

CCARE and
LOVE for
ENVIRONMENT
and
NATURE
(CLEaN)
Program

SEKOLAH RENDAH SABA DARAT, BRUNEI 1 ZONE

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Abstract

Sekolah Rendah Saba Darat is located in the middle of Brunei river. In the year 2011, the school committee decided to implement the Care and Love for Environment and Nature Program (C.L.E.a.N. Program) which aims to instill the habits of keeping the school environment and nature clean and safe for everyone. It's a dynamic program where changes and activities keeps on added in according to what the students and the school needed. Moreover, it develops awareness of the importance of keeping the water village clean and transform the school environment to be 'green' that support the 4R that is Reduce, Reuse, Recycle and Recover. The action plan has been drafted and expected to evolve from time to time, year 2011 onwards. The activities emphasize on the active participation of the students such as in drawing posters, show and tell competition, setting up the mini market from recycled and reuse 'rubbish' and sustainability of going green.

INTRODUCTION

Kampong Ayer is the largest water village in the world where there are many houses built on *Sungai Brunei* (Brunei River). In 1521, the water village was indeed a major trading city, well-established, populous and a vibrant entreport as stated by Antonia Pigafetta, . Beside its attraction for tourists, the water village is now a residential area and pollution from domestic activities are still inevitable. The river pollution can be in a variety forms such as bottles, cans, plastic containers, oil, etc.

In some way or form, almost all cultures have recognized the importance of taking care of the environment and nature for their societies and have therefore understood the need to sustain it. In Brunei, efforts have been made to clean polluted rivers. The Brunei government through several departments like Department of Environment, Parks and Recreation's are spending a lot of money to clean up the environment. There are also fines for people who deliberately throw rubbish and pollute. There also some bodies of communities volunteer to clean up and beautify the environment.

This program involves all teachers, supporting staffs, students and parents. Beside the acronym states it all whereby cleanliness need more than just being clean but to care and love for the environment and nature that should be embraced by all to prevent unhealthy diseases spread around and to sustain as well as preserve the environment and nature of the well-being. Furthermore, physical cleanliness is also one of the most important aspects of the Islamic.

BACKGROUND OF THE PROGRAM

Issues on water pollution have been on the rise globally. A school is a learning centre for the children, our future generation, where information is delivered thus plays a major role to educate and create habits on how important it is and why is it crucial to keep the environment clean and safe. Sekolah Rendah Saba Darat is one of the primary schools located in the middle of Brunei river (refer Appendix A) thus it's suitable to promote the importance of keeping the river water clean and safe.

Furthermore, upon recognizing the effects of the pollution, the school committee decided to implement the program named Care and Love for Environment and Nature Program (C.L.E.a.N. Program) which aims to instill the habits of keeping the environment and nature clean and safe for everyone especially the students. The school decided to implement the C.L.E.a.N. program in the year 2011 to support the conservation of water and cleanliness of Brunei river.

All of the students are muslims. Physical cleanliness is also one of the most important aspects of the Islamic faith. Islam, as taught from the Qur'an and Hadith, is a religion of nature. Nature loves cleanliness and hates pollution that is why cleanliness highly desirable feature of human survival. It is one of the basic beliefs of the Islamic faith. It's hoped that through education the students could develop the habits of keeping the environment clean and safe especially the river where their villages are.

RATIONALE

This reasons for this program to be implemented are for

1. The character development of the students where they need to practice a good habit of keeping their school and home environment clean
2. Instilling good values for sustaining the awareness of keeping the water village clean amongst the students.
3. Providing information where students can recognize the importance of good health, safe and clean environment.

AIMS

The specific aim of the program was to inculcate and cultivate the specific personal aspects of being caring and loving towards the wellbeing of the environment and nature to all the students in Sekolah Rendah Saba Darat through their participation in the activities designed and implemented by the school committee.

