotely. Project-based learning became one of instructional approaches designed to provide students the chance to develop knowledge and skills through projects that were conducted online. For instance, the flipped Critical Listening course analyzed in this study emphasized meaningful and independent

learning which promoted better students' learning experiences. "Combining FC and PBL can improve and motivate academically weaker students in several manners" (Chua & Islam, 2020). The students who were not able to follow the learning process during the class would have more time to learn and access the content at their own pace outside the class. Moreover, for students who have different learning styles and abilities, this concept is adaptable and beneficial.



Figure 1. Online classroom in Zoom Meeting

Project 1 - Extensive and Intensive Listening and Viewing

The Critical Listening course took extensive listening and viewing as the introductory project. The students were able to choose any movie they liked as long as the movie was in English and completed with captions. After watching the movie, the students wrote a short summary; their impression, what they like/dislike, whether it is recommended or not, and its link so that the other students could access the movie. The online media platform used was Schoology. Figure 1 illustrates how students shared ideas by giving comments in a discussion. The teacher was also involved in the discussion to give recommendations or feedback. The aims of this activity were to get the students' recognition of spoken text, tune into pronunciation, and notice intonation patterns. They could build speech recognition as they understood the text they read and the sound they listened to. Moreover, they noticed more grammar concepts, vocabularies, and generally, their brain would be working very efficiently because they enjoy listening. Listening-while-reading has one main benefit that the students can build not only vocabulary enrichment but also intonation sense, how it is written and pronounced as well. This activity can help students' listening ability. It is in line with the research from Chua and Islam (2020) that project-based activity acquired better engagement from self-directed learning. After undergoing this activity for two months, a deeper analysis project was designed by the lecturer, the intensive listening and viewing.

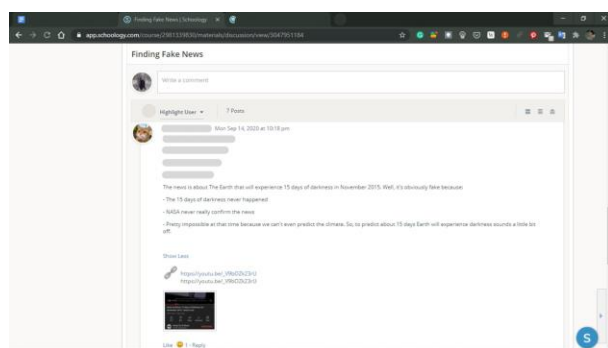


Figure 2. Students’ movie review on Schoology criticism about fake news

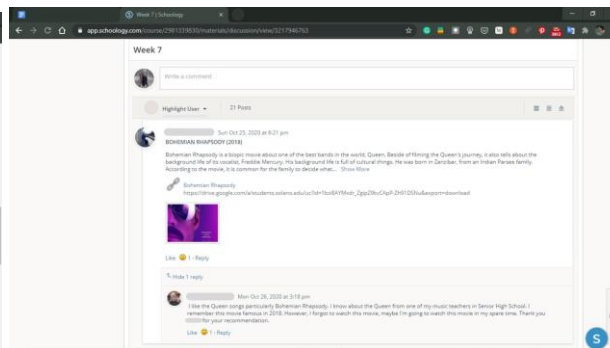


Figure 3. Students’

The intensive listening and viewing took themes fake news, media framing, discrimination, culture, and politeness around the world. The lecturer used authentic, real-world videos like YouTube videos, news, and movies. The goal of this intensive listening and viewing project was to focus on a certain detail with intense practice without eliminating students’ engagement towards the project. A study from Balan et al. in 2019 supports this idea that one of the key priorities of teachers is to find innovative pedagogical approaches that activate students' passion to practice and enhance their involvement in the learning process. However, this study also proposed that in-class time should be allocated by the teacher to meet and discuss the status of the students' project.

For about two months, during the class, the lecturer showed some videos to be criticized in the online class. After watching the videos, the students were asked to answer some follow-up questions that are connected to the topic. Sometimes, PolIEv.com was used to collect ideas and after that, the lecturer did reflections. At the end of the course, the students were given a teamwork task about analyzing a video with the themes I clarified before. Schoology was also used as the submission platform which allowed the students to see other works and gave feedback to them.

