

EFL Learners' Reflection on Digitally Mediated Multimodal Project-Based Learning: Multimodal Enactment in a Listening-Speaking Class

Kaffah Visa Alvionita¹

kaffahvisa_1803046029@student.walisongo.ac.id

Lulut Widyaningrum²

lulut.widyaningrum@walisongo.ac.id

Agus Prayogo³

agus.prayogo@walisongo.ac.id

^{1,2,3}Universitas Islam Negeri (UIN) Walisongo Semarang

Abstract

Although teaching methods had been developed in recent years, project-based learning adopting multimodality in language teaching-learning which deals with materials development facilitating language skills and environment care at the varsity level remained underexplored yet. This qualitative content analysis study purposed to explore learners' reflections in the enactment of multimodal project-based learning – to display how multimodal project-based learning facilitates learners' language skills and environmental care. Twenty-four learners act as participants, do various projects, and describe their experience toward multimodal project-based learning of green listening and speaking course in the form of learners' reflections. The findings show that students report the positive effects which influence their learning process. The results also indicate that adopting multimodal project-based learning of green listening and speaking facilitates learners' language skills development and builds environmental awareness. Thus, the results of this research may have implications as the pioneer projects on investigating learners' reflection of multimodal project-based learning and contribute to the development of the EFL learning process in general.

Keywords: multimodal project-based learning, learners' reflections

INTRODUCTION

Since the growth of technology has become more affordable day by day, Chris (2011) states that higher education institution classrooms are being converted from traditional into multimodal learning environments, while students are equipped with any gadget such as tablets and smartphones which are connected with the network and social media as well. Here, as students, learners need to adjust this condition related to the learning process. Besides, the development of teaching methods also has been being varied in recent years. So, an appropriate teaching method is needed to be enacted in the class of higher education institutions these days.

Multimodal Project-Based of Green Listening and Speaking is an alternative way that comes

with a combination of materials, methods, and media. This kind of multimodal challenges students with a kind of product-oriented performance-based assessment. By using this assessment, the score will be examined based on some products such as flyers, posters, videos, and PowerPoint presentations. By using this kind of multimodal, Youngjoo (2016) states that the products are supposed to be a combination of (1) texts/genre/purposes, (2) images/visual, (3) sound/audio, (4) videos, gestures, costume, poems, or websites. Thus, this multimodal project-based learning is expected to help students learn English skills, especially listening and speaking.

Likewise developing learners' listening and speaking skills, the materials of "Green Listening" may enrich and build learners' environment care.

It is related to the student's preparation for the unpredictable 5-10 years of global changes. The given projects in the listening class are expected to sensitize learners' environmental awareness such as deforestation and waste problems that causes global climate change on our earth. Adams (2020) states that this earth has called us to consider and start to take actions of its conservation and protection towards: (1) 75% damage of ecosystems, (2) up to one million threatened with extinction species, (3) more than 85% lost wetlands, (4) 90% greenhouse gas emissions, and (5) the loss of a football field of forest in every minute. Then, students get a project of making a campaign video related to the environmental crises above. Therefore, learners' environmental awareness can be built up and empower them to survive their future life.

Studies about multimodality previously explained that multimodality is important for meaning-making and communication. Eugene (2020) defined meaning-making as "the relationship between a genuine, interested, information-seeking, question and serious response to it". Furthermore, students can be attracted when they start asking as follow: a) what other people think, and how they describe it; then b) what they do, feel, relate to, and think about. Another study from Rowsell & Walsh (2011) explains that multimodality is a kind of field that takes into account how individuals arrange the meaning in another way. So, we can say that in multimodality meaning-making does not only based on the individual perspective but also related to the others' perspective that aims to communicate with others.

Multimodality on the varied foci such as multimodal literacy, motivational capacity, inquiry, and multimodal digital project assessment had been explained by Drajadi et.al (2018). The use of multimodal platforms in the classroom is intended to improve the quality of the learning process. Hence, project-based learning (PBL) is one of the methods that help teachers and learners especially gain a higher level of goals in 21st-century skills development which are related to technological skills.