With this specific aim in mind, a second more general aim was to critically involve all the students in the action learning processes in order to comment on how these processes can generate peak personal learning experiences for them, from their interpretation of significant experiences and observations in the activities and how useful this reflective process is for them in a long term.

This program is expected to instill the habits of keeping the school environment and nature clean and safe for everyone. Also it is hoped the students have developed awareness of the importance of keeping the water village clean. Transformation of the school environment to be 'green' that support the 4R for environment (Reduce, Reuse, Recycle and Recover) is also anticipated. This program is only a basic introduction to the young children and the school really

hope that as they grow up and mature, the students will continue to study further on options to use the renewable energy and create deeper understanding of green environment and world's crisis that are caused by the surplus of oil demand which is solely due to oil peaks, global warming and human intervention in order to create a more healthy and safe environment where energy use from fuel will be minimised.

LITERATURE REVIEW

Teaching good manners to our children are crucial as the intentions of having to save the environment is by having generations that keep the environment safe and clean to live in. Our concerns about the environmental issues that rise day after day should also be our concerns about the children that will live in the environment they want. Worldwide, where humans are inhabiting, it's inevitable pollution will be taking place. Thus, educating the children on the importance of keeping clean and safe should be one of the roles of school to deliver the information and also to be person that support and promote 'Green Environment'. Many world religions not only stress the importance of pureness, but physical cleanliness as well. This is especially apparent in the Islamic religion and Muslim way of life. Allah the Al-Mighty, orders humans to avoid doing mischief on earth and prevent wastage of resources which will lead to destruction of the environment and hence the Earth. Muslims look to the Prophet Muhammad as a perfect example of cleanliness. The Prophet states: "Attend to cleaning with all your strength, since God the Almighty has established Islam on cleanliness. No one shall enter Heaven, but the clean."

The Brunei Vision 2035 envisions that Brunei Darussalam will be a country that is recognized for its high quality of life, sustainable economy, and well-educated citizens. Educating and preparing the students for sustainable development is vital and developing their thinking skills and critical thinking towards the consequences of their doings to the environment and nature should be nurtured as early as the primary school level.

PROGRAM IMPLEMENTATION

This program was initiated together with all of the Saba Darat Primary School teachers in 2011. They designed a plan and carried them out whenever possible in stages throughout the year 2011 up to this very moment with their respective team who worked together to improve school facilities. The activities in this program ‘evolve’ according to the needs of the students and school in relation to the global issue. Each activity which is planned and then implemented had specific purpose. However, the general purpose is for the care and love for the environment and nature.

Improving the school conduciveness

The teachers started by doing a make-over to the school environment. The teachers were grouped into four groups to work on certain school facilities. With their team, the teachers got together to improve the school conditions. Teachers spent their time to improve and further beautify the school environment so that the students will feel more comfortable to be in the school. The make-over include the library, school foyer, restroom, canteen and the school main

hall (Appendix B). This activity is more to recovering the cleanliness and beauty of the school environment.

Through this activity, teachers have also developed their sense of professionalism through a positive growth in values, attitudes and commitment of being a teacher, not just teaching during curriculum time but their sense of belonging of and values to the school. It enhanced and built their teamwork capacity. It has developed through their professional interactions with their team and other team members.

The 4R in the school

The students learn in the curriculum about the 3R – Recycle, Reuse and Reduce. Another ‘R’ (Recover) was introduced by the International Unit, Department of Schools that the school finds this is also a beneficial knowledge and could provide useful experiences for the students.

The school started the 4R activity by setting up a mini-market made from used materials and had become waste or better known as rubbish. This mini-market was set up in one of the corner of the school kitchen. The teachers collected the ‘rubbish’ themselves and also from the students and the rubbish was reused as useful learning tools. The items collected were drink cans and bottles, snack boxes, broken electrical appliances such electric kettle, water heater, rice cooker and phones. Some used toiletry was also collected such as the shampoo bottles, floor liquid cleaner bottles, detergents boxes and many more. The items collected were cleaned and sorted accordingly.

