



## Improving Student Literacy and Environmental Care Movement in Pematang Raya Village, Raya Sub-District, Simalungun Regency

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**Abstract.** Increasing student literacy and environmental care for elementary and junior high school students is the theme of the Real Work Lecture/Kuliah Kerja Nyata (KKN) Group 138 in Pematang Raya Village, Simalungun Regency. This paper aims to describe the community service activities carried out by Universitas Sumatera Utara students in KKN activities in increasing Merdeka Belajar Kampus Merdeka Outcome Base Education (MBKM-OBE) as a forum for providing opportunities for students to experience off campus, interact, identify social phenomena and provide solutions through Project Base Learning and Problem Solving for the community around the location of the Real Work Lecture/Kuliah Kerja Nyata (KKN) carried out by the Community Service Institute of Universitas Sumatera Utara. From the results of observations and assessments of students, the priority scale of the problem is the lack of student literacy and low environmental awareness. The implementation method is carried out during the 2 months students are at the KKN location by making KKNT posts, learning houses and programs that have been compiled and run regularly every week for 2 months. The results of the 138 KKN group service can be seen in real changes, namely increasing student literacy to read as a means of filling spare time, doing homework independently and conscious activities to dispose of waste in its place, sorting organic and non-organic waste and being able to make simple compost.

**Keyword:** Literacy, Environmental Care, Organic, Non-Organic Waste, Compost

**Abstrak.** Peningkatan literasi siswa dan peduli lingkungan bagi siswa Sekolah Dasar dan Sekolah Menengah Pertama menjadi tema Kuliah Kerja Nyata (KKNT) Kelompok 138 di Kelurahan Pematang Raya Kabupaten Simalungun. Tulisan ini bertujuan menggambarkan kegiatan pengabdian masyarakat yang dilakukan mahasiswa Universitas Sumatera Utara dalam kegiatan KKNT dalam meningkatkan Merdeka Belajar Kampus Merdeka Outcome Base Education (MBKM-OBE) sebagai wadah memberikan kesempatan bagi mahasiswa berpengalaman diluar kampus, berinteraksi, mengidentifikasi fenomena sosial dan memberikan solusi melalui Project Base Learning dan Problem Solving bagi masyarakat sekitar lokasi Kuliah Kerja Nyata (KKN) yang dilaksanakan oleh Lembaga Pengabdian Kepada Masyarakat Universitas Sumatera Utara. Dari hasil obeservasi dan assessment para mahasiswa didapat skala prioritas masalah minimnya literasi siswa dan rendahnya kepedulian lingkungan. Metode pelaksanaan dilakukan selama 2 bulan mahasiswa berada di lokasi KKN dengan membuat posko KKNT, rumah belajar dan program-program yang

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*telah disusun dan dijalankan secara rutin setiap minggunya selama 2 bulan. Hasil dari pengabdian KKN T kelompok 138 ini dapat dilihat perubahan nyata yaitu meningkatnya literasi siswa untuk membaca sebagai sarana mengisi waktu luang, mengerjakan Pekerjaan Rumah secara mandiri serta kegiatan sadar untuk membuang sampah pada tempatnya, memilah sampah organik dan non organik dan mampu membuat kompos sederhana.*

**Kata Kunci:** Literasi, Peduli Lingkungan, Sampah Organik, Non Organik, Kompos

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## 1 Introduction

The USU KKNT-Reguler Program in 2022 is one form of Merdeka Belajar Kampus Merdeka (MBKM-OBE) activity of the Universitas Sumatera Utara which aims to improve the Main Performance Indicators (IKU) of the Chancellor of the Universitas Sumatera Utara, precisely IKU 2 [1], which provides learning experiences for students to live in the midst of society outside the campus. As well as a learning process and a form of student service to the community, identifying and dealing with problems that are being faced by the community in the form of Project Base Learning and Problem Solving, especially in the Pematang Raya Village Hall Environment, Raya District, Simalungun Regency, North Sumatra.

KKNT-Reguler USU was carried out in the Balai Desa of Pematang Raya Village, Raya District, Simalungun Regency, North Sumatra. The work program of group 138 KKNT-Reguler USU 2022 is to establish a "Learning House" as a place to stimulate and improve the literacy of students who are in elementary and junior high school, as well as the importance of practicing the values of Pancasila. Environmental care service is carried out by increasing the awareness of the surrounding community towards a clean, neat and healthy environment [2]. The focus of this activity is to keep the environment clean by getting used to disposing of garbage in its place by sorting garbage (household waste that can be recycled and composted, plastic waste, glass bottle cans in a separate place), making it easier for the cleaning service or garbage hauler to bring and sort household waste [3]. During this KKN activity, gymnastics is also carried out every Sunday afternoon to increase public awareness of the importance of health. Based on the results of observations and assessments, KKNT Group 138 students discussed with Field Supervisors/ Dosen Pembimbing Lapangan (DPL) to analyze problems and prioritize problem solving that will be resolved through Project Base Learning and Problem Solving activities by KKNT Group 138 students of the Universitas Sumatera Utara Some of the main problems that exist in the Pematang Raya Village Hall Environment along with alternative problem solving:

1. Lack of and decline in the morals and concern of local youth for others
2. The high price of fertilizers and the use of chemical fertilizers that are harmful to the environment, as well as the lack of medicinal plants in the Pematang Raya Village Hall.
3. Lack of public awareness and concern for environmental cleanliness by not throwing garbage in its place.

4. The lack of children's interest in learning in the Pematang Raya Village Hall Environment and the lack of educators in several schools is one of the factors that make children's interest in learning in the Pematang Raya Village Hall Environment even less.
5. The lack of positive things that can be done by local children to fill their spare time and the lack of children's awareness of the importance of maintaining a healthy body.

The results of the observation and assessment became the priority of problem solving by the 138 KKNT group which will be implemented for 2 months. The presentation was conducted in Pematang Raya Village, Simalungun Regency, which was attended by local village officials.



**Figure 1.** KKN 138 Group Presentation with Field Supervisors in front of the Village

KKNT Group 138 and Field Supervisors (DPL) explained the results of observations, assessments and work programs, priority scale problems in Pematang Raya Village and problem solving strategies using Problem Solving and Project Base Learning (PBL) to the Pematang Raya Village Head of Simalungun Regency. The knowledge gained so far from the campus is practiced to help the community at the KKNT activity location.

## 2 Method of Implementation

This activity was carried out from the beginning of September to the end of October 2022 at the KKNT 138 Post and around the Pematang Raya Village Environment, Raya District, Simalungun Regency, North Sumatra. Observation and assessment were carried out by group representatives,

namely the group leader with two colleagues (Lembaga Pengabdian Pada Masyarakat Universitas Sumatera Utara. (2021). The results of the observation and assessment were discussed with all group members and Field Supervisors to determine the priority scale of problems and programs to be carried out in Pematang Raya Village, Simalungun Regency. After determining the priority problems and programs to be implemented, the group made a time schedule for the implementation of the program during the 2 months of KKNT in Pematang Raya Village, Simalungun Regency.

During the 2 months of KKNT, the group was divided into 4 small groups, each of which implemented the program. However, members of each group from each of these small groups can exchange roles to replace their friends if someone is absent due to illness or other things.

### 3 Results and Discussion

In overcoming and tackling the problems found in the Pematang Village Hall Environment, the USU Regular Thematic KKN 138 group carried out various activities that became solutions/alternatives to overcome existing problems, including:

a. Counseling on the Practice of Pancasila Values in Daily Life

Name of Activity. The name of the activity carried out is "Pancasila Values Education Program for Elementary School (SD) and Junior High School (SMP) Students in Pematang Raya Village".

b. Purpose and Objectives

The aims and objectives of this activity, among others:

- 1) To provide a better understanding of the values of Pancasila and to be able to practice them in everyday life.
- 2) To develop the competence and ability of students to understand the values of Pancasila.
- 3) To build moral and concern of students in crisis towards the values of Pancasila. The



**Figure 2.** Pancasila Values Education Program for Elementary and Junior High School Students in Pematang Raya Village

### Making Compost Fertilizer

#### 1. Name of Activity

The name of the activity carried out is "Making Compost Fertilizer".

#### 2. Purpose and Objectives

The aims and objectives of this activity, among others:

- 1) To produce fertilizers that are useful for increasing a nutrient content and elements that are very useful for plants that can be used by the surrounding community.
- 2) To reduce environmental pollution due to the use of chemical fertilizers.
- 3) To reduce household waste by using unused organic materials.



**Figure 3.** KKN 138 group members demonstrating how to make simple compost

The picture above shows students practicing how to make simple compost to the surrounding community, the participants who attended, especially children who came to the KKNT 138 post every afternoon to fill their spare time with literacy activities and do homework, it is hoped that by practicing composting, the children can practice it in their respective homes, so that each house is able to process household waste or kitchen waste into compost that can be used to fertilize plants in their respective yards. These values if instilled and taught to children will be more attached so that it is hoped that they can become agents of change at least in their home environment in the future and become agents of change for the environmentally conscious movement, a clean environment in the future.

### Planting of Medicinal Plants

#### 1. Name of Activity

The name of the activity carried out is "Planting Medicinal Plants in the Form of Toga Plants".

#### 2. Purpose and Objectives

The aims and objectives of this activity, among others:

- 1) To inspire the local community to develop the planting of medicinal plants that are very useful.

- 2) To provide aesthetic value in the Pematang Raya Village Hall Environment by planting plants.

Family medicinal plants (TOGA) are plants that have many properties, especially in the health sector. Because of the many properties of TOGA plants, in this Community Service Activity (PPM) in the form of training, TOGA planting training is carried out by planting this family medicinal plant. This training is intended for students of SDN Dermo, Benjeng District, Gresik Regency. The purpose of this PPM is that by utilizing TOGA plants, it can improve health status independently by utilizing medicinal plants, as well as providing knowledge to all students about the importance of Toga for health and providing an understanding of how to plant and care for TOGA properly and familiarize students and teachers to plant plants, especially TOGA in the school environment. The methods used were active learning and participatory learning, which included lectures, demonstrations, TOGA planting practices and continued with a discussion of the results of this training. The results of this training showed that the knowledge of SDN Dermo students increased about the importance and benefits of TOGA plants for health and the environment [5]. Based on this, one of the programs carried out by KKN Group 138 Pematang Raya Village is to conduct medicinal plant activities for elementary and junior high school children in Pematang Raya Village with the hope that they can identify types of medicinal plants and utilize medicinal plants for household needs when needed if a family member is sick.

#### Cooperation "Gotong Royong"

1. Name of Activity

The name of the activity carried out is cooperation "Gotong Royong" to Maintain Cleanliness in the Pematang Raya Village Hall Environment".

2. Purpose and Objectives

The aims and objectives of this activity, among others:

- 1) To provide the local community with an understanding of the importance of keeping the environment clean.
- 2) To help the local community to maintain the cleanliness of the surrounding environment.





**Figure 4.** Cooperation "Gotong Royong" and Planting Family Medicinal Plants (TOGA) in the Pematang Raya Village Hall Environment

Healthy Clean Living Behavior (PHBS) in Schools. School introduces world of health in children at school, should be not too difficult because in general every school already has a School Health Enterprise (UKS). Understanding UKS is an effort to foster and develop healthy living habits and behaviors in aged students schools that are carried out in a comprehensive and integrated manner. In Law Number 36 of 2009 article 79 concerning Health, emphasized that "School Health" organized to improve students' healthy living abilities in a healthy living environment so that students can learn, grow and develop independently harmonious and as high as it is expected to be become a quality human resource [4]

The main activity of this Gotong Royong is to sensitize the community to live clean and healthy by cleaning the surrounding environment, being an example or role modeling in practicing positive things to the community has a positive impact compared to putting up posters, billboards of healthy living or protecting the environment. These mutual cooperation activities are routinely carried out 3 times a week. This means that KKNT Group 138 students have practiced cleaning the environment 12 times during the 2 months of running Real Work Lecture (KKN) activities in Pematang Raya Village, Simalungun Regency. In addition to the expected positive impact of this activity, namely sensitizing through modeling, it turns out that the negative impact of this activity is also obtained by Group 138 students, namely the surrounding community considers the gotong royong activities carried out as voluntary activities so that the community even tells them to clean their yards. However, the 138th group of students refused subtly and invited the surrounding community to participate together in environmental clean-up mutual cooperation activities in Pematang Raya Village, Simalungun Regency.

#### Creating a Learning Home

1. Name of Activity

The name of the activity carried out is "Rumah Belajar to Increase Children's Interest in Learning in Pematang Raya Village".

2. Purpose and Objectives

The aims and objectives of this activity, among others:

- 1) To provide additional learning portions for children in Pematang Raya Village.
- 2) To increase the interest of children in Pematang Raya Village to study harder.



**Figure 5.** The learning house implemented by group 138 to improve the literacy of the surrounding community.

Child Welfare Institutions are institutions formed by Government, Regional Government, or the community in organizing child care [5]. The learning house provided as a form of the 138 group KKN program in the Pematang Raya Village, Simalungun Regency is a follow-up to provide children's rights, one of which is a proper education. Weak literacy in elementary and junior high school children in the Pematang Raya area of Simalungun Regency can be improved by getting used to liking learning. A good way of learning can produce reading habits such as liking books. This will become a habit or culture of reading books to increase children's literacy.

Teaching in Elementary School and Kindergarten

1. Name of Activity

The name of the activity carried out is "Teaching at Elementary Schools and Kindergartens in Pematang Raya Village".

2. Purpose and Objectives

The aims and objectives of this activity, among others:

- 1) To help elementary schools and kindergartens that lack educators to teach.







**Figure 6.** Group 138 helps teachers teach at elementary schools and playgroup

### Conducting Afternoon Gymnastics

1. Name of Activity

The name of the activity carried out is "Afternoon Gymnastics Every Sunday to Maintain Body Health".

2. Purpose and Objectives

The aims and objectives of this activity, among others:

- 1) To give children in Pematang Raya Village an understanding of the importance of maintaining a healthy body.
- 2) To help improve physical fitness, develop skills and instill mental and spiritual values to children in Pematang Raya Village.



**Figure 7.** Doing afternoon exercises for body health

As a closing activity in the afternoon, there was an afternoon gymnastic activity together with children and local residents. This aims to increase the body's immunity, especially after post-covid 19, with a healthy body it can improve the mental and mental health of children and local residents in Pematang Raya Village, Simalungun Regency.

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#### REFERENCES

- [1] Kemendikbud. *Buku Tematik Terpadu Kurikulum 2013*. Kementerian Pendidikan dan Kebudayaan. Jakarta. 2013
- [2] Lembaga Pengabdian Pada Masyarakat Universitas Sumatera Utara. *Buku Panduan Kuliah Kerja Nyata Pembelajaran Pemberdayaan Masyarakat (KKN-PPM) Universitas Sumatera Utara*. Medan: Universitas Sumatera Utara. 2021
- [3] Peraturan Menteri Sosial Republik Indonesia (Permensos). Nomor: 30 / Huk/ 2011 Tentang Standar Nasional Pengasuhan Anak Untuk Lembaga Kesejahteraan Sosial Anak. 2011
- [4] Indriastuti, D. R. *Membangun Kepedulian Masyarakat Untuk Berperilaku Pola Hidup Bersih Sehat*. Unisri Press. Surakarta. 2021
- [5] Fitriatien, S. R., Rachmawati, N. E. J., Rahmah, N., Safitri, D. A., Pahlevi, M. R., & Natsir, N. M. W. Kegiatan Penanaman Tanaman Obat Keluarga (Toga) Sebagai Salah Satu Usaha Pemberdayaan Siswa SDN Dermo Guna Dalam Menumbuhkan Kepedulian Kesehatan Keluarga. *Abadimas Adi Buana*, 1(2), 21–28. <https://doi.org/10.36456/abadimas.v1.i2.a949>. 2017