Along with the technological developments, Sarosa et.al (2021) explained that project-based

learning methods recently had been more popular in the education field. Stephany (2010) exposed this kind of method was explained as a teaching method that instructional allowed students to play a role actively in driving their learning process through inquiry, working in a collaborative activity, and creating any project that reveals their knowledge well. In the meantime, previous researchers indicated that project-based learning used over past years was being a successful method that afforded academic performances, high-order cognitive skills, attitudes, students' self-directed learning skills, motivation, and creativity in the educational settings (see. Bagheri et al., 2013; Gültekin, 2007; Isabekov & Sadyrova, 2018; Kai et al., 2011; Koparan & Güven, 2014; Pinho-lobes & Macedo, 2014). Therefore, it showed that investigating PBL in a learning process was a beneficial method in the educational setting, especially at the varsity level that must be conducted by the researcher.

Based on the explanation above, it is clear that project-based learning is a very helpful method in the teaching and learning process. Here, knowing learners' perceptions in adopting project-based learning is an important thing to be investigated. Sometimes, learners are getting bored and even unengaged in the class. They are also likely uninterested to learn and work the assignments. So, to increase their understanding and engagement of the material, the use of project-based learning is suggested to be applied and it is important to be investigated.

As the explanation that project-based learning is one of a great method in the teaching and learning process, Peter (2012) explains that knowing students' attitudes in adopting project-based learning is very important as well. Students' attitude plays an important role because it is one of the main factors besides motivation that influences them in a good way. In Indonesia, Luh et.al (2018) explained that this study is quite limited. Thus, a study on this topic which is rarely explored of adopting multimodal project-based learning must be engaged by the researcher.

Some studies had explored in the education field such as the effect of the project-based learning method on students' attitudes, as well as students' attitudes in terms of cognitive,

behavioral, and effectivity (see. Ayaz & Söylemez, 2015; Gültekin, 2007; Koparan & Güven, 2014). Meanwhile, Genc (2015) exposed the effect of project-based learning on learners' attitudes toward environmental care. In this study, environmental care and preservation concepts were explored in detail. Here, students had their group projects on environmental problems to deal with. This course was beneficial in evolving learners' positive attitudes toward the environment. The researcher explained that environmental problems were clearer and it was found by the project. This activity also enhanced learners' creativity in their way of thinking and problem-solving. This study had a different methodology from the present one. The previous study used a mixed-method explanatory design. In the meantime, the present study adopts a content analysis method. Besides, previously students are in the environmental course while in this present research students are grouped in the extensive listening and speaking course.

Another study by Vincent (2018) investigated a model of project-based learning that was called as 10Cs of Project-Based Learning TESOL Curriculum. This model engaged with the principle of PBL with second language development elements. Project-Based Learning TESOL Curriculum is a student-centered design dominated by collaborative engagement and the teacher plays a role as the facilitator only. It is intended to develop students' socio-affective capacities, creativity, communication skills, and linguistics knowledge. Meanwhile, the present study adopts the principle of PBL to build learners' English skills in terms of listening and speaking courses in EFL classes by exploring their reflections.

Farrel (2006) explained an old cliché which stated "Experience is the greatest teacher" might not be that true if we didn't learn as much from such experiences as the reflection on those experiences. Here, reflection or reflective practice provides an extensive understanding to the teaching and learning process. Related to the statement, the researcher explains that reflection is purposed to improve the process and the outcome of classroom activities. It is also intended to develop the confidence and motivation of both learner and teacher. Here, learners' reflection

should be invested due to the use of student-centered method which mostly used nowadays. Then, the process of teaching and learning in the EFL class would be better although it might not be easy worked.

Prayogo & Widyaningrum (2019) explicitly revealed a reflective practice mediated by WhatsApp group application. This previous study explored teachers' experience in an online environment where teachers shared and interacted with their colleagues by constructing knowledge and evaluating the teaching practice. The study was conducted in the General English Two subject which focuses on reading and writing skills. The finding of the study provided the development of teacher professionalism which increased the quality of EFL teaching and learning process by facilitating them with collaboration and interaction mediated by WhatsApp application. Meanwhile, the present study reveals learners' reflections mediated multimodal project-based learning which is expected to facilitate learners' listening and speaking skills and also environmental care developments. It is intended to increase their enthusiasm for the learning process where the environmental care topic is rarely discussed in the field of English learning. Both previous and present one explores reflections but the present one refers to explore students' point of view instead of teachers' perceptions. It is because the method used in the class is a student-centered method and this side is unexplored yet in the previous study which interestingly discussed to gain a better English learning process. So, investigating learners' reflections to the implementation of multimodal project-based learning in language learning play important roles in supporting and enhancing learners' learning process.

Based on the explanation above, knowing learners' perceptions in adopting project-based learning in the EFL class is an important thing since it has established the success of the learning process. So, adopting multimodal project-based learning is a good choice for the Indonesian educational setting. Since this kind of method is important for the learning process in education but it is still infrequently investigated, the researcher believes to explore this issue further. This recent study is conducted to answer these

following questions (1) how is pre-service teacher's reflection in the enactment of multimodal project-based learning of green listening and speaking? and (2) how does multimodal project-based learning of green listening and speaking facilitate pre-service teacher's language skills and environmental care?

This research is intended to figure out the EFL learners' perceptions by investigating learners' reflections on adopting multimodal project-based learning of green listening and speaking skills since this kind of research is quite limited in Indonesia. With this intention, this study is expected to complete the gap area of the previous studies. A piece of evidence from Murat (2015) showed that project-based learning helped students deal with environmental problems more clearly and provide active tasks in the solution process. This teaching method also seemed to be meaningful in enriching vocabulary, pronunciation, creativity, listening and speaking skills, and in building environmental awareness during the Extensive Listening and Speaking course.

METHODOLOGY

24 EFL learners of the Extensive Listening and Speaking course were willing to fill out the agreement form to participate in this present study. They have consisted of 21 female and 3 male students in the second semester level between 18 to 20 years old. The ultimate goal of the course is to develop learners' listening and speaking skills, vocabulary development, pronunciation recognitions productivity behaviors, and environmental care. In this extensive listening and speaking course, the learning activities were adopting multimodal project-based learning activities where students engaged with various themes and topics repeatedly in defined time guided with a Listening & Movie Logs platform, class discussion, and presentation, making online mind-maps, posters, video campaigns, and reflections. Students also communicate with other people through the presentation and comment session on their social media accounts. Because of the Covid-19 pandemic, the class is set up in the form of an online mode adopting Zoom for

meeting and discussion, a Whatsapp group for communication, and an e-learning system provided by the university for conducting attendance, instructions, materials, assignments, and reflections. This design supports students' Information and Communication Technology (ICT) skills development in facing any challenge in the 21st century.

The topic selected in this extensive listening and speaking course is "Green Listening" which discusses environmental awareness such as waste, deforestation, and pollution. They also try to invite other people to care about these problems. This topic is purposed to build up learners' awareness to take responsibility for keeping the environment through understanding spoken talks and projects related to the topic. So, these projects can empower learners' positive attitudes and make a balance between ICT skill developments and environmental care buildings.

This project was carried out which consists of three kinds of activities. These projects began with making posters or flyers. In this way, the teacher had presented the material and gave the example of using Canva as a design platform and online maps creator. Both Canva and online mind-map was selected because these two were easy to use and only needed a low level of ICT skills, especially for beginners. A lot of templates also appeared in Canva, so students could choose one of them as their flyer or poster design and edited the design based on their creativity and taste. They also easily added the texts of the campaign and interesting images to attract the viewers. The posters or flyers would be posted on learners' social media accounts such as Instagram, Facebook, and WhatsApp. Then, they tried to show up their speaking skill by making a video campaign about environmental care that would be posted on their Youtube channel. After posting the result projects, students identified the viewers' comments on their social media posts. They also might be responding and interacting with the viewers through the comment section. Students also should report their projects in the form of presentations to the class individually. Last but not least, the students were required to write down their experiences in the form of reflection through an e-learning system in adopting

multimodal project-based learning of green listening and speaking.

The present research used learners' reflections as the instrument which can be accessed through an e-learning system provided by the university. In the previous research conducted by Peter Jarvis (2002), it was exposed that reflections in the form of journals provide two kinds of reflective purposes. Firstly, the reflection was going to help the student become a reflective learner who was expected to make various recording data including attitudes, reading, and study habits. Here, students were required to describe their self-developments. In this case, students might record their development of knowledge, the ability to identify and articulate issues, and experience during joining the program. Secondly, students were able to examine their self-development and empowerment feelings by themselves. This previous study has differences from the recent one. The reflections in the recent study consist of how the learning process is carried out, the projects are created, the campaign is made, and the viewers' responses. Students also share the impact of multimodal projects in the form of reflections. After all, the researcher uses learners' reflections to know their perception in adopting multimodal project-based learning in the Extensive Listening and Speaking course.

In the process of finding the result, the researcher conducted this research with an inductive qualitative content technique to analyze and describe the data retrieved from Saldana (2009). Here, learners' reflections were transcribed and reviewed to gain a general understanding. Then, each reflection is summarized by the researcher. The summarized reflection was abstracted and named with any code. The researcher categorized the codes depending on the similarities and the ways of emerging them. The researcher used a manual technique instead of using software to analyze the data.

For gaining dependability, the pieces of information and codes were checked and examined by the participants. Besides, to gain credibility, the report and interpretation were given, and checked the authenticity of the work to the students as the participants (informants) of

this study. Moreover, the researcher hired external auditors who are familiar with qualitative research to verify the findings of this study. This action means that the codes and classes of the reflections provided by the researcher had been examined and confirmed. Here, the information of the participants was kept safe by the researcher.

RESULT AND DISCUSSION

Result

In this section, the researcher will describe the findings from the data collected by learners' reflections on adopting multimodal project-based learning of green listening and speaking. This is designed in the extensive listening and speaking course of the English Education Department which means in an EFL class. Each student explains their reflections in a paragraph and submits them in the e-learning that is provided by the university itself. The poofs provided in the reflection by explaining learners' experience in making a poster or flyer and a video campaign which are commented on by the viewers. It also reveals learners' perception of adopting multimodal project-based learning which facilitates their development of listening and speaking skills, creativity skills, vocabulary, pronunciation recognitions, and environmental care. Students also explain another experience in engaging in this multimodal project-based learning which comes from the viewers' responses. Here, the researcher

Learners' reflections are explained many kinds of feelings after they are going through the experiences. The analysis of learners' reflections indicates that students find a new fun way to facilitate and improve their "listening" and "speaking" skills. The following extracts elaborate learners' reflections on adapting multimodal project-based learning of green listening and speaking.

Through this learning session, I can improve my speaking skill in class by inviting people to care more about the environment by making a poster and posting it on social media. I also make a video about the plastic waste issue and I invite my viewers to reduce the use of plastic to save our ecosystems. (Participant A5)

The social media campaign in the extensive listening and speaking course is so fun. I am happy because I can practice listening through audio and video prepared by the lecturer and speaking in front of my friends on the online platform, even though my speaking skill is not fluent. This course motivates me to continue learning and improving my skill. (Participant A21)

Another statement described that multimodal green listening and speaking improved their creative skills. Students try to make creative captions to attract their viewers. They also feel the improvement of their “creativity” because they make a poster for reducing plastic waste. Here are the reflections that elaborated on these statements.

The campaign is carried out through presentation and social media where each student creates and uploads posters on Instagram, WhatsApp, and Facebook. I also try to invite my viewers by making creative and attractive captions and also campaign how to protect the environment from waste. (Participant A19)

This activity also developed my creativity in making a poster for reducing plastic waste and choosing a proper design. (Participant A24)

The other advantages of multimodal project-based learning show that this method can improve learners’ “vocabularies” and “pronunciation recognition”. Students have found new vocabulary related to the environmental issue which is not the main topic discussed in their class. They also get more pronunciation recognition in the practice of speaking in making a campaign video. Another elaboration of the reflection appeared below.

In the extensive listening and speaking class, I got listening log assignments every week. I got a lot of new vocabulary that I never knew before. Sometimes, I also found the difference in pronunciation of each word. (Participant A22)

Then, most of the students mentioned that multimodal project-based learning of green listening and speaking methods in their course improve their environmental awareness. This is an essential topic which very good in building up learners’ good attitudes when combined with

multimodal project-based learning. Here are some students explained in their reflections below.

In this course, I conducted socialization on how we reduce the trash in the sea by making a poster and posting it on WA status. I also made a video about this and uploaded it on my Youtube channel. I got a lot of inspiration and new knowledge about protecting nature. From this session, I think it is very beneficial for me and many people who have seen my poster and video. (Participant A1)

I can say that I have achieved the goal of this campaign which is to invite others to minimize the use of plastic in daily life. (Participant A2)

This course made me realize the importance of reminding each other and growing a more conscious and caring attitude. If positive things are done for togetherness, indeed, these efforts can produce outstanding results for all. (Participant A11)

In this course, I consider that the use of plastic bags is increasing day by and it is not a good thing. Instead of using plastic bags, it will be better if people use cloth bags. So, sharing and inviting to do this activity is a good idea. (Participant A23)

Furthermore, students also faced challenges during this course. Moreover, after they got any feedback from their friends in the comment sections. Here are the student’s reflections that mentioned the challenge.

I have created a poster entitled “One Step to Make Your Earth Brighter” and I have shared it on social media. Maybe many people saw it and also understood what I was conveying and campaigning on the poster. Unfortunately, I did not get any response from people who saw my poster. (Participant A8)

Out of the hundreds of viewers, most of them did not care about the invitation of environmental awareness through posters and videos. It was very disappointing for me because this small action did not motivate them to do positive action for the environment. (Participant A14)

Based on the analysis above, learners have various impressions in adopting multimodal

project-based learning of green listening and speaking. Students described that this kind of method can improve their listening and speaking skills in a new way. They also mentioned that this method enhanced their vocabularies and pronunciation recognitions. Moreover, they claimed that the projects built up their environmental awareness. They also face any challenge of viewers' feedback such unresponsive comments. These results indicate that this method gives various experiences for students in adopting multimodal project-based learning of green listening and speaking.

This section provides a discussion of the research findings. Depending on the analysis of learners' reflections, the researcher infers that EFL students who are engaging with multimodal project-based learning in their extensive listening and speaking course get various experiences based on their perceptions. Depending on the data analysis of learners' reflections, the researcher found out five themes emerged in this study. These five themes are listening and speaking skills, creativity improvements, vocabulary development, pronunciation recognition, and environmental awareness.

Discussion

Table 1 Related Themes and Quotes

Theme	Quotations
Listening and Speaking Skills	EFL students reflected on the descriptions that their listening and speaking skills are being increased since multimodal project-based learning has been conducted in their class.
Creativity	Learners' creativity developments were also found based on the learners' reflection on making the posters or flyers and creating the interesting caption.
Vocabulary Development	EFL students were prompted to reflect on their vocabulary developments since they found unfamiliar vocabulary in making the projects.
Pronunciation Recognition	Since the findings of unfamiliar vocabulary were not related to the usual material in EFL class, students would look for the pronunciation to read the words properly.
Environmental Awareness	Most of the students noted their experiences of being more considerate of the environmental issues which became their responsibility to keep it up.
Response	Several students also reported that they got unexpected responses from the viewers who did not give any good responses.

Second-year EFL learners have gotten various experiences in the multimodal project-based learning design. In the end, students also completed a reflection related to their experiences. Based on learners' reflection analysis, it is found that multimodal project-based learning in the extensive listening and speaking course is rewarding for the learning process. As the result of the present study, these projects give students a chance to play as active agents such as decision-makers, poster designers, video makers, reporters, and agents of social change.

The first theme of the results is the improvement of listening and speaking skills among Indonesian EFL students. Mastering both listening and speaking must be considered to have good communication skills which is an important competency in the 21st century. The results were supported by the findings from Simon Avery (2006) that reviewed the teaching of English skills to students in higher education by conducting the Project methodology. This previous study engaged with reflective learning to encourage their learning and progress activities. This study

outlined that the Project method gives positive benefits for improving learners' oral skills by participating in the discussions, reading aloud, engaging in group work, and delivering presentations. On the other hand, this present study did not only talk about the impact of the use of project-based learning on oral skills but also on listening skills.