The corner has been used and updated from time to time and many visitors who came to the school thought it was a real mini-market (Appendix C). This mini-market has given the students experiences in learning real-life mathematics as well as learning about keeping their body

healthy in science lesson. Teachers used this mini-market as one of the learning corners for their students. Another section in the mini market will be added soon. The section will be ‘selling’ the

Mini-Market brought Opportunities

The school was very fortunate that this mini-market had given good impression to the STEP (Science, Technology, Environment and Partnersip) Centre, Ministry of Education. The STEP centre was established in 1998 and this centre is fully committed towards promoting environmental conservation and protection to schools and Ministry of Education (MOE) through raising awareness, integrating environmental knowledge and values as well as making well-informed decisions through various related activities. Three students and a teacher from Sekolah Rendah Saba Darat were amongst the selected ones whom were invited to participate in the International Sustainability Camp for Children at the University Tun Hussein Onn in Batu Pahat Johor, Malaysia. The students were Md Hadif, Asradin and Syamimi along with the supervising teacher, Cikgu Yong Iee Ling. They brought home two medals, silver and bronze medals which they were awarded for their participation in the activities conducted by the organizer (Appendix D).

More activities were carried out following the previous one. All of the students participated in keeping the school environment clean and they were taught on how to reduce the amount of rubbish thrown into the river. Some activities were carried out to create awareness to reduce the things they use (paper, plastic, so that they will have less to throw away). For Year 1, 2 and 3 students, they were required to do drawing and colouring objects where they needed to identify objects that should and shouldn’t be placed in Brunei River (Appendix E). Year 4 students were brought in the school boats to catch the ‘rubbish’ nearby the school and river

banks (Appendix F) while Year 5 and 6 students went around villages to answer questionnaires and activity sheet given by their teachers (Appendix G). They were required to critically inquire to find the causes, effects and also solution on river pollution (Appendix H).

This year the school will be implementing another activities which promote the ‘Recycle’ and ‘Recover’ activities. These two activities are hopefully to give a bigger impact to the school. The students will be doing recycling where they’ll be contributing bottles to make big boats and the winner from this activities will be the boat that can hold the most weights. For the ‘Recover’ activity, the school students will be participating in planting in bottles the school flower, Morning Glory which was chosen to match the school vision and motto, ‘Glorious School by 2016’ and ‘To Achieve Glory’ respectively. This will a big challenge for the school as the school is not on land and it’s expected that a little soil will be enough for growing the flower.

CONCLUSION AND IMPLICATIONS

The action learning highlighted various aspects of being caring and loving to the environment and nature. The students had learned knowledge and experiences, putting theories into practices of being a caring and loving environmentalist. More than that, the students learned the values of the environment and nature to their life and future. Continuous efforts from the community are also needed in order to sustain the conservation and preservation of the healthy and safe environment.

Conclusions

The knowledge generated through active learning has become the students development opportunity. They were able to become more active participants in the lesson to improve the

environment. Throughout active engagement, the students learned different aspects of skills in conserving the environment and getting the benefits from it such as learning mathematics and science in the mini market. It was meaningful, memorable and motivational for the students as they developed through their own experiences and creation.

Implication

For the leader who was the participating researcher in this study, the skills and knowledge created through this virtuous teaching and learning cycle will become the basis of her future leading role in any school – employing the knowledge and skills to continuously learn and teach the others. The leader will be able to develop leadership skills further through practicing this action-reflection learning. The leader should create such opportunity for herself and also the teachers and supporting staff in the school that she is going to lead. With this experience, the leader can develop other leaders amongst the teachers and also improve the professionalism of all teachers and staffs. Furthermore, this can also be shared with other school heads through the school heads committees in different zones. Writing up the critical incidents involved lots of reflection activities and it was really meaningful experience for the leader. It will be very interesting if many school heads can write about their experiences to be shared for the others to learn from as the school heads somehow have similar issues at school but cope with it differently.

