

Green project work for process writing amidst the pandemic: Planning, implementing, and reflections

Proyek *Hijau* untuk menulis paragraf proses di tengah pandemi: Perencanaan, pelaksanaan, dan refleksi

Lestari Setyowati ^a * , Sari Karmina ^b , Sony Sukmawan ^c ,
 Razlina Razali ^d 

^{a,b} Faculty of Letters, Universitas Negeri Malang

^c Faculty of Cultural Studies, Universitas Brawijaya

^d Academy of Language Studies, Universiti Teknologi MARA Cawangan Perlis, Malaysia

Submitted: May 20, 2022; Accepted: August 16, 2022; Published: August 25, 2022

KEYWORDS

project-based learning, process paragraph planning, implementing, refleksi

ABSTRACT

The aims of this paper are to discuss the concepts underlying Project-based learning (PjBL) and its syntax and to explore the planning, implementation, and reflection of PjBL in the online teaching of writing a process paragraph on the topic of using Reduce, Reuse, and Recycle (3R) principles to save the environment. Thirty-one students joined the paragraph writing course. The learning process and the students' products of their projects were collected and documented in the form of videos, Power point presentation, and electronic writing portfolios. The paper discusses how PjBl promotes collaborative work, problem-solving, critical thinking and technology integration. It also illustrates the steps of the implementation of PjBL which include planning, implementing, and reflecting. The project products were the students' compositions and the videos showing the process in how to do or to make something that reflect the 3R principles. The majority of the students' compositions were in 'very good' criteria, and the students' videos were published in YouTube. The implementation of PjBL in the online teaching of process writing on the environmental topic increases the students' critical thinking and creativity in solving global problems.

KATA KUNCI

project-based learning, paragraf proses perencanaan, implementasi, refleksi

ABSTRAK

Tujuan artikel ini adalah membahas konsep yang mendasari pembelajaran berbasis proyek (PjBL) dan sintaksnya, dan mengeksplorasi perencanaan, pelaksanaan, dan refleksi PjBL dalam pembelajaran online menulis paragraf proses dengan topik menggunakan prinsip-prinsip Reduce, Reuse, dan Recycle (3R) untuk menyelamatkan lingkungan. Ada 31 mahasiswa yang mengikuti kelas menulis paragraf. Semua proses belajar mahasiswa dan produk proyek mereka dikumpulkan dan didokumentasikan dalam bentuk video, presentasi power point, dan portofolio tulisan elektronik. Artikel ini membahas bagaimana PjBl mengedepankan kerja kolaboratif, pemecahan masalah, integrasi teknologi, dan berpikir kritis. Artikel ini juga mengilustrasikan langkah-langkah implementasi PjBL yang meliputi perencanaan, pelaksanaan, dan refleksi. Produk proyek adalah karya mahasiswa dan video yang menunjukkan proses bagaimana melakukan atau membuat sesuatu yang mencerminkan prinsip 3R. Sebagian besar tulisan mahasiswa termasuk dalam kriteria 'sangat baik', dan video mahasiswa telah dipublikasikan di YouTube. Penerapan PjBL dalam menulis paragraf proses bertema lingkungan meningkatkan daya pikir kritis dan kreativitas siswa dalam memecahkan masalah ekologi global.

How to cite this article:

Setyowati, L., Karmina, S., Sukmawan, S., & Razali, R. (2022). Green project work for process writing amidst the pandemic: Planning, implementing, and reflections. *Bahasa dan Seni: Jurnal Bahasa, Sastra, Seni, dan Pengajarannya*, 50(2), 223–222. <https://dx.doi.org/10.17977/um015v50i22022p223>

* Corresponding author: lestari.setyowati.fs@um.ac.id

Introduction

There has been a growing interest in recent years to incorporate environmental education into the classroom. Environmental education is vital to teach learners how to appreciate, preserve, and protect nature. Environmental education is seen as one of the best instruments for dealing with future environmental concerns (Wahyudin & Malik, 2019). Teachers therefore play an important role in promoting and motivating learners to have noble values and to participate in social actions for a better life as part of Socially Responsible Teaching (henceforth SRT) (Sihem, 2012). SRT is one of the reflections of critical pedagogy (Gürsoy & Sali, 2014), which challenges students to critically think about their education and society (Freire, 2000). In this sense, teachers and students play active roles in the learning environment, rather than being passive recipients of knowledge (Freire, 2000).

Incorporating environmental topics into a language class is seen as a beneficial medium to create active agents of change to protect the environment. This being the case, involving students in writing projects on environmental protection by applying the Reduce, Reuse, and Recycle (henceforth 3R) principles is a good way to 'kill two birds with one stone'. Such projects enable students to practice their writing skills while at the same time stimulating their critical thinking to solve global problems.

One of the strategies to incorporate global issues in writing is by implementing project-based learning (henceforth PiBL). PjBL is an instructional model that enables students to find answers and solve problems through a process of inquiries (Lee et al., 2014) and to work autonomously to complete a project (Dado & Bodemer, 2017). PjBL offers students opportunities to actively and independently learn in real-life situations by working on meaningful projects of their choice (Guo et al., 2020). In addition, PjBL helps university students improve their self-regulated learning (English & Kitsantas, 2013). Self-regulation is important especially in the current situation where most of the learning activities occur online. The different dynamics in online learning require students to have effective self-regulation skills in order to persist in the online learning environment (Stephen & Rockinson-Szapkiw, 2021).

