

Supporting Partners:



Bangkok Office
Asia and Pacific Regional
Bureau for Education



Bank of Tokyo-Mitsubishi UFJ

Submission Form of 2013 SEAMEO-Japan ESD Award
Theme: Values Education
The last day for submission of entries: 16 September 2013

PART I: Details of Your School

1. Name of your school: **SMA Negeri Bali Mandara**
2. Full address: Jalan Raya Air Sanih, Desa Kubutambahan, Kecamatan Kubutambahan, Kabupaten Buleleng, Bali
3. Postcode: 81172
4. Country: Indonesia
5. Telephone number (country code+city code+telephone number): +62362-3435051
6. Fax number (country code+city code+fax number): -
7. Name of the Principal: I Nyoman Darta
8. Name of Teacher Coordinator: I Wayan Agustiana
9. Email address: sa.smanbara@gmail.com
10. School website (if available): -
11. Educational level (Such as Kindergarten 1 to Grade/Year 9): High School (grade 10 – 12)
12. Number of teachers in your school: 26
13. Number of students in your school: 221
14. Please provide the name of teachers and students who were/have been involved in the planning and implementation of this school activity/programme on Values Education.

Teachers:

- a) I Nyoman Darta
- b) I Wayan Agustiana
- c) Nyoman Yuliana Citra
- d) Trissyana Angelina
- e) I Nengah Sumerta
- f) Made Yudi Armawan

- g) Komang Suarsana
- h) Kadek Darsika Aryantha

Students:

- a) Andi Ruspita Dewi
- b) Adhi Rama Wijaya
- c) Dina Puspasari
- d) Werdi Gita Permata
- e) I Wayan Rona
- f) Arya Badra Suta
- g) Ahmad Ali Sahbana
- h) Dedi Sahana
- i) Luh Putu Eka Yani
- j) Novi Kariani
- k) Luh Rika
- l) Agus Nova Wiratama
- m) Pande Nengah Purnawan
- n) Gede Krisnawan
- o) Putu Handre Kertha Utama

PART II: Information about the School's Values Education Activity/Programme

The information of part II from no.1 to 14 should be no longer than nine (9) pages long of A4 in total. The information should be written in Times New Roman font, 11-12 point size.

1. Title of the school's programme

COMPOSTING FOR GREEN SCHOOL

2. Summary of the programme (a half to one page A4)

Composting for Green School is an extracurricular program, which focuses on helping the environment from the rubbish explosion and making the green school environment. It is carried out as the part of students' Pathway to Leadership Program, in which it is one of the school programs to nurture them as the future leaders of Bali.

The nature group, a special group of students, who concern about the environmental issues, does the composting activity every week. It is an integrated program, which involves the natural education provided by science teachers and skills of composting by the school landscapers. This program is also developing their characters as students who should aware of the environmental issues like rubbish and how to recycle it. Even after the composting process has finished, the students then still need to carry out a special program like planting trees around the school using the compost or sometimes outside the school as their community service program.

The main point of composting program is to recycle the organic rubbish from the school waste. There are so much waste produced by the school as it is a boarding school, which has more than 250 occupants. The rubbish is from the kitchen, dead leaves around the school, daily life waste from the dormitories and office. They are separated and collected every week before it is recycled by the team. The product is the compost which contains pesticides (neemba composting). The advantages of this compost is that, not only it is useful as the fertilizer but also effective as the pest repellent due to the chemical material produced called azadirachtin, melantriol, nembidhin and nimbin.

3. Background information or reasons why the school created this programme

The school was a “brown school” where the 10 hectares land was very deserted. The weather in the school area is mostly very hot, around 33 – 35 Celsius degree and is closed to the beach. When the school established in 2011, it was quite difficult to plant trees. It takes lots of effort to create a better environment, as we need more water and supports for the planting of the trees. As it was dangerous to use artificial fertilizer, not to mention the expensive price, then an idea came up to create the natural fertilizer. The school also needs to be more self sufficient to fulfill the demands of the environment. Based on those problems, then a composting program was created for the students as their activities outside the classrooms. Not only it is going to be a saving the earth program by recycling the rubbish, but also as the character development education for the students.