Recommendation

This action-reflection learning through virtuous teaching-learning cycles should be practiced by all school heads as the routine tasks that need to be done continuously to instill continuous improvement in all schools. It should also be developed amongst senior education officers in Brunei Darussalam and even the school inspectorate who works on school improvement activities. When this is developed throughout the organization, the Ministry of Education especially those who are in the Department of Schools will benefit from it and thus a teaching and learning organization is developed. Through this virtuous teaching and learning cycle, everyone gets the opportunities to learn and teach interactively practicing in making a

good judgment, if the call is not good enough they will still have the choice to redo the judgment making. The school heads should also stay communicating as leaders of different schools and give support to each other. Standard operation procedures should also be developed for the school heads to get support in tolerance of unexpected events.

The world of education is gradually growing where school heads need to always upgrade their skill and update their knowledge and be ready to experience new experiences – new changes. A school head regardless of their age, experiences, knowledge and skills need to build good foundation of leadership through virtuous teaching – learning cycle and action reflection learning. During tough times, when a school head is striving for success through hindrance and obstacles, they will create the foundation to truly flourish for victorious education returns for self and teachers’ professionalism.

ACTION PLAN

OBJECTIVES	ACTIVITIES	TARGET GROUP	RESOURCES	TIME FRAME	ACTION BY
The teachers will be given a briefing about the program to prepare for all the activities	Teachers' Meeting		Meeting room Information on implementation of the program	January 2013	School Administration
Phase 1: REDUCE - The students will be participating in keeping the school environment clean - Reduce the amount of rubbish thrown into the river - Create awareness to reduce the things they use (paper, plastic, so that they will have less to throw away)	Water Cleanliness Awareness: - Drawing and colouring and displaying posters (Appendix B) - Rubbish Collecting - Cleaning campaign - Show and Tell	Year 1,2,3 All students Year 4, 5 & 6	Art rooms Plastic bags Weighing scale Drawing block Posters Students Logbook Questionnaires and Activity sheet (Appendix C)	February	Class teachers Focal person: Cikgu Yong Iee Ling Class teachers
Phase 2: RECYCLE - The students will be able to identify materials that can be recycled into different things. (Appendix D)	- Setting up the 3R Rubbish bin - Identifying the materials according to their classification (Plastic, Paper, Metal) - Recycling Craft	- Year 4,5,6 - Preschoolers and Year 1-3 - Year 4,5,6	Bins Rubbish	March	Teachers
Phase 3: REUSE To reuse materials into useful learning tools	Collecting 'clean rubbish' and setting up Mini Market from used materials as learning corners	All students	Teachers Parents Students 'Clean Rubbish'	February – March 2013	All teachers
Phase 4: RECOVER To recover suitable plants for water village	School Garden - Going Green in Water Village school - Naming the school mascot contest (Flower, Tree and Fish)	Year 4 and 5	JASTRE Flowers and pots, fish	January - February	All teachers
EVALUATION PHASE To evaluate the implementation and outcomes of the program	Program Review by the teachers Students Journey line Students logbook	Year 4, 5 & 6	Checklist of activity Journey line (Groups of children)	End of March	Class teachers

SCHOOL LOCATION



The School Foyer Make Over





Sekolah Rendah Saba Darat, CLEaN Program

The School Restrooms Make Over



School Multi-Purpose Hall



The Making of the School 'Mini-Market'





The 'Mini-Market'