A number of previous studies on PjBL were conducted at the primary and secondary school levels than in higher education (Chen & Yang, 2019; Guo et al., 2020; Lee et al., 2014). A review study by Chen and Yang (2019) revealed that only 20% of the studies on PjBL was conducted in higher education. This finding indicates a gap in the literature as research on PjBL revealed that PjBL offers university students many benefits. For instance, a study conducted by Munezero and Bekuta (2016) concluded that PjBL trained university students to improve technical, interdisciplinary, and interpersonal skills for their future career. In addition, PjBL has also been found to improve university students' grades, motivation, communication, problem-solving skills, collaboration, and critical thinking skills in computer programming education (Grota & Prado, 2019). Similarly, a recent review study reported that PjBL improves students' cognitive and behavioral outcomes (Guo et al., 2020).

PjBL is also applied in the teaching of writing in the Department of English, Faculty of Letters, State University of Malang. The freshmen of English Department, Faculty of Letters, State University of Malang must take a course named Intensive Course (IC)

in the first semester. One of the subjects taught in the IC course is paragraph writing. IC Writing weighs 4 credits and this subject is taught twice a week throughout the semester. Each meeting lasts 100 minutes. In one semester, there are 32 meetings for the IC Writing. This paper will later discuss one of the classes of IC Writing, that is, Class C, which consisted of 29 females and one male student. This class was selected because of several reasons. First, it was the only class in which PjBL method was applied. Second, it was also the only class which incorporated a project focusing on environmental topics. The students' project was to present how they creatively applied the 3R ways in day-to-day life which later had to be written in English and presented in videos. Thirdly, this class was taught by a team consisting of the lecturer originally assigned to teach in the class and postgraduate students doing their teaching practicum in the class. The leader of the class team teaching was the assigned lecturer, while the co-lecturers were three students of master's degree program who chose IC writing class for their teaching practicum. The lecturer and the co-lecturers took turn in teaching the students by using one course outline. The first and the last ten meetings were taught by the lecturer, while the co-lecturers each taught four meetings in between.

The authors of this article documented all the students' learning processes and the products of their project and did a portfolio assessment on the students' project. The project scoring rubric was adapted from the writing scoring rubric in which the latter was made by the writing team lecturer in the Department of English. One criterion was added to adapt the rubric to the project-based method, that is, the project creativity and artistry. The rubric therefore assessed the content, organization, grammatical precision, vocabulary, mechanics, project ingenuity and artistry of students' project. The lowest score set in the rubric was 10 while the highest score was 100. The students' project was rated by the co-lecturers. The scores used to determine the students' grade were the average scores from those given by the first and second raters. The authors then used SPSS 25 to examine the reliability of the scores among raters and the frequency distribution of the students' scores.

In the context of English as a foreign language (EFL), research on PjBL has also been conducted mostly at the pre-higher education. The few studies conducted at the tertiary level have yielded similar results. PjBL has been found effective to improve learners' autonomy and motivation (Kettanun, 2015), and to foster students critical thinking and creativity (Cosgun & Atay, 2021; Ghaemi & Mirsaed, 2017). In addition, PjBL has been implemented to increase the English skills such as speaking, listening, and reading. Sirisrimangkorn (2018) and Zhang (2015) reported that the students in their study improved their speaking skills after working on speaking projects. Some other researchers have found similar findings in relation to reading skills (Kavlu, 2015). Within the Indonesian context, the implementation of PjBL in higher education for teaching writing that incorporates environmental issues is not much discussed. Exploring the use of PjBl in EFL writing class helps writing teachers/lecturers with sufficient information on the actual practices of PjBl in the classroom. In the end, they can replicate the steps, or even enhance it, to improve the quality of the teaching and learning process for writing subject.

Therefore, this conceptual paper is intended to fill the gap by exploring the use of PjBL in the writing class focusing on process paragraphs. The paper is intended to

discuss the concepts underlying Project-based learning (PjBL) and its syntax and to explore the planning, implementation, and reflection of PjBL in the online teaching of writing a process paragraph on the topic of using Reduce, Reuse, and Recycle (3R) principles to save the environment.

Theoretical Framework

Writing

Writing is one of the most significant language skills since it helps people to convey their thoughts and feelings (Ibnian, 2017). The process and product of writing are intertwined (Linse, 2006). Linse (2006) claims that writing is the act of bringing ideas together and working with them so that readers may understand them. Writing is a process of generating language and expressing thoughts, feelings, and opinions (Harmer, 2004). Harmer (2004) also claims that writing is a process of expressing ideas through the medium of writing in which genres play an important role on the process.

A good piece of writing is rarely produced in one sitting (Setyowati et al., 2020). The writer should come up with ideas by gathering relevant information on the subject. As a result, writing necessitates both physical and mental effort. Nunan (2003) states that writing is a thought and bodily act. He claims that writing is, at its most fundamental level, a physical act of communicating words and concepts through a medium. Writing is also a mental exercise in coming up with ideas, deciding how to convey them, and organizing them into understandable words and paragraphs. Yet, writing is the most difficult ability to master for most foreign language learners (Setyowati et al., 2017). Writing involves not only expressing ideas and organizing them, but also selecting appropriate words and syntactical structures (Setyowati et al., 2020). Writing can be challenging and time-consuming. Students should work on numerous things almost simultaneously, such as deciding what to write, translating their ideas into text, and reviewing their work. Thus, the intricacy of writing necessitates a lengthy cognitive process (Kieft et al., 2007). The prewriting stage, according to Murray (1982), is the most significant element of the writing process because it takes up the majority of the writing time.

Project-Based Learning

PjBL is not a new approach to learning. This idea of learning by doing was proposed in the 1990s by John Dewey. Engagement and experience are seen as two crucial aspects to the learning process (Dewey, 1985). Collaboration, problem-solving, critical thinking, technology integration, as well as solidarity and cultural diversity awareness are all part of the project-based approach (Ulrich, 2016).

Buck Institute for Education for Project Based-Learning Works in its official website of PjBL provides a 'gold standard' for learners and teachers with similar learning goals (PBL Works, 2019). The Gold Standard PBL places a high priority on learning goals, such as students' acquisition of critical knowledge, comprehension, and success skills (PBL Works, 2019). It is so called 'gold standard' because it offers seven key project design components to encourage excellent project-based learning, including questioning (the need to know), persistent inquiry, authenticity, student voice and choice in decision making, reflection, evaluation and revision, and public outcome. Sayuti et al. (2020)

used the Gold Standard for PjBL (GSPiBL) to help students improve their speaking skills. The findings demonstrated that GSPjBL aids teachers in helping pupils enhance their speaking abilities. The study also concluded that PjBL is appropriate for digital learning. This paper describes the implementation of the seven elements of the standard in PjBL, namely questioning, inquiry, authenticity, making decision, reflection, giving and receiving feedback, and product sharing to wider community.

The literature shows that PjBL steps differ from one study to the next. For example, Bell (2010) discussed various PjBL steps: 1) inquiry questions, 2) planning (brainstorming method, materials, goal setting, and deadline-setting), 3) project execution, 4) offering feedback, 5) publishing, and 6) evaluation. Meanwhile, Shanti and Koto (2018) used PjBL in the classroom to increase students' writing skills in composing a descriptive text. In their research, PjBL involved six steps. Giving fundamental questions, planning, scheduling, monitoring student progress, evaluating results, and evaluating experience were all part of it. On the other hand, Jalinus et al. (2017) proposed a model of PjBL syntax. According to the model, PjBL consists of seven steps, namely: 1) formulation of intended learning goals, 2) material concept understanding, 3) ability training, 4) project topic creation, 5) project application marking, 6) project implementation, and 7) project presentation.

It is important to note that while the processes of PjBL may vary, the main steps of PjBL are systematically evident. Starting with a question or an issue is the first step, formulating the project concept is the second step (planning), the project's execution is the next step. Next, the students can then exchange constructive remarks or seek input from the lecturers. The most crucial stage is to make the project public. In the final stage, the project is evaluated.

Results and Discussion

Planning the PjBL

This section discusses the implementation of PjBL in the teaching and learning of process paragraph writing, the extent to which the students' writing projects reflect the 3R principles, and the students' achievement in process paragraph writing when using PjBL. This section is structured around those three topics.

(1) Pre-project activity (discussing the process paragraph)

In this stage, the students and the lead lecturer discussed what was meant by process paragraph and the grammatical structures typically used for process paragraph. After the discussion, the students completed some practices to apply what they had learnt. These activities were done during the Zoom meeting with the students taking an active role. The students prepared a slide presentation and presented the contents to their classmates. The lecturer facilitated the activity and provided comments on the presentations. The implementation of PjBL applied the following steps, namely planning, designing, implementing, exhibiting, and reflecting. Each step is elaborated as follows:

(2) Planning the project (gathering information, solving problems)

In this step, the students were asked to write down their overall planning of the project. The lecturers announced the project in which the students had to write a

process paragraph. The content of the writing should be based on the students' real-life experience related to any environmental issues. For instance, the students may write about the processes involved in planting a tree or how to transform unused materials into something useful. Each student was asked to write the topic they are going to write about. The lecturer gave questions and problems for the students to solve. The questions are 'What are unused material that you can find in your neighbourhood?' 'What can you make from the unused material?' 'What are the additional materials you need to reuse the items?' 'What are the steps to create the product?'

The students with the same project were asked to make a group and discuss the materials and the steps in the making of something. Some of them worked in a small group to look for information and creative ideas from the internet. They also discussed the vocabulary they needed in the writing.

(3) Project design

The next step was project design. The lecturer gave overall feedback on the students' rough draft and discuss some language problems. The lecturer asked the students to apply their grammatical knowledge about the subordinators for the process paragraph which they learned in the previous meeting. The students were required to use at least ten subordinators in their composition and design the presentation in PowerPoint. Excerpt 1 is the example of the student's draft when writing a process paragraph by using the 3R principles. Excerpt 1 was a draft written by Rist/406. She wrote about how to make pots from unused mineral water.

Excerpt 1. The student's draft

Ways to make your own plant pots

Having plants at home makes the house look beautiful, healthy, and green. Besides that, the air or the oxygen at home feels fresher. But sometimes we don't realize we have spent quite a lot of money to buy pots. So, how to save our money by not buying pots if we need them? We don't need to buy pots to grow plants if we can make our own pots. We can recycle used bottles at home to make plant pots. So, here are some steps for making recycled pots. First, prepare tools and materials to make pots. The materials and tools we need are some used bottles, scissors, paint, and a brush. Second, we need to wash the bottles until they clean well, and do not forget to dry them. Next, after the bottles are dry, cut all of the bottles into two parts. Then, color the bottle using paint and brush. Color it with your favorite color. After that, let it dry first. Wait about 15-20 minutes. The last step is to fill the dry bottle with fertilizer and soil and place the plant in. After following these steps, now you can make your own pot, and you can save money. In addition, your home looks beautiful and healthy you can also help to reduce garbage. (Rist/406 / IC-C Writing)

When the process paragraph was converted into PowerPoint presentation, some improvements were shown in terms of the content of the writing, clarity in steps, and artistic presentation.

Each of the Power Point presentations should tell the steps of how to make/do something based on the chosen topic. Besides having a text that explained a step, each slide should be presented with pictures related to the topic. The lecturer set the deadline for

the revision of the text and set a different deadline for the PowerPoint presentation (Figure 1).

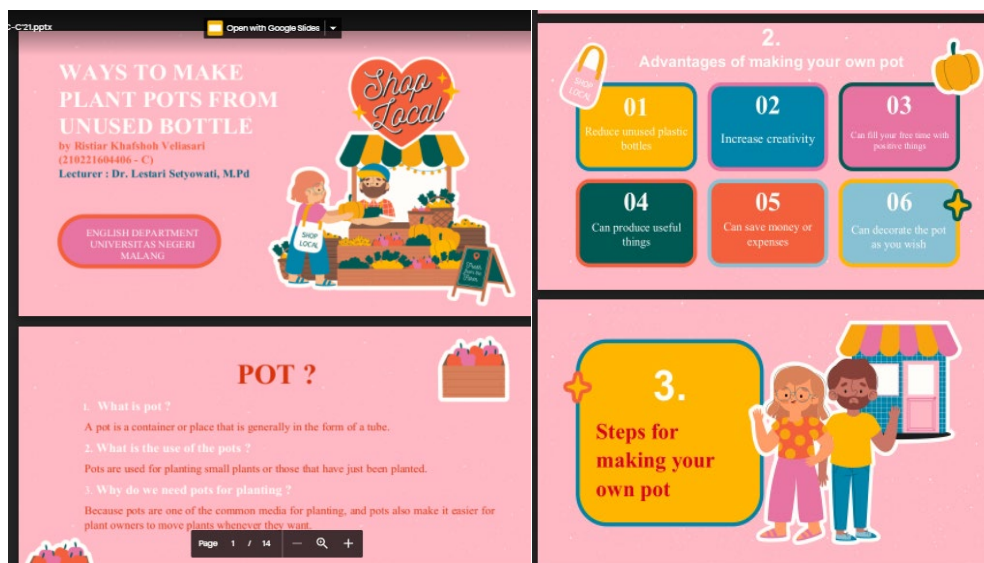


Figure 1. Sample of a student’s PPT (Rist/ 406 /PPT/ IC-C writing)

Implementation of the project (discuss, revise, and develop the project)

The students had to conduct a project on how to make or do something in one week. The lecturer checked the students’ progress with the project and asked about the problems that they might encounter in an ongoing manner. The students could discuss the project with the lecturer outside class hours. In general, students consulted the lecturer about the number of the slide presentations, the contents in the slides, and language use. A few students said that they had time management problems, but in general the students had no significant issue finishing the project. Some students asked for an extended deadline to finish the project due to the piling up assignments from other courses. Based on the classroom discussion, the lecturer agreed to give the students additional time to finish the project.

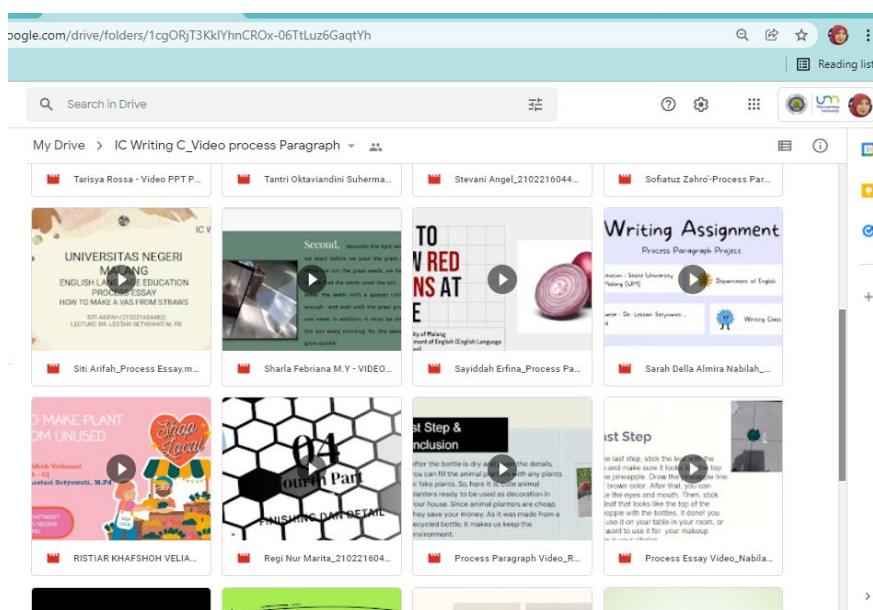


Figure 2. Students’ video in Google Drive

(1) Project launch

On the agreed deadline, the students submitted their process paragraph project in Google classroom. Some of them presented their project in PowerPoint presentations, and the lecturer gave comments on the students' projects. After the project launch, the lecturer asked the students to convert the PowerPoint presentation into a video and gave some background music to make the video interesting. The students were given a link to submit their video in Google Drive. Each student became the editor in the Google Drive link. This enabled them to share and view each other's work.

The students' projects were uploaded on YouTube for a wider audience. Before the project exhibition, the lecturer asked the students to pay attention to the copyright issue that may arise concerning the use of background music. Some students' background music did have copyright issues. Because of this, they had to change the music with copyright-free one (Figure 2).

(2) Project exhibition (exhibited to a general audience)

The students' projects were uploaded to the lecturer's YouTube channel. The time to upload the students' videos took several days since YouTube gave restrictions to the number of videos to upload. Each day, only eight videos were uploaded to the channel. The links of the students' project publication on YouTube were shared in the class WhatsApp group. The lecturer also gave freedom to the students to upload the video in their channel (Figure 3).

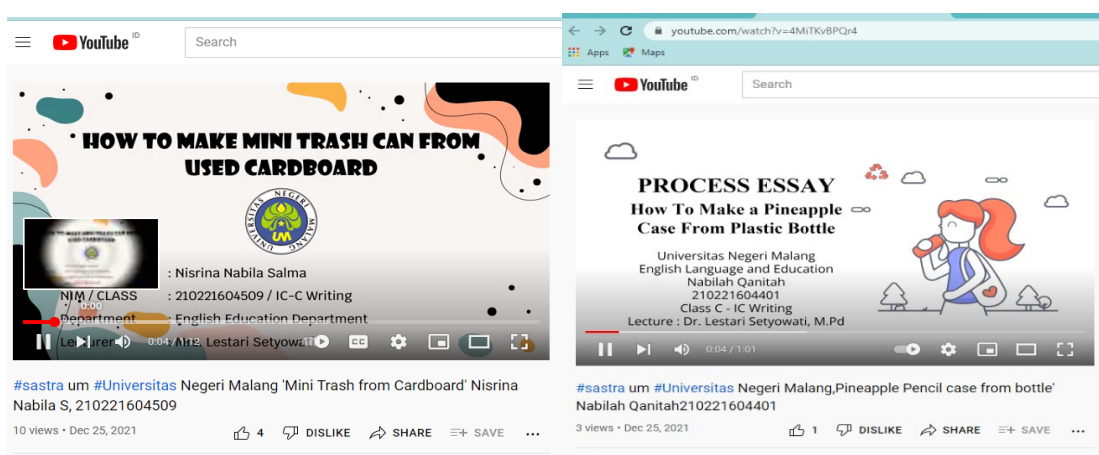


Figure 3. The students' YouTube videos of process paragraph writing

To avoid negative comments from the viewers and keep the students' motivation to write, the lecturer disabled the comment section. The students were encouraged to show support to their friends by clicking the 'like' button.

Project reflection

After all videos were uploaded to YouTube, the students and the lecturer did a reflection. The reflection was related to their feelings, project exhibition, and the content of the project. Many students were happy because their handicraft project videos were uploaded to the lecturer's YouTube channel. Yet, some of them felt that they could do better with the project. The reflection provided the students with the feeling of accomplishment and the spirit to do better in future projects. The students confessed that

they enjoyed creating new things from the thrown away items, such as making a flower vase from unused bottles, tissue box from shoes boxes, trash cans from card boxes, as shown in Excerpt 2 below.

Excerpt 2. The students' reflection

I enjoyed making a new thing from unused bottle, but I feel I can do better in my project ma'am (Nab/401/Ref/ IC-C Writing)

I enjoyed making the craft, Ma'am (Reg/512/Ref/ IC-C Writing)

I feel I can do better too, ma'am (Stev/ 429/Ref/IC-C Writing)

Several issues were encountered in the implementation of PjBL in the current case. According to Aldabbus's (2018) survey, the majority of pre-service teachers in Bahrain found it challenging to implement PjBL owing to time constraints. Time management was also a problem for a few students in this current study although the students were able to overcome the problem and completed the task on time. Second, internet connection was the next issue to address. Because of the COVID-19 pandemic, the paragraph writing lesson in this study was conducted entirely online. Each student's project was uniquely conceived, executed, and presented. The students had to process the project and report it for a classroom presentation in addition to performing real-life experience projects of making and doing something. Due to poor internet connection, some projects were submitted late. Unfortunately, the issue of poor internet connectivity and data is not unusual in Indonesia as reported in previous studies (see, e.g., Inawati and Setyowati, 2020; Nur Agung et al., 2020; Prasojo & Srisudarso, 2021; Yanti, 2021)

The issue of plagiarism was the next hurdle for the PjBL implementation reported in this paper. To address this issue, the writing lecturer instructed students to check the originality of their work using a plagiarism checker available for free online and to submit their writing product together with the originality check result.

3R principles in students' writing project

A closer look at the students' projects shows that all the students' topics reflected the 3R principles. Most of the projects were about how to reuse plastic bottles. The students' ideas were to reuse the plastic bottles into pots, vases, and piggy banks. Some students preferred to reuse card box into bookshelves, pencil case, tissue box, and mini waste bin. After the students decided the topic, the next step was to make a rough draft of the process paragraph. The students' first drafts were submitted in the Google classroom (Table 1).

Taking action, according to Jacobs and Goatly (2000), is the most crucial stage in environmental protection. They also argued that being aware is simply superficial because they realize that the environment has issues. Simply being aware is insufficient. The students must be able to solve problems and put plans into effect. In addition, being conscious is crucial because one is unable to discover answers and contribute to environmental conservation without being conscious (Setyowati, 2015).

Table 1. List of the students' topic

Name	Topic
Irs	Bookshelf from cardboard
Kei	Vase from Unused Plastic
Kho	Tissue Box from card box
Luc	Pots from bottle
Mey	Vase from bottle
Mif	Pencil case from bottle
Dil	Flower pot from unused bottle
Nab	Pineapple case from plastic bottle
Nad	Piggy bank from bottle
Nan	Flower vase from bottle
Nat	Pencil case from plastic straw
Nis	How to plant ginger
Pra	Flower from used bottle
Ra	Animal planter from plastic bottle
Reg	Piggy bank from food container
Ris	Pots from bottle
Riz	Cosmetic shelves from carton
Sar	Pots from plastic
Say	How to grow onions
Sha	How to make aquascape
Sil	Pots from plastic
Sin	Decorative lamps from duct
Sit	Vase from straws
Sof	Mini trash bin from card box
Ste	Pots from old newspaper
Tan	Pots from plastic bottle
Tar	Bookshelf from card box
Tsa	Vase from plastic bottle
Van	Storage from cardboard
Wij	Flower pot from bottle
Win	Make up holder from plastic bottle

The students' achievement in the project

The students' projects were graded by two co-lecturers. To rate the projects, the co-lecturers used a scoring rubric. Before analyzing the students' scores, the reliability analysis among the two co-lecturers (henceforth the raters) was examined. The result of the reliability analysis is presented below (Table 2).

Tabel 2. The Reliability analysis among the raters

Reliability Statistics	
Cronbach's Alpha	N of Items
.730	3

The result of reliability analysis among the two raters showed an alpha value of $>.70$. According to Taber (2018), the Cronbach alpha value of ≥ 0.70 is considered acceptable; it shows that there is an internal consistency among raters in scoring the students' projects. The writing rubric covers content, organization, grammatical accuracy, vocabulary, mechanics, and project creativity and artistry. The scores are within the range of 10 - 100.

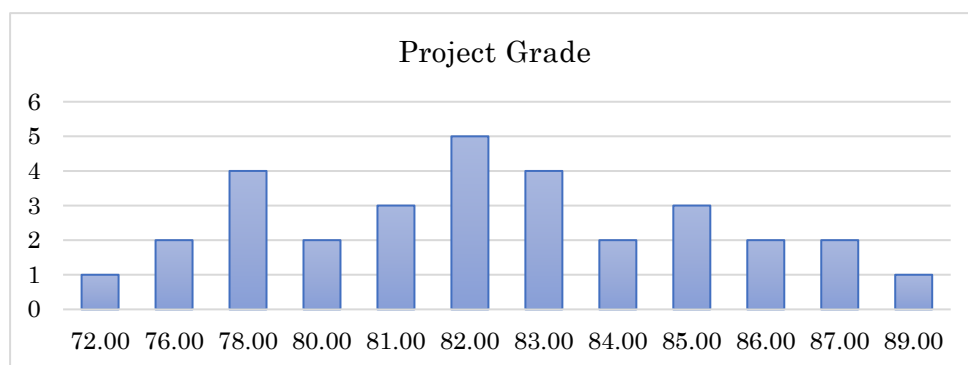


Figure 4. The students' scores

Figure 4 shows that the lowest score among the students was 72, while the highest score was 89. The average students' score was 81.9. To find out the students' final grades in the project, the lecturer used a final letter grade based on the criteria specified in Universitas Negeri Malang grading system policies and procedures as stated in the course profile-to measure their performance. Based on the grading rubric, the students whose scores fall within the range of 85-100 deserve to get an A, while those whose scores were 80-84 deserve an A-. To get the B+ grade, the students' scores should be between 75-79, while B grade requires score ranging from 70-74.

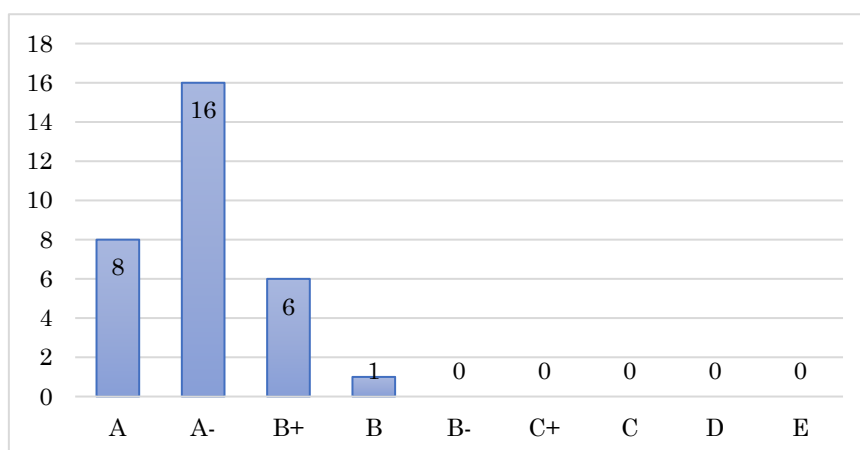


Figure 5. The distribution of the project score grades

The students' scores showed that eight projects deserved to get an A grade, 16 projects got an A-, six projects got a B+, and one project got a B. The majority of the students' projects therefore fell in the 'very good' criteria, and the student's performance in doing the process paragraph project was deemed satisfactory. It is in line with Praba et al.'s (2018) argument that PjBL improves secondary school students' writing abilities. Praba et al. (2018) also believe that PjBL is genuine because it takes place in a real-world setting.

In sum, PjBL is advantageous and relevant for students' writing courses, according to the PJBL implementation reported in this paper. The students' writing samples revealed that they had no trouble expressing themselves on paper. The ideas flowed nicely throughout the composition, as evidenced by the introduction, phases, and conclusion because the students were in charge of the project and had hands-on experience making crafts or raising plants. The activities provided them with sufficient background information to create the composition.

Conclusions

The PjBL implementation reported in the paper demonstrates that the use of PjBL is suitable for teaching higher education students process paragraph writing while also discussing environmental issues. The project made the students feel engaged with the course and gave them a hands-on experience to write for a purpose, as well as to train their creativity and critical thinking skills. Incorporating environmental topics that reflect the 3R principles enabled the students to think critically and creatively in solving global problems. In the process, the students learned to write, evaluate, analyse, and solve problems that they encountered during the completion of the project such as

having problems with time management and internet connection. Therefore, it is recommended that PjBL be implemented in teaching process writing.

It is impossible to exclude the planning and implementation of PjBL for process writing from its challenges and limitations. The issue with the internet connection is the first concern. Due to the slow internet connection, some students were unable to share their projects with peers during the class presentation on Zoom. To address this issue, the students uploaded their project to Google Classroom and requested that their peers view the presentation. The lecturer asked other students to give comments and suggestion in the Google Classroom stream about the presentation. Second, some students lacked confidence in publishing their work on social media platforms like YouTube. They said that it was not the project that they worried, but their English. Some of them were worried about the hateful comments from the audience who read their composition. To overcome this problem, the lecturer gave encouragement and asked them to recheck the language used in the composition by using Grammarly or other writing application, and to encourage peers to give constructive feedback. Next, the students' feelings, opinions and challenges were not documented quite well during the planning stage. Because of this, the lecturer could not identify fully what the students actually learned from the project. Giving time for the students to reflect themselves in the planning and implementation phase would be helpful for their project and self-improvement. And finally, the lecturer needed to show students how to make reflections well. The fact showed that many students could not make proper reflection that expressed their feelings, emotions, difficulties, challenges, and hopes for their project. In the reflection stage, many students only expressed their feeling in one or two sentences. Thus, the lecturer needed to train them how to do the reflection correctly. Despite of the fact that the "green" PjBL has been implemented well in the classroom, understanding these hurdles would make the implementation of PjBL far more effective.

Acknowledgments

This research is fully supported by the Indonesian Directorate of Research and Community Engagement (DRPM) of Higher Education for funding in 2022.

References

- Aldabbus, S. (2018). Project-based learning: Implementation & challenges. *International Journal of Education, Learning and Development*, 6(3), 71–79.
- Bell, S. (2010). Project-based learning for the 21st century: Skills for the future. *The Clearing House: A Journal of Educational Strategies, Issues and Ideas*, 83(2), 39–43. <https://doi.org/10.1080/00098650903505415>
- PBL Works. (2019). *Gold standard PjBL: Essential project design elements*. Retrieved from <https://www.pblworks.org/what-is-pbl/gold-standard-project-design>
- Chen, C.-H., & Yang, Y.C. (2019). Revisiting the effects of project-based learning on students' academic achievement: A meta-analysis investigating moderators. *Educational Research Review*, 26, 71–81. <https://doi.org/10.1016/j.edurev.2018.11.001>
- Cosgun, G. & Atay, D. (2021). Fostering critical thinking, creativity, and language skills in the EFL Classroom through problem-based learning. *Int. J. Curr. Instr.* 13(3), 2360–2385.

- Dado, M., & Bodemer, D. (2017). A review of methodological applications of social network analysis in computer-supported collaborative learning. *Educational Research Review*, 22, 159–180. <https://doi.org/10.1016/j.edurev.2017.08.005>
- Dewey, J. (1985). Democracy and education (1916). *The middle works*, 9, 4–58
- English, M. C., & Kitsantas, A. (2013). Supporting student self-regulated learning in problem- and project-based learning. *Interdisciplinary Journal of Problem-based Learning*, 7(2), 128–150. <https://doi.org/10.7771/1541-5015.1339>
- Freire, P. (2000). *Pedagogy of the oppressed, 30th anniversary*. Continuum
- Ghaemi, F., & Mirsaheed, S.J. (2017). The impact of inquiry-based learning approach on critical thinking skill of EFL students. *EFL Journal*, 2 (2), 89–102. <http://dx.doi.org/10.21462/eflj.v2i2.38>
- Grotta, A., & Prado, E. P. V. (2019). Benefits of the project-based learning to cope with computer programming education: A systematic literature review. Conference Proceedings of Pbl2019 *Immersive Virtual International Conference Hello Future! Reinventing Education!* July 12-13, 2019, pages 1–10.
- Guo, P., Saab, N., Post, L. S., & Admiraal, W. (2020). A review of project-based learning in higher education: Student outcomes and measures. *International Journal of Educational Research*, 102. <https://doi.org/10.1016/j.ijer.2020.101586>
- Gürsoy, E., & Salı, P. (2014). A language course within the scheme of socially responsible teaching: ELT trainees' expectations. *Journal of Educational and Social Research*, 4(2), 355–365. <https://doi.org/10.5901/jesr.2014.v4n2p355>
- Harmer, J. (2004). *How to teach writing*. Longman.
- Ibniyan, S. S. K. (2017). Writing difficulties encountered by Jordanian EFL learners. *Asian Journal of Humanities and Social Studies*, 5(3), 197–206.
- Inawati, L. & Setyowati, L. (2020). The students' and parents' voices on online learning in SMP Wahid Hasyim Pasuruan. *Linguista*, 4(2), 120–127. <http://doi.org/10.25273/linguista.v4i2.8126>
- Jacobs, G. M., & Goatly, A. (2000). The treatment of ecological issues in ELT coursebooks. *ELT Journal*, 54(3), 256–264. <https://doi.org/10.1093/elt/54.3.256>
- Jalinus, N., Nabawi, R. A., & Mardin, A. (2017). The seven steps of project based learning model to enhance productive competences of vocational students. *Advances in Social Science, Education and Humanities Research*, 102, 251-256. <https://doi.org/10.2991/ictvt-17.2017.43>
- Kavlu, A. (2015). The effect of project-based learning on undergraduate EFL students' reading comprehension ability. *Journal of Education in Black Sea Region*, 1(1), 39-44. <https://doi.org/10.31578/jrebs.v1i1.8>
- Kettanun, C. (2015). Project-based learning and its validity in a Thai EFL classroom. *Procedia - Social and Behavioral Sciences*. 192 (24 June 2015), 567-573
- Kieft, M., Rijlaarsdam, G., Galbraith, D., & Van den Bergh, H. (2007). The effects of adapting a writing course to students' writing strategies. *British Journal of Educational Psychology*, 77(3), 565-578. <https://doi.org/10.1348/096317906X120231>
- Lee, J. S., Blackwell, S., Drake, J., & Moran, K. A. (2014). Taking a leap of faith: Redefining teaching and learning in higher education through project-based learning. *Interdisciplinary Journal of Problem-Based Learning*, 8(2), 19–34.
- Linse, C. (2006). *Practical English language teaching: Young learners*. McGraw-Hill.
- Munzero, M., & Bekuta, B. (2016). Benefits and challenges of introducing a blended project-based approach in higher education: Experiences from a Kenyan university. *International Journal of Education and Development using ICT*, 12(2), 206–218.
- Murray, D. M. (1982). *Learning by teaching: Selected articles on writing and teaching*. Boynton/Cook Publishers, Inc.
- Nunan, D. (2003). *Practical English language teaching (International ed.)*. McGraw-Hill Singapore.

- Nur Agung, A. S., Surtikanti, M. W. C. A., & Quinones, O.P. (2020). Students' perception of online learning during COVID-19 pandemic: A case study on the English students of STKIP Pamane Talino. *Soshum: Jurnal Sosial dan Humaniora* [Journal of Social Sciences and Humanities], 10(2), 225-235. <https://dx.doi.org/10.31940/soshum.v10i2.1316>
- Praba, L. W., Artini, L. P., & Ramendra, D. P. (2018). Project-based learning and writing skill in EFL: Are they related? *SHS Web of Conferences*, 42, 1-6. <https://doi.org/10.1051/shsconf/20184200059>
- Prasojo, Z., & Srisudarso, M. (2021). An investigating students' perception on asynchronous online language learning during COVID-19 pandemic: An exploratory study. *INTERACTION: Jurnal Pendidikan Bahasa*, 8(2), 291-302. <https://doi.org/10.36232/jurnalpendidikanbahasa.v8i2.1391>
- Sayuti, H. A. M., Ann, T. G., Saimi, W. M. S. A., Bakar, M. A. B., Dawawi, S. N. A., & Mohamad, M. (2020). Using gold standard project based learning for intermediate year three pupils to enhance English speaking skill: A conceptual paper. *Creative Education*, 11, 1873-1889. <https://doi.org/10.4236/ce.2020.1110137>
- Setyowati, L. (2015). Integrating character building into teaching to enhance the students environmental awareness. *Journal on English as a Foreign Language*, 3(1), 1-10. <https://doi.org/10.23971/jefl.v3i1.57>
- Setyowati, L., Sukmawan, S., & Latief, M. A. (2017). Solving the students' problems in writing argumentative essay through the provision of planning. *Celt: A Journal of Culture, English Language Teaching & Literature*, 17(1), 86-102. <https://doi.org/10.24167/celt.v17i1.1140>
- Setyowati, L., Sukmawan, S., & El-Sulukiyah, A. A. (2020). *Write down your thoughts: Essay writing for EFL learners*. Delta Pijar.
- Shanti, V. M., . S., & Koto, I. (2018). Project based learning approach to improve students' ability to write descriptive text (A classroom action research at Grade X SMAN I Bengkulu Selatan). *JOALL (Journal of Applied Linguistics & Literature)*, 1(2), 46-54. <https://doi.org/10.33369/joall.v1i2.4196>
- Sihem, B. B. (2012). The social responsibility of teaching. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.2180026>
- Sirisrimangkorn, L. (2018). The use of project-based learning focusing on drama to promote speaking skills of EFL learners. *Advances in Language and Literary Studies*, 9(6), 14-20. <https://doi.org/10.7575/aiac.all.v.9n.6p.14>
- Stephen, J. S., & Rockinson-Szapkiw, A. J. (2021). A high-impact practice for online students: The use of a first-semester seminar course to promote self-regulation, self-direction, online learning self-efficacy. *Smart Learn Environments*, 8 (6), 1-18. <https://doi.org/10.1186/s40561-021-00151-0>
- Taber, K. S. (2018) The use of Cronbach's alpha when developing and reporting research instruments in science education. *Research in Science Education*, 48, 1273-1296.
- Ulrich, C. (2016). John Dewey and the project-based learning: Landmarks for nowadays Romanian education. *Journal of Educational Sciences & Psychology*, 6, 54-60.
- Wahyudin, D., & Malik, R. S. (2019). Teaching environmental education for sustainable development: Strategies and challenges. *Journal of Sustainable Development Education and Research*, 3(1), 51-70. <https://doi.org/10.17509/jsder.v3i1.17172>
- Yanti, D. (2021). Students' perception on the effect of online learning during COVID 19. *Acitya: Journal of Teaching and Education*, 3(2), 176-187. <https://doi.org/10.30650/ajte.v3i2.2194>
- Zhang, Y. (2015). Project-based learning in Chinese college English listening and speaking course: From theory to practice. *Canadian Social Science*, 11(9), 40-44. <http://www.cscanada.net/index.php/css/article/view/7532>