Project 2 - Teaching Listening

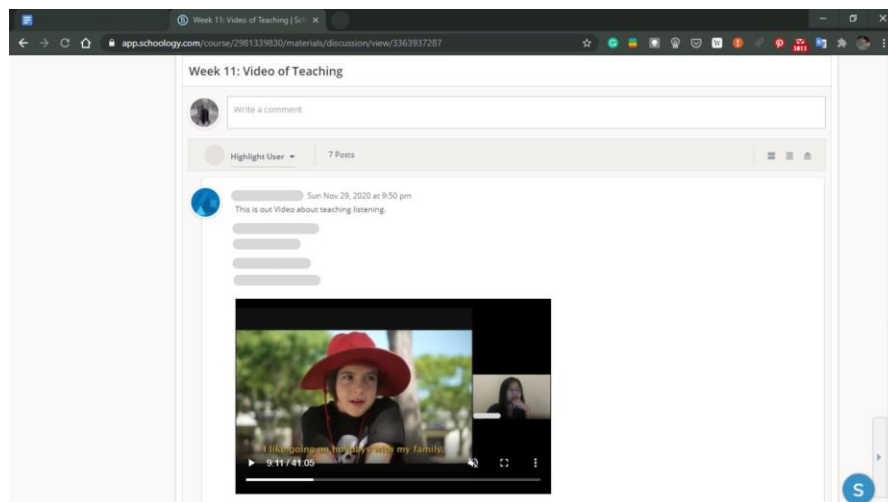
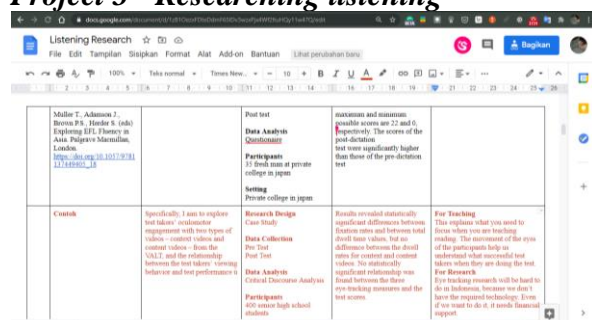


Figure 4. Students’ video submission about teaching listening

Since the students were pre-service teachers from the English Education Major in a public university, they should know more about the nature of listening and how to teach it. To avoid outdated methodology to teach listening, the lecturer introduced a new way of teaching listening. It should be authentic, interesting, and accessible to the students. Then, using video was possible and appropriate. This concept was promoted during the learning process. Other than that, this project required critical and creative thinking skills. Creativity directly improved learning by increasing the students' engagement, motivation, deeper understanding, and promoting excitement through the process. Uncovering and focusing on the learning experience ensures that the content is understood on a deeper stage by students (Schroeder, 2012).

In this project, there were four team works consisting of 4-5 students who designed a listening lesson plan. The students needed to work as a team to manage group workloads and strategy to execute the project. The lecturer firstly told the students how to teach listening in detail. Moreover, the demo had been done before, when the lecturer taught listening itself in this course. The students did group discussion using WhatsApp for chatting, Google Meet for oral talks, and then transcribed the ideas through Google Slide to create the lesson media. This was done in one week. The following week, the lecture gave direct feedback to every student's work in the class. After revising it, the students started to create a teaching listening video with one student to be the lecturer and the rest to be the students. The final project was also submitted on Schoology. The lecturer treated lesson planning as a creative exercise because next time, the students would face new constraints in the formation of the students' preferences and needs of various types of learners in the classroom. So, lesson planning material is urgent for them.

Project 3 - Researching listening



Post test	Data Analysis	Participants	Setting	Conclude	For Tracking
Post test Data Analysis Quantitative	Post test Data Analysis Quantitative	Participants 51 fresh men at private college in japan	Setting Private college in japan	Conclude Specifically, I aim to explore the value of experiential engagement with two types of video content (video and content video) from the CALL and the relationship between the test taking strategy behavior and test performance	For Tracking The original video (one used to focus when you are tracking reading). The movement of the eyes of the participants help us understand what successful test takers when they are doing the test
Post test Data Analysis Quantitative	Post test Data Analysis Quantitative	Participants 51 fresh men at private college in japan	Setting Private college in japan	Conclude Specifically, I aim to explore the value of experiential engagement with two types of video content (video and content video) from the CALL and the relationship between the test taking strategy behavior and test performance	For Tracking The original video (one used to focus when you are tracking reading). The movement of the eyes of the participants help us understand what successful test takers when they are doing the test