Another previous study from Moly and Hilary (2018) also supported the findings of the recent study. The previous researcher conducted the same methodology as the recent one namely *Project Soapbox* which was project-based learning. The analysis of this previous study indicated that *Project Soapbox* gained student's anticipated political engagement, confidence in the presentation session, and listening to the other's speech. Thus, this previous study found that the Project Soapbox on high school students gave a positive impact on listening with empathy and speaking with confidence. Similarly, both previous and recent study is engaged with the impacts of listening and speaking skills using the project-based learning method. The difference comes in the subjects of the study where the previous one deals with high school students and the recent one come with learners at the varsity level.

The second theme of the result is creative development. Creativity is defined as a core competency in the 21st century where the learning process at school is intended to prepare the student to be creative problem solvers in the future. Greenier (2018) explored a model of project-based learning that was called the 10Cs of Project-Based Learning TESOL Curriculum applied in the Korean middle school. In this previous study, the researcher found students' experiences that explained that they were required to think creatively during the program and this model can be more effectively helped them in learning English. The similarities come to the present study where the results exposed the creativity development among Indonesian learners while the previous one was conducted with Korean middle schoolers.

Another study from Ji Won Yu (2021) investigated the science college students' creativity in a team project-based learning design.

The results of this previous study had implications for the creative learning process in Team Project-Based Learning. The study also validated the importance of the safe psychology aspect in Team Project-Based Learning and explored the moderating role of team creativity. The previous researcher also revealed that team interaction was important to team creativity development. Meanwhile, in the present one, the multimodal project-based learning of listening and speaking influenced Indonesian EFL learners' creativity in making individual projects such as poster or flyer design and arranging interesting captions.

The third theme of finding is defined to be vocabulary development. A word is a basis of communication. This is the reason why learning words is very important to explain ideas and thoughts as well. Without using words, it will be very difficult. For these reasons, the existence of vocabulary is extremely important since without using proper words which are related to the context, people will not be able to know and understand what other people say. Here, multimodality as the interdisciplinary approach related to the ICT skill comes as a proper method in the learning process. Previously, Millaray et.al (2016) conducted an action research project to investigate the impacts of using multimodality on vocabulary acquisition among students of two semi-public schools. The result of this previous study indicated that the use of multimodality gave benefits to the students in their learning process of new vocabulary which could enhance students' communication skills in learning English. The researcher of this present study also conducted multimodality for enhancing learners' new vocabulary developments. Moreover, the learners are prepared to be an educator of English in Indonesia. By analyzing learners' reflections after the class ended, the researcher found that the use of multimodal project-based learning in the class supported learners' vocabulary developments in learning English as a foreign language.

The fourth theme of the results tends to be pronunciation recognition. Pronunciation is basic support in oral communication which is used to understand a message of people's statements. Sometimes, English pronunciation errors can cause misunderstandings among people. Hence,

learning pronunciation adequately is a crucial thing for the ones who learn English. Based on this reason, the teaching method used seems important to deal with the improvement of pronunciation recognition. Here, multimodal appears as the one which can lead students to enhance their pronunciation properly. A previous study claimed that the multimodal tools used were having the possibility to enhance L2 learners' pronunciation. By using a novel speech with an Automatic Speech recognition (ASR) technology, Strik et.al (2013) indicated that the possibility is not only for pronunciation training but also for L2 teaching aspects. In the present one, the researcher organized a multimodal project-based learning design in an EFL class. Here, the researcher found out the existence of pronunciation recognition in the use of multimodal project-based learning.

The fifth theme of the findings is students' environmental awareness. Therefore, a previous study conducted by Genc (2015) exposed that project-based learning affected learners' positive attitudes toward the environmental issue. This result resembles the result of this present study. Depending on the analysis of learners' reflections, this multimodal project-based learning in the form of poster making, students engage with activities of creating and meaning-making which then influence them to aware of environmental issues. Since no course discussed environmental care in their major, this topic is extremely attractive for them. Then, they are going to look for other materials related to the topic to support their environmental awareness posters. In the case of a campaign video, it has invited the audiences to care about the environment. So, this result shows that this kind of method influence and develop learners' positive attitudes by enhancing their environmental awareness and the viewers as well.

The last theme of the results is the viewers' responses to the projects uploaded on social media. By analyzing learners' reflections, the researcher found that many viewers did not give any response to the posters or flyers and even the video campaign. Even if there is a comment, it doesn't show their enthusiasm for an environmental issue. This result might be conducted as the evolution of the implementation

of multimodal project-based learning in the EFL class.

CONCLUSION

In conclusion, adopting multimodal project-based learning of green listening and speaking course can improve learners' attitudes. Based on the findings and discussions, this kind of method facilitates learners' listening-speaking skills, vocabulary enrichments, pronunciation recognition, and builds their environmental awareness. Moreover, students are being more active, interested, and enjoyed the learning process. So, we can conclude that adopting multimodal project-based learning of green listening and speaking is an effective way of developing learners' attitudes in the learning process although they have to deal with unresponsive comments from the viewers. This study has given implications such as an example of how multimodal project-based learning can be adopted and applied in the classroom to improve learners' English skills and build their environmental care. As a result, this research serves as the pioneer project in investigating learners' reflections at the varsity level of multimodal project-based learning in the extensive listening and speaking course. This study also contributes to the development of English as a foreign language learning process. Despite the research significance, for further research, the researcher suggests new ones to investigate learners' difficulties during the multimodal project-based learning course and the way they overcome them. In addition, this kind of investigation needs to be done to increase the quality of the learning process.

REFERENCES

- Adams, J. (2020). *Earth Day 2020: Why global reforestation will restore the earth's health*. World Economic Forum.
<https://www.weforum.org/agenda/2020/04/earth-day-2020-why-global-reforestation-will-restore-the-earth-s-health/>
- Andolina, M. W., & Conklin, H. G. (2018). *Speaking With Confidence and Listening*

- With Empathy: The Impact of Project Soapbox on High School Students. *Theory and Research in Social Education*, 46(3), 374–409.
<https://doi.org/10.1080/00933104.2018.1435324>
- Avery, S. (2006). Teaching Advanced Skills in English Studies: The Work of the Speak-Write Project. *Innovations in Education and Training International*, 36(3), 192–197.
<https://doi.org/10.1080/1355800990360304>
- Ayaz, M. F., & Söylemez, M. (2015). The Effect of the Project-Based Learning Approach on the Academic Achievements of the Students in Science Classes in Turkey: A Meta-Analysis Study. *Education and Science*, 40(178), 255–283. <https://doi.org/10.15390/EB.2015.4000>
- Bagheri, M., Zah, W., Ali, W., Chong, M., Abdullah, B., & Daud, S. M. (2013). Effects of Project-based Learning Strategy on Self-directed Learning Skills of Educational Technology Students. *Contemporary Educational Technology*, 4(1), 15–29.
<https://doi.org/10.30935/cedtech/6089>
- Bell, S. (2010). Project-Based Learning for the 21st Century : Skills for the Future. *The Clearing House Taylor & Francis Group*, 83(2), 39–43.
<https://doi.org/10.1080/00098650903505415>
- Dede, C. (2011). Emerging Technologies, Ubiquitous Learning, and Educational Transformation. *Springer*, 6964, 1–8.
https://doi.org/https://doi.org/10.1007/978-3-642-23985-4_1
- Drajati, N. A., Tan, L., Haryati, S., Zainnuri, D. R., & Zainnuri, H. (2018). Investigating English Language Teachers in Developing TPACK and Multimodality Literacy. *Indonesian Journal of Applied Linguistics*, 7(3), 575–582.
<https://doi.org/10.17509/ijal.v7i3.9806>
- Farrell, T. S. C. (2006). Reflective Practice in Action : A Case Study of a Writing Teacher ' s Reflections on Practice. *TESL Canada Journal*, 23(2), 77–90.
<https://doi.org/10.18806/tesl.v23i2.56>
- Garrett, P. (2012). *Attitudes to Language* (cambridge (ed.)). Cambridge University Press.
<https://doi.org/10.1017/CDO9780511844713>
- Genc, M. (2015). The project-Based Learning Approach in Environmental Education. *International Research in Geographical and Environmental Education*, 24(2), 105–117.
<https://doi.org/10.1080/10382046.2014.993169>
- Greenier, V. T. (2018). The 10Cs of project-based learning TESOL curriculum The 10Cs of project-based learning TESOL curriculum. *Innovation in Language Learning and Teaching*, 0(0), 1–10.
<https://doi.org/10.1080/17501229.2018.1473405>
- Gültekin, M. (2007). The Effect of Project Based Learning on Learning Outcomes in the 5 th Grade Social Studies Course in Primary Education. *Educational Sciences: Theory & Practice*, 5, 548–556.
<https://doi.org/10.17051/IO.74918>
- Isabekov, A., & Sadyrova, G. (2018). Project-Based Learning to Develop Creative Abilities in Students. *Vocational Teacher Education in Central Asia*, 28, 43–49.
https://doi.org/10.1007/978-3-319-73093-6_4
- Jarvis, P. (2002). Journal writing in higher education. *New Directions for Adult and Continuing Education*, 2001(90), 79–86.
<https://doi.org/10.1002/ace.23>
- Kai, S., Chu, W., Tse, S. K., & Chow, K. (2011). Using collaborative teaching and inquiry project-based learning to help primary school students develop information literacy and information skills. *Library & Information Science Research Elsevier*, 33, 132–143. <https://doi.org/10.1016/j.lisr.2010.07.017>
- Koparan, T., & Güven, B. (2014). The Effect of Project Based Learning on the Statistical Literacy Levels of Student 8th Grade The Effect of Project Based Learning on the Statistical Literacy Levels of Student 8 th Grade. *European Journal of Educational Research*, 3(3), 145–157.
<https://doi.org/10.12973/eu-jer.3.3.145>
- Luh, N., Ning, P., Putri, S., Artini, L. P., &