The Students having fun in Shopping Spree







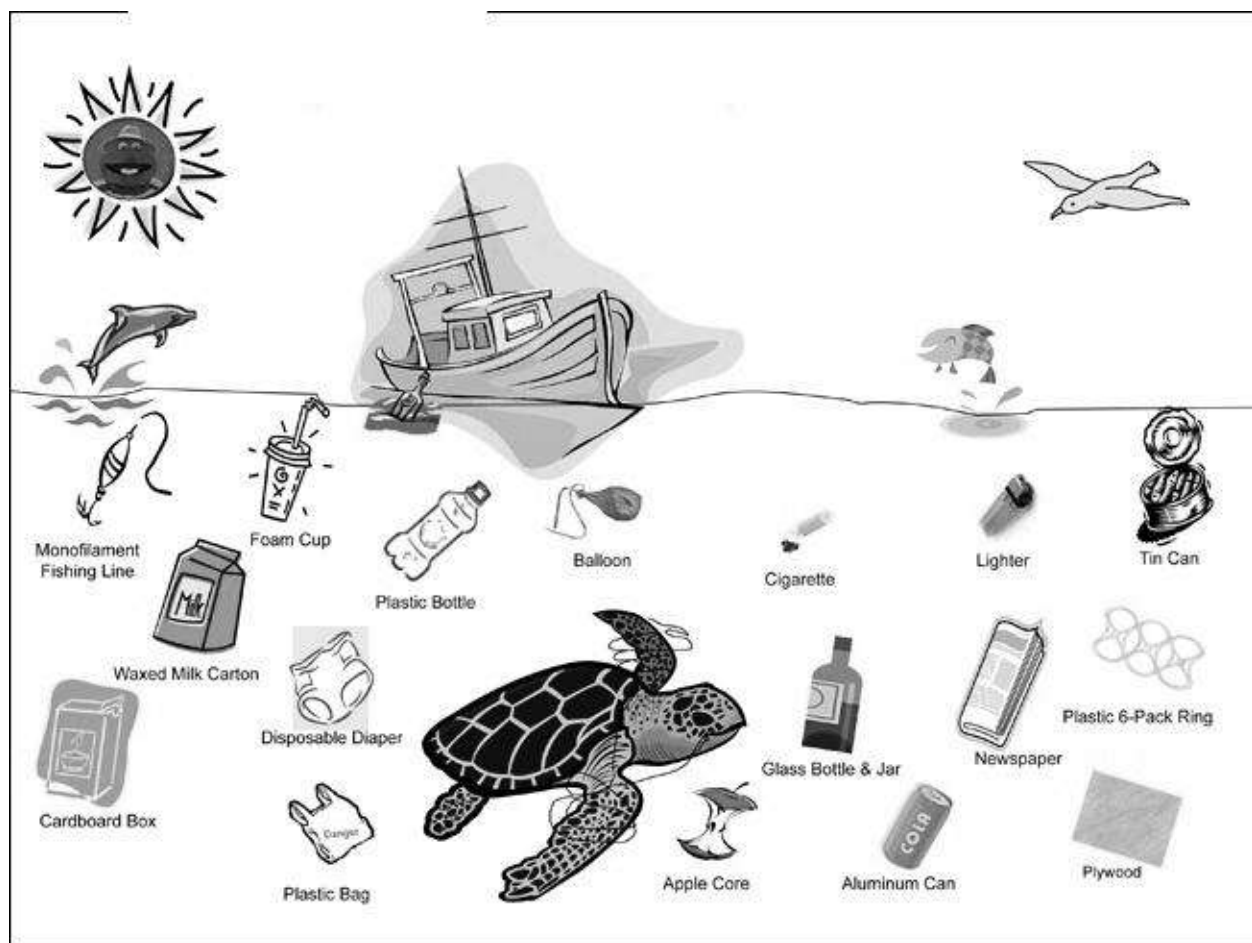
One of the colouring activities

Name: _____

Class: _____

HELP us to cleanup brunei river

Colour the items that shouldn't be in the water.



Students with their work (Drawing and Colouring – River Cleanliness Awareness)



Year 4 students, catching the rubbish






The students handing over the rubbish they collected to one of the worker from the Department of Environment, Parks and Recreation





Appendix H


	<p align="center">CARE AND LOVE FOR ENVIRONMENT AND NATURE PROGRAM FOR CHILDREN (C.L.E.a.N.) 2013</p> <p>Worksheet: C.L.E.a.N. Tour of Brunei River ecology</p>	<p align="right">Time: 0800 – 1000 Location: Water Village Module for: pