



INTRODUCING CHILDREN OF ENVIRONMENTAL ISSUE IN SEKOTONG TIMUR THROUGH PROJECT BASED LEARNING

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Abstract. Nowadays, the environmental issue is one of the biggest problems worldwide. It is because the climate change deteriorates from time to time; the earth becomes warmer, and pollution polluted the environment. Humans have a pivotal role in changing the earth because they damage the ecosystem by using numerous plastics, throw many of rubbish, and cutting plenty of trees. As a result, climate change and global warming become worse. Consequently, all stakeholders need to take the responsibility to protect the earth. Some groups blame the government; however, environmental issues are the government's responsibility and all society's matters, including academicians. This community service activity was conducted in one of the remote areas in Bunbeleng village, East Sekotong district, East Lombok. The Project was held by Relawan Saling Jaga Indonesia (Relasi) funded by Direct Aid Program (DAP) Australian Consulate-General, Bali Indonesia coordinated by Isyatul Mardiah. This project was conducted based on Project-based Learning (PBL). There are five stages in implementing this project: planning the project, monitoring the project, presenting the project, and evaluating the project. The environment topics were elaborated in this community through the PBL. After the program, the students have more knowledge in reducing, recycling, and reusing plastics and green programs with planting trees. The students were very enthusiastic and motivated. The collection of the project was exhibited in the classroom.

Keywords: Environmental Issue; Children; Project Based Learning

Abstrak. Saat ini, masalah lingkungan adalah salah satu masalah terbesar di dunia. Itu karena perubahan iklim memburuk dari waktu ke waktu; bumi menjadi lebih hangat, dan polusi mencemari lingkungan. Manusia memiliki peran penting dalam mengubah bumi karena mereka merusak ekosistem dengan menggunakan banyak plastik, membuang banyak sampah, dan banyak menebang pohon. Akibatnya, perubahan iklim dan pemanasan global menjadi lebih buruk. Akibatnya, semua pemangku kepentingan perlu mengambil tanggung jawab untuk melindungi bumi. Beberapa kelompok menyalahkan pemerintah; namun, Masalah lingkungan adalah tanggung jawab pemerintah dan semua urusan masyarakat, termasuk akademisi. Kegiatan pengabdian masyarakat ini dilakukan di salah satu pelosok desa Bunbeleng, kecamatan Sekotong Timur, Lombok Timur. Proyek ini diselenggarakan oleh Relawan Saling Jaga Indonesia (Relasi) yang didanai oleh Direct Aid Program (DAP) Konsulat Jenderal Australia, Bali Indonesia yang dikoordinir oleh Isyatul Mardiah. Proyek ini dilakukan berdasarkan Project Based Learning (PBL). Ada lima tahapan dalam pelaksanaan proyek ini: perencanaan proyek, pemantauan proyek, presentasi proyek, dan evaluasi proyek. Topik lingkungan dielaborasi dalam komunitas ini melalui PBL. Setelah program, para siswa memiliki lebih banyak pengetahuan dalam mengurangi, mendaur ulang, dan menggunakan kembali plastik dan program penghijauan dengan menanam pohon. Para siswa sangat antusias dan termotivasi. Koleksi proyek yang dipamerkan di kelas.

Kata Kunci: Masalah Lingkungan; Anak-anak; Pembelajaran Berbasis Proyek

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INTRODUCTION

Climate change becomes one of the biggest issues for scholars, scientists, governments, and all stakeholders. One of the causes of this condition is people using plenty of plastics and deforestation. Plastics are thrown everywhere and every place such as in the rivers, in the sea, in the forest, and many others so that people need to tackle this matter. The matter is not only the government's responsibility but also for all of society because we have to protect the earth altogether to make the world better. Consequently, all stakeholders need to create an activity or



program to instill the issue in children or young people. Therefore, children can implement to reduce plastics, plant trees, and utilize textile waste which is one of the ways to tackle the environmental problem.

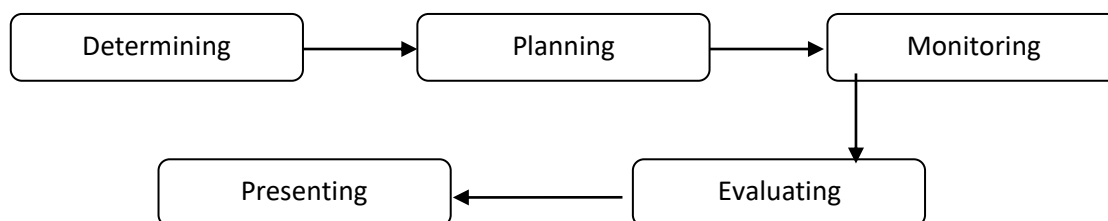
Educators, teachers, or lecturers also have a big role to make the world better because children's perspectives, beliefs, and behaviors might be altered through education and schools. Plenty of efforts can be put to protect the earth. For example, giving socialization or promoting the issue to schools and children to shape their perspectives and behaviours. Finally, the team agree to conduct the community service in one of the remote areas in West Lombok, particularly in Sekotong Timur, Bunbeleng. This place is located in the top of the hill which is far from information and access. The aims of this activity are to introduce the environment matters to children, to raise the awareness the children of the issue, and to create prototypes (products) of the topic. This community service activity is expected able to encourage the students and society in the area to be more aware of environmental matters.

Numerous methods, strategies, or approaches can be used to conduct this community service. One of those is Project Based Learning (PBL) approach. This approach can arouse and encourage students' motivation to engage in the learning process. Juuti et al. (2021) stated that PBL involves students in real-world activities to support them in engaging with the materials learned. Implementing PBL also leads the pupils to sharpen their leadership skills. It is because engaging teaching in PBL may be a good approach to developing leaders because the educator creates an authentic environment of leadership practice to be implemented in classrooms (King & Smith, 2020). Through the approach, students can explore and share their ideas with their friends in a team. Through the PBL and the dynamic process of investigation and collaboration, the learners probably have the opportunity to deeply explore complex and compelling phenomena so that the learners work in a team to create a response to driving the questions and explain the project created (Li et al., 2020). This approach is a method that is based on the context and it is believed that the students are able to explore real-world challenges and problems in their neighborhood (Maluleka, 2020).

This activity is held by Yayasan Saling Jaga Indonesia known as RELASI (Relawan Saling Jaga Indonesia) funded by Direct Aid Program, Australian Consulate-General, Bali Indonesia coordinated by Issyatul Mardiah. The team joined the program to introduce to the students about environmental issues especially reducing plastics by reducing, reusing, and recycling plastics and protecting the world from erosion and flood by planting trees. It is not only about reducing plastics and planting trees but also the children are taught to green their neighborhood to plant vegetables to make food sustainable. This study aims to share information with students who are far from access particularly on environmental matters and how to solve the problem through Project Based Learning (PBL).

METHOD

This community service activity was conducted in MI NW Al-Mujahidin Bunbeleng, East Sekotong, West Lombok, West Nusa Tenggara Province. There are about 30 students in the Islamic elementary school both females and males from 4 to 6 grades. There are some stages that were carried out in implementing this community service activity. Actually, the PBL does not have any specific framework to be imitated and it is based on the situation amongst the participants and the program (Leggett & Harrington, 2021). In implementing the project, there are five stages that are modified (Ismuwardani et al., 2019) namely determining the project; planning the project, monitoring the project, presenting the project, and evaluating the project. The steps of the PBL process can be seen in the Diagram 1:



The PBL was implemented in the classroom with environmental topics such as recycling plastics, planting trees, and others. The students were divided into some groups with one leader in each group and facilitators accompanied per group. The leader of the group will lead their friends to make the project and the facilitator assist them to prepare the project and the presentation. The projects were instructed for every meeting and topic.

FINDINGS AND DISCUSSION

There are about 30 students who joined the program from grades 4 to 6 for Islamic elementary school. After the program, the learners gain new knowledge and information about microplastics, planting trees, and others. This activity was held 4 weeks in one of the remote areas in Sekotong Timur where the school is at the top of the hill. The team spent about 2 hours reaching the place on foot. The activity run for approximately two hours to deliver the materials and the students create a product each meeting because this project is based on Project-based Learning (PBL). The topic of this community service activity is concerned with environmental issues such as utilizing rubbish, planting trees, keeping the earth, and others. This project is held by Yayasan Saling Jaga Indonesia, well-known as Relawan Saling Jaga Indonesia (RELASI), coordinated by Issyatul Mardiah. It is funded by Direct Aid Program (DAP), Australia-Bali. Universitas Bungiora team joined the program by assisting the RELASI.

In the first meeting, the students were instructed to know about ecosystems that consist of two namely aquatic ecosystem and terrestrial ecosystem. The materials were delivered about 15 minutes and the facilitators and the students discussed for about the topic. At the end of the teaching and learning process, the students were divided into four groups and each group has a leader and a facilitator. The students were asked to make a project of a diorama ecosystem. One group took aquatic ecosystem topic and the rest of the groups chose the terrestrial ecosystem topic. The facilitator guided and assisted the students to accomplish the project. The project was estimated duration for around 15 minutes. The facilitator assisted the members of the group to present their projects. Each group was provided about 5 minutes to present their projects. It aims to encourage the students to talk and build their confidence.



Picture 1. The activity in the classroom

In the second meeting, the students learned about organic and an-organic plastics that embedded with Islamic values. The materials also discuss the harmful of plastics and the way to protect the earth by reducing, recycling, reusing plastics. The benefits of keeping the environment are incorporated with Islamic values and asked the students to read Surah Arrum, Ayat 41 and read the translation. Asking and answering the question were implemented after

presenting the materials. The students who were able to answer the questions gain rewards such as pens, books, fruits and other gifts. After questioning and answering the questions, the students gathered in groups to create a project. The project is for the students to create a poster about the harmful of plastics using colour pens, glue, plastics, and other materials. After finishing the project, the pupils presented the posters enthusiastically. Before closing the class, sometimes the facilitators review the materials by asking some questions related to the topic.

The third meeting, discussing microplastics continue the previous meeting about organic and an-organic plastics. The micro plastics are dangerous not only for animals and fish but also for human because they consume the fish. Before discussing micro plastics, the facilitators review the previous materials. Presenting the materials and asking the students to the group to make a project by creating posters the process of microplastics were thrown into the sea and the fish ate the microplastics and humans consumed the fish. Afterward, explain the impact of consuming the fish. At the end of the activity, the students share their posters and the ideas with their friends. All groups gained rewards with different types of winners such as favourite group, awesome group, cheerful group, and amazing group.



Picture 2: Documentation after class

In the fourth meeting, the students created posters of clothing and textile waste. The students read the module for approximately 10 minutes guided by the facilitator. Then they were asked related to the topic as the prologue. The pupils also learned the process of making clothes. It is from the cotton tree until be clothing. Afterward, the pupils gathered in each group and create and design their poster. The learners also prepare about 5 minutes to present their posters. Each group presented the poster in front of their friends by explaining of process creating clothes from the beginning process until the clothes are ready to be sold and worn. The messages that want to be explored explicitly is the learners can reduce buying clothes and also reusing the textile waste.

This project or program was designed by PBL in which the learners have more time to learn in groups with their friends. This approach is believed to be one of the best approaches in the teaching and learning process. Hanham et al (2020) state that Project-based learning is the main mode of instruction that can provide a lot of time for the learners to learn and discuss with their groups. in the process of implementing PBL in the classroom, the pupils acquired a strong sense of ownership and personal care for the project which affects on the original engagement, creativity, and innovation that lead to impactful outcomes for the learning (Cummings & Yur-austin, 2021). This approach is collaborative learning in that the outcomes are team creativity or from group activities (You, 2021). Collaborative learning is assumed can influence the intellectual growth of the learners by sharing and discussing the materials with their peers or members (Loes et al., 2018).

CONCLUSION AND FOLLOW UP

Bunbeleng is one of the areas placed at the top of the hill in Sekotong Timur, West Lombok. To reach the place, the team needs about two hours on foot because the access is difficult to use motorcycles or cars. The project is held by Yayasan Saling Jaga Indonesia which is focused on the environmental issue such as rubbish, plastics, plants, and others. There are several topics discussed such as ecosystems, organic and anorganic, micro-plastics, and textile waste. Project-based Learning (PBL) was implemented in running the program. Every meeting, the students have a project to be accomplished. This approach is considered one of the best approaches used in the teaching and learning process. The learners are motivated and enthusiastic to follow the class and the materials. The program can encourage the students to recycle, reduce, and reuse plastics and the learners can gain a lot of information related to the environmental issue.

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