- Nitiasih, P. K. (2018). Do Learners Like Project in Their English Classes?: Impact of PBL on Students' Attitudes. *SHS Web of Conferences*, 42, 1–9.
<https://doi.org/10.1051/shsconf/20184200084>
- Matusov, E. (2020). meaning-making in education E2. *Dialogic Pedagogy: An International Online Journal*, 8, 1–24.
<https://doi.org/10.5195/dpj.2020.314>
- Millaray, M., Cárcamo, A., Heraldo, C., & Larenas, D. (2016). The Impact of Multimodal Instruction on the Acquisition of Vocabulary. *Trab. Ling. Aplic.*, 55(1), 129–154.
<https://doi.org/10.1590/010318134842170942>
- Pinho-lobes, M., & Macedo, J. (2014). Project-Based Learning to Promote High Order Thinking and Problem Solving Skills in Geotechnical Courses. *IJEP*, 4(5), 20–27.
<https://doi.org/http://dx.doi.org/10.3991/ijep.v4i5.3535>
- Prayogo, A., & Widyaningrum, L. (2019). WhatsApp-Mediated Language Teachers' Reflection of Classroom Practice: Experience of Indonesian Context. *Indonesian Journal of English Language Teaching and Applied Linguistics*, 4(1), 61–82.
- Rowell, J., & Walsh, M. (2011). Rethinking Literacy Education in New Times: Multimodality, Multiliteracies, & New Literacies. *Brock Education Journal*, 21(1), 53–62.
<https://doi.org/10.26522/brocked.v21i1.236>
- Saldana, J. (2009). *The Coding Manual for Qualitative Researchers* (2nd ed.). SAGE Publications Ltd.
- Sarosa, T., Asrori, M., & Draijati, N. A. (2021). Project-based Learning (PBL) in EFL Learning : Lessons from Indonesia. *Al-Ishlah: Jurnal Pendidikan*, 13(2), 1114–1122.
<https://doi.org/10.35445/alishlah.v13i2.558>
- Strik, H., Doremalen, J. van, Colpaert, J., & Cucchiari, C. (2013). Development and Integration of Speech Technology into Courseware for Language Learning: The DISCO Project. In P. Spyns & J. Odijk (Eds.), *Essential Speech and Language Technology for Dutch*. Springer. https://doi.org/10.1007/978-3-642-30910-6_18
- Yi, Y. (2016). Multimodal Pedagogies for Teacher Education in. *TESOL Quarterly*, 50(4), 988–998. <https://doi.org/10.1002/tesq.326>
- You, J. W. (2021). Enhancing creativity in team project-based learning amongst science college students : The moderating role of psychological safety. *Innovations in Education and Teaching International*, 58(2), 135–145.
<https://doi.org/10.1080/14703297.2020.1711796>