4. School vision, mission and core values

School Vision: To develop a premier network of Indonesian boarding school nurturing globally conscious future leaders

School Mission:

- **To develop students as future Indonesian leaders equipped with strong academic skills and enquiring intellect with an appreciation and awareness of Indonesian and foreign cultures**
- **To educate student who are global visionaries, responsible citizens and competent in their decision making, problem-solving extra mural activities**
- **To develop a boarding house system with programs and activities that infuse curiosity and teamwork and equip students with social and lifelong skills**
- **To create an enduring awareness of and actions to meet environmental and global challenges**
- **To support the *gotong royong* by instilling high moral values and commitment to give back to our community**
- **To meet the needs of digital and collaborative learners in a connected and technological era**

School Core Values:

Religious, honesty, tolerant, discipline, hardworking, independent, democracy, curiosity, patriotism, appreciate achievement, friendly, peace, reading habit, eco-friendly, social awareness, responsibility

5. Objectives/goals of the programme

The objectives of the programme are:

- 1 To recycle the organic rubbish
- 2 To produce self compost for the green school environment
- 3 To be self sufficient school
- 4 To develop environmental awareness of the students
- 5 To develop the students' characters

6. Values that the school aims for within the programme and/or definitions

1. Tolerant to the environment condition
2. Discipline in selecting the rubbish between organic and inorganic types
3. Hardworking in turning the “brown school” into “green school”
4. Eco-friendly
5. Being Responsibility to the nearby environment

7. Period of the time when the programme was or has been implemented

The programme has been implemented since 2011 until now

8. Activities (Actions and strategies of implementation)

1. Separating organic and inorganic rubbish; the students do it in groups every day and pile up the rubbish
2. Preparing tools and materials
3. Chop and mix the organic rubbish and add the EM4 (effective microorganism four). Then pile the mixture in the bamboo tunnel. Turn the position of the bamboo tunnels once a week and showering with water. The ideal fermentation temperature is 45-65 degree Celsius.
4. The compost is ripe within four until six weeks. The compost is ripe if the materials have shattered and the colour is as dark as the soil. The temperature is 45 degree Celsius.
5. The compost that passes the filter will be packed. The left over compost or residues will be used as starter compost or active pile.
6. Packing; the package has to be water proof. The size and weight of the package are made by order.

9. Teaching strategies or pedagogies used for teaching values in the school

40% knowledge and 60% practical

The knowledge part was done in the classrooms where the students had the theory about composting. The knowledge was delivered using the 21st learning method in which the teachers are only as the facilitators. The students tried to find as much as information that they can get about composting, then related it to the practical activities. Before they did the practical, there was an observation done for the process of composting. They then shared their observation results and found the best method to help the composting process to be more effective.

10. Programme monitoring and evaluation mechanisms and summary of results

Programme monitoring and evaluation mechanisms:

The programme monitoring was done by the teachers and the school landscapers. Both parties observed the process and the participation of the students in doing the activities. Merit will be awarded to the groups which done the work best. After the production was done, the school then asked the students to use the compost to fertilize the plants, to find out the effectiveness of the compost.

Summary of results:

The result of the programme is the compost which contains pesticides (neemba composting). The advantages of this compost is that, not only it is useful as the fertilizer but also effective as the pest repellent due to the chemical material produced called azadirachtin, melantriol, nembidhin and nimbbin.

11. Resources used for programme implementation

1. Materials and tools were provided by the Government of Bali Province as one of the main supporters of the school programs
2. The rubbish was gained from the school environment

12. List of partners, local government bodies, companies or development agencies who have participated in the planning and implementation, including their roles in the activity/programme.

Name of Partners	Roles or contributions
a) Government of Bali Province	Provided the tools and materials for the programme

13. Benefits/Impacts/ positive outcomes of the activity/programme to teachers, students, parents and the community

1. The rubbish problems can be solved.
2. The school has sufficient supply of fertilizer
3. The students know well how to recycle the rubbish into something useful for the environment
4. The students become more environmental alerted
5. The society who needs the compost can request it cheaply, only 700 IDR

14. Proof of achievement from students, teachers and the community

1. The school environment has become greener because now more trees have grown around the school
2. It has become one of the school top products that is very helpful for the society
3. To save the earth by doing a small thing that is recycling the rubbish

15. Plan for sustainability and plan for the future

Plan for sustainability:

The programme will be done simultaneously by each batch of students as it can be done outside their classrooms sessions. The compost is expected to be produced in massive product to fulfill the supply demand not only by the school but also the society.

Plan for the future:

The school will propose a programme that can help to recycle the inorganic rubbish so that both of types of rubbish can be useful for the environment.

16. List of attachments such as a copy of the school plan, learning/ teaching materials, samples of student worksheet, manual, etc. If the attached materials are in the local language, please provide a brief description in English language.

Attachment 1) Composting poster

17. Photos related to the activity/programme (Maximum of 10 photos with captions in English)

Photo1



Collecting the rubbish

Photo 2



Watering and mixing

Photo 3



The compost