Figure 6. Students' collaboration work on Google Docs

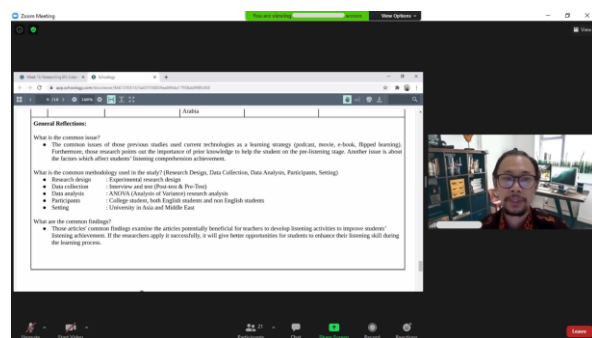


Figure 7. The lecturer's feedback during the course

This project was started by the lecturer with an overview and a series of initial questions to explore the topic of listening research. A key to conducting successful listening research is

taking on questioning orientation and asking more precise questions. Next, there was a set of specific steps for the students to implement the project that emphasized concepts and applications rather than data analysis and computations. Specifically, the students explored listening research topics in the past five years and filled a rubric consisting of the purpose of the study, research methodology, data collection, data analysis, findings, and students' reflections for teaching and for research based on the study. This was a collaborative project of 4-5 students in each group. The fundamental purpose of this project was to promote direct experience and insight concerning effective approaches to teaching listening, explore avenues of listening research, and frameworks of exploratory research projects that can be carried out by a researcher. Another goal of this project was to enrich the inquiry process by seeing issues from interrelated perspectives. This task requires some extra time but leading to deeper interactive learning and improved adaptability to the collaboration of students, it is worthwhile (Knapp, 2018).

Projects that were conducted in the flipped Critical Listening course were in line with what had been stated by Schroeder (2012) and Zappe et al. (2009) applying the key concepts of learner-centered teaching. The implementation of the construct could help students to understand group learning in a PBL context better and more meaningfully and also to facilitate the whole learning process. The intention is that such varied, practical, relevant, and challenging project forms will increase their motivation and learning.

Assessment and Grading

In the Critical Listening course, a set of project artifacts and participation outlining the individual contribution as well as group performances of the students were used to grade the students' achievements. The students will be graded based on some criteria; attendance, group work, extensive listening task, mid-term test, and final-term test. The detailed criteria are shown in the following.

Table 2
Criteria of Grading

NO	Criteria	Score
1	Attendance	16%
2	Extensive listening	14%
3	Group work	20%
4	Mid-term test	25%
5	Final-term test	25%

The lecturer checked the students' works at the end of the semester. Grading open-ended projects with some individual topics brings extra complexity for the lecturer to build a comprehensible rubric. Meanwhile, the grading should adequately represent the students' contribution to promoting equality. The lecturer usually checked, gave feedback, and talked a little bit about it in the following meeting in class. If the students do it seriously, they would get full points. Other than that, attendance is participation. If the students come to the class all the time, they will get 16. For extensive listening, that is an individual activity. The main point of extensive listening is students' joy of doing the activity. If they report their movie review on Schoology, they get extra

points. Some students were so excited and watched more than one movie, but some students didn't even do it. So, there is the effect of motivation and engagement here. For the group work, the main goal is to provide practice and opportunities for everyone to critically think about the topics in a teamwork. There was a grading weakness for the open-ended projects done in a group work that one of the interviewees, Choco, mentioned,

I am quite worried about my grading for the group projects because what the lecturer evaluates is probably only the result that is posted on Schoology. [Choco, Interview, December 7, 2020]



Figure 8. Mid-term test

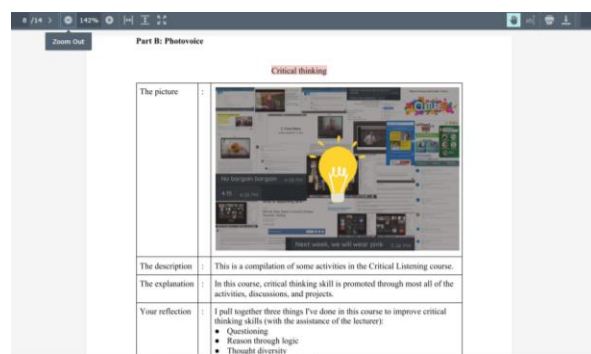


Figure 9. Final-term test

A week-long take-home exam was done for the mid-term assessment. It was an individual task that the students should find some videos with the topic, fake news, media framing, discrimination, cultures, and politeness. After that, they criticized the content and wrote a narrative of their reflection towards the issues on the video. This activity underlined listening and viewing to gain the development of critical thinking and writing skills in interpreting the content. For the final examination, the lecturer provided a worksheet to reflect the students' learning during the listening course. In this test, there are two segments: narrative frame and photovoice. Narrative frame covered a set of questions guiding the students to describe their perception about a listening course, it could be when they were in high school or college. The narrative frame examined how their teacher taught listening, what activity they did, the good and bad thing about the course, recommendation, and their expectation when they teach listening in the future. The second segment, photovoice, the students added pictures related to the criteria that had been determined by the lecture such as critical thinking, extensive listening, intensive listening,

teaching listening, and researching listening. Afterward, they wrote descriptions about their reflections of the Critical Listening course.

Students' Perspectives on the Implementation of PBL in Flipped Critical Listening Course during COVID-19 Pandemic

Students' Overall Learning Experience

In general, chart 1 implies that students in flipped Critical Listening course tend to support the implementation of project-based learning approach. 96.4% of 28 students who participated in this study liked doing such a method; 53.6% of them like the method and the rest 42.9% highly like the method. According to the clarification of the open-ended questionnaire, most of them argued that PBL gives the opportunity to provide varied, practical, relevant, and challenging activities that develop deeper understanding, critical thinking, collaboration skill, teamwork, time management, creativity and meaningful learning. Other than that, 3.6% of the participants show neutral responses. Generally, this means that no student complained about the implementation of PBL in flipped Critical Listening course.

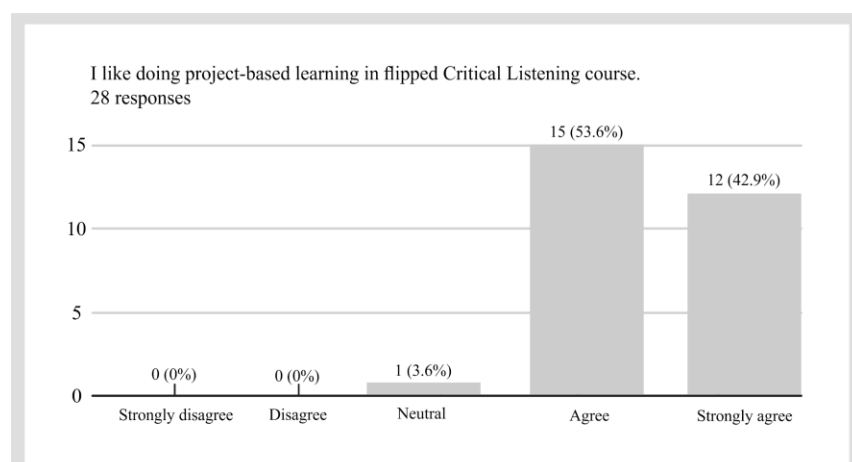


Chart 1. Students' perspectives of the implementation of PBL in flipped Critical Listening course

Any relevant results from many researchers claimed that PBL supported students' meaningful learning and applied the understanding into authentic activities. Students are required to actively participate in class with the use of project-based learning method and take action to explore ways to achieve a task (Chu et al., 2017). Another study supported by Guo et al. in 2017 strengthened the belief that the production of the projects is important because it allows students to combine their knowledge and experience, enhance their capacity to collaborate with others, and to explore their technical skills. Simply, student-centered instruction requires the harmony of the students and teacher shifting, so the students are more active in or outside the class and the teacher becomes more of a facilitator (Schroeder, 2012). The general intention of the studies I mentioned is in line with the interview response from five students in this study. Mango and Choco agreed that they mentioned,

In my opinion, PBL is a good way to develop communication with the lecturer and also peers by doing the projects. In this class, the lecturer did very interesting tasks, for example watching movies that I like the most. It was enjoyable. We choose what movies that best interest us, my lecturer didn't specify or determine it. Other projects introduced something insightful and new for me, for example exploring research toward the listening field and designing listening lesson plans. [Mango, Interview, December 7, 2020]

I can't agree more about how meaningful the activities in this course were. Discussion during the class made me understand enough, the projects gave me the ability to apply the material in real world problems. [Choco, Interview, December 7, 2020]

Another interviewee, Crayon, had an interesting thought towards the projects given in the PBL course,

During the COVID-19 pandemic, other lecturers also used project-based learning. I don't like too many projects. They gave us so many projects that sometimes it was not project-based learning anymore, it was 'doing projects'. I hope the lecturers notice the difference between those two concepts. Overall, I like this class. The project portion was enough and the lecture was very creative to make learning come alive for us. [Crayon, Interview, December 7, 2020]

Benefits

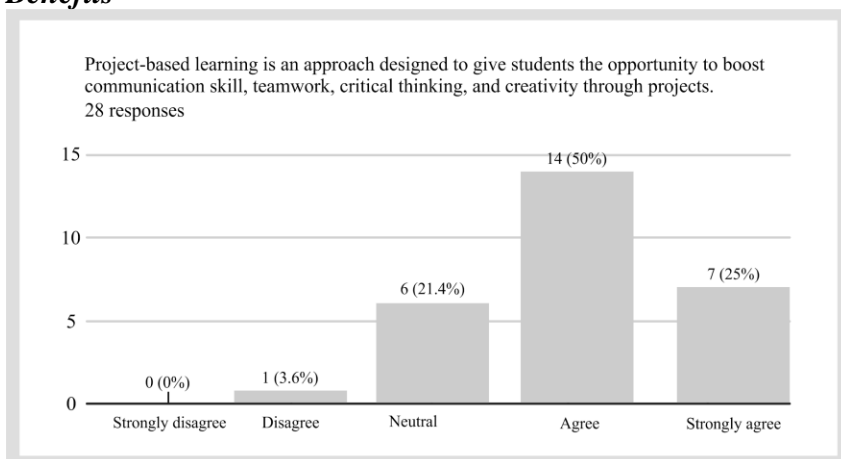


Chart 2. Some benefits of PBL in flipped Critical Listening course

Chart 2 shows that PBL got the goal to design students' communication skills, teamwork, critical thinking, and creativity. Overall, it is indicated that 75% of the students approved the statement; 50% of them agreed and the rest 25% strongly agreed. 21.4% of the students were neutral and the rest disagreed. The existence of projects with well-defined intentions had a positive impact in terms of students' engagement. Even though there were many things to do in this course, the purpose was to gain students' deeper understanding about the material and communicate it with peers. Online class didn't allow students to get the best feedback from the lecturer, so peer feedback was one of the solutions. Other than that, it could decrease students' lack of communication skill development and social isolation. The lecturer often set free discussion

during the class in order to know what the students' weakness about the material was. After that, they could critically think about how to do the projects outside the class.

This is in line with the statement that Guo et al. (2020) claimed on their research, PBL emphasized problem-solving and critical thinking skills. This means, the students get the freedom of learning outside the class as the projects were the guide format. Social interaction is a critical factor for the development of an individual. The activation of communicating with others, for example, while working with others, will activate those skills. Students should therefore concur in any type of group work that handles various components of a problem and works together to fulfill tasks using the strengths of one another. It teaches time management and organizational skills. This finding was strengthened by four of five interviewees who were in one mind with the ideas, but the rest disagreed. Here is a clarification from Choco,

I prefer individual project rather than group project because not all my peers were supportive. I know this approach is better meaningful than the lecture-based, but this did not affect the students who were unmotivated to learn. Some of us thought that online learning was tough, and projects made everything worse. For me, it was unfair for them who didn't involve doing the projects. [Choco, Interview, December 7, 2020]

Most of the students thought that PBL made their critical listening skills better. Besides listening itself, the basis was how to accept multiple perspectives or open-mindedness. This will lead to broader knowledge. Moreover, three of five students that were interviewed had the same idea about the themes took in this course which supported critical thinking skill such as fake news, media framing, discrimination, culture, and politeness. Other than that, the major knowledge about the listening field for the students who are pre-service teachers such as extensive listening, intensive listening, narrow listening, teaching listening, and researching listening were analyzed. One of the interviewees, Mango, had a positive attitude towards it,

I thought, technically, this critical listening course would identify how to critically listen to an audio. I was wrong because it was not all about that. We were given many insightful topics, methods, and activities that I believe would be useful when I become a teacher. [Mango, Interview, December 7, 2020]

Challenges

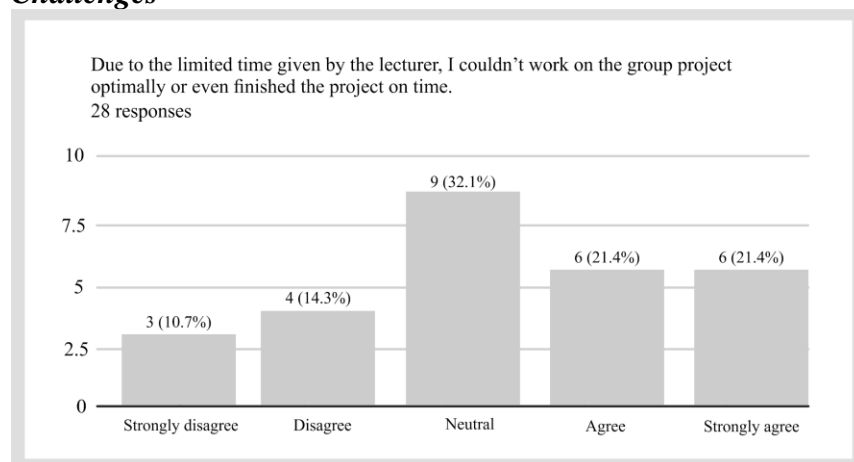


Chart 3. Common challenge that occurred during the implementation of PBL in flipped Critical Listening course

Chart 3 indicates that PBL in the flipped Critical Listening course during the pandemic had a major impact on how the students optimized their projects and managed the workloads. Behind this generalization, there were several points indicating that PBL in flipped Critical Listening course comprised many challenges. 48.85% of the participants were in one mind about these difficulties; 21.4% of them agreed and the rest 21.4% strongly agreed. 32.1% of the students are neutral. Whereas a quarter of the students disagree about the statement. This chart implies that not all students could undertake the projects effectively.

The analysis based on the open-ended questionnaire and interview of five participants identified some kinds of hardships the students passed through during the implementation of PBL method and also their perceptions. Some of the students had a lack of teamwork management skills that hold the potential for group conflict. Some of them hated teamwork because they said that the smartest kids do all the projects. Moreover, every student is in their hometown during the COVID-19 pandemic, so the group control and communication was getting worse. Online-flipped class setting drives some of the teachers to use such a method. This led to stacked up workloads with other courses that not all the students could organize. Indeed, some of the projects were time consuming because they were conducted in a group. Here are some of interviewee's clarifications,

Sometimes I got sick because I didn't want to do the projects hurry-scurry or carelessly, so I pushed myself to carry them out as best as possible. Honestly it was tiring. [Nana, Interview, December 7, 2020]

If only I focused only on school, I think I could manage all the projects, assignments, tests, and stuff to be done well. Unfortunately, I have some younger siblings that I should take care of. They're doing study from home too and my parents can't assist all of them, they need my help. Often it ruined my school balance. [Rose, Interview, December 7, 2020]

I have no problem with the amount of the projects. The more challenging thing for me was that I live in an area with low internet connection. [Mango, Interview, December 7, 2020]

Recommendations

Chart 4 represents whether project-based learning should be done in the Critical Listening course or not. Most of the students supported this approach; 42.9% of them agreed and 32.1% strongly agreed. Listening could be the hardest skill to practice, but most of the students argued that PBL with open-ended problems helped them to learn better. Moreover, flipped class promotes independent learning which the students can actively learn inside and outside the class. In summary, PBL and flipped class supported each other so that they could save their time to cover the content in class and had more time to do exercises outside the class in order to make listening comprehension better. 21.4% of the students were neutral. One of the interviewees claimed that PBL is not the only approach best fit to the Critical Listening course, since it has both benefits and weaknesses. Other than that, however, 3.6% of the students disagreed because they thought PBL was complicated and challenging as table 2 clarified in detail. Not all the students were motivated to do the projects online as the COVID-19 didn't allow everybody to interact in real

communication to decrease the spread of the disease. Two of the interviewees also agreed and added,

PBL would be a good approach if only it is adjusted to the learning context. In this course, I'm in one mind that the learning process was meaningful, but I suggest the number of materials and projects needed to be reduced. It was tiring to collaborate with peers all the time. [Rose, Interview, December 7, 2020]

I like doing PBL in a traditional way. [Crayon, Interview, December 7, 2020]

One of the interviewees who had a positive attitude towards this approach declined,

Learning is always tiring, and the lecturer has a syllabus consisting of what material the students should learn. PBL in flipped classroom allowed us to comprehend better and more effectively than lecture-based learning. [Choco, Interview, December 7, 2020]

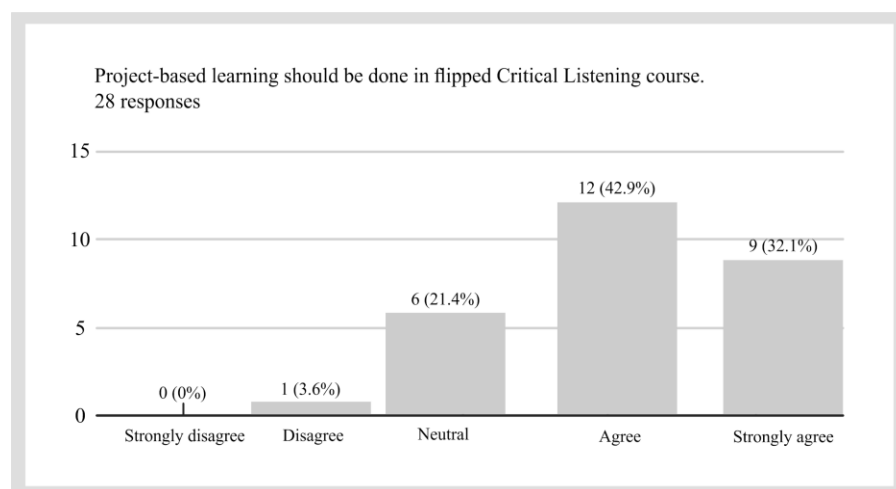


Chart 4. Students' recommendation that PBL should be done in a flipped Critical Listening course

During the COVID-19 pandemic, education regulation has changed so fast. Higher education institutions start to introduce and implement the appropriate approaches to teaching, learning, and assessment, helping students develop their learning comprehension due to this critical situation. For teachers, the shift from conventional learning to online learning means to rethink what approach can fit in a very different format. Analyzed in this study, project-based learning is one of such methods that can be applied especially to a flipped Critical Listening course. In general, this study has shown an example of PBL practice and how students' perspectives about its implementation. Since many of the previous researchers used the case study or experimental design that still not be able to cover students' perspectives comprehensively, the use of survey and interview forms gained deeper experience that could indeed complement each other and contribute stronger information.

Based on the result in this study, the finding was that most of the students had a positive attitude towards the implementation of PBL in flipped classroom. Teachers need to consider this approach as it is student-centered in which the students are the subject. It gives the

students better learning experience in communication, time management, group work, problem-solving ability, critical thinking, and creativity which have become necessary skills in the 21st century. This approach promotes students' to be an autonomous learner. To develop this skill, there are a lot of efforts and exercises to consider by teachers to be chosen as the best method for their students. Class analysis is needed and other than that, it takes time.

Discussion

In this study, I explore the perspectives of Indonesian undergraduate students on the project-based learning integration into a flipped critical listening course. Altogether, almost all the students of the Critical Listening course agreed on the usefulness of the projects and there was overall satisfaction towards the learning process. The PBL teaching method was successfully combined into the flipped class setting, in line with what Pérez et al. in 2021 had proven in their study, the association of PBL contextualized learning and flipped class appears to be a constructive strategy indeed. Other previous studies similarly acquired the same findings. Executing PBL alongside the complexity of the academic content influenced the students' development of language skills (Pacheco et al., 2020). Moreover, Sultan and Javaid in 2018 believed that with the help of project-based learning, the students tend to develop life skills such as active listening skills more independently, problem-solving skills, time management, communication, and collaboration skills. Universities should be more conscious of forcing the students to target problems and projects which would empower them more in terms of engineering competencies. Kolmos et al. in 2020 encouraged this idea that for students' employability competencies, such as the ability to work in a structured direction and the capability to meet deadlines, PBL was one of the strategic methods to get the intention.

In Indonesia, there is still a lack of research investigating flipped Critical Listening course with PBL as the learning approach. Even though this study concentrated on students' perspectives about the impacts of PBL on meaningful learning and engagement during the online-flipped class, a number of studies examined that PBL gains students' content knowledge (Chua & Islam, 2020; Kolmos et al., 2020), learning outcome and product quality (Balan et al., 2019; Chu et al., 2017; Guo et al., 2020; Kardipah & Wibawa, 2020), motivation (Alves et al., 2015; Blumenfeld et al., 1991), and teacher self-efficacy (Choi et al., 2019). This study has a different focus from other previous research in Indonesia. The COVID-19 setting appeals to the researcher to do this study to prove whether the project-based learning approach was suitable for this course or not. Even though some of the students preferred to do PBL in conventional-flipped class, not fully online class, students' perspectives were still positive. This method was still well-received by the students. Other than that, the open-ended questionnaire indicated that not only the PBL approach could cover meaningful learning towards this setting. Furthermore, not every course is compatible with the implementation of this approach. While many previous studies examined the effect of PBL on students' learning comprehension, this study has a central point on students' perspectives of implementing the PBL approach. This study could be insightful for teachers to determine whether PBL suits their students and environmental setting or not. Mixed-method methodology with content analysis as the data processing was used in this study to clarify students' perspectives. Not only close-ended and open-ended questionnaires were used, but also intense interviews to get as much data as possible.

The fact I found that synchronous and asynchronous learning activities in the Critical Listening course suggest that the role of teacher is not only delivering learning content but also

engaging the students to learn more by themselves. It was challenging for teachers for sure. Consequently, an interesting fact is that developing teacher-student connections may be beneficial in ensuring that the method used in a course best fits the students and environmental setting. The teacher should know the students' way of learning and how they like to work on the process, so that the teaching and learning process can be more comprehensible, meaningful, and also engaging.

Given that the results of this study are taken from student perspectives, the question is whether this can be correlated with the standard Indonesian curriculum based on the teacher's perspective. Besides, there are some places in Indonesia that are not optimally exposed to the development of the newest learning methods. They still have limited qualified teachers, and even not all the children are anxious to study. Future research should consider these analyses.

Conclusions

The objective of this study is to analyze Indonesian undergraduate students' insight to the implementation of project-based learning method in a flipped Critical Listening course during the COVID-19 pandemic. More specifically, I look at their experiences, attitudes, challenges, benefits, and recommendations of the practices. This topic is comparatively rare in Indonesia. The use of a mixed-method approach and content analysis consisting of a quantitative survey design was used to analyze and answer the research questions.

In this study, some notable findings are revealed. First, the project-based learning method is found to be effectively implemented in flipped Critical Listening class with the support of the teacher as a guide and the students as the subject. Initially, most of the students thought this course would have the classic listening lecture in which the students focus on how to listen critically. However, with the PBL and flipped classroom approach, the critical listening skill was developed if they did the projects and learnt asynchronously outside the class. Second, based on the interview, it is found that the projects forced the students to independently learn outside the class. Since the class-time allocation is limited and the lecture all the time cannot guide them, they are encouraged to solve whatever problems occurred when they do the projects by finding other resources online. Third, most of the students reported that the method was beneficial academically and non-academically. It helped them to enhance deeper and broader knowledge about critical listening. Other than that, PBL and flipped classroom approach encourage the students' communication skills, problem-solving ability, teamwork, time management, and creativity.

Not only are PBL and flipped classroom approach beneficial, but its implementation also had several challenges. Some of the students state that it was tough to do so many projects from this course and also other courses. It is also time-consuming, so they only focused on finishing the projects rather than bearing a meaning for the process. Moreover, communication and collaboration among team members sometimes become one of the obstacles. Not all students get involved to do the projects, the result is that the rest of the group members took the responsibility to do it. Other than that, because of the pandemic situation, the students were in their home and not all the locations had strong internet connection. Some of the students claim that in a particular time, they struggle to get a strong internet connection while doing their projects or joining the course. Other problems happen when they are at home and get distracted by other members of the family's activities. This is a minor challenge, but some students find it difficult.

This study analyzes and discusses students' experiences in PBL and flipped classroom approach to investigate its implications for student learning and for teaching practices in higher education. As this approach generally has positive impacts for EFL undergraduate students, future studies should take a consideration of a more longitudinal research-based approach, such as classroom action research. The focus is to look at the classroom dynamics and factors that affect students' success and failure to complete the designed projects. Students' perception of a course where the parameter is result-based should be analyzed. Furthermore, the author looks forward to overwhelming some of the problems identified through the practice of PBL and flipped classroom strategy by expanding further studies in specific areas as needs of improvement (e.g., integration of a particular subject in the project and the evaluation system, including peer evaluation). Lastly, the findings of this study provided a good opportunity for the researcher to come up with some valuable suggestions that could contribute in facilitating the process of applying those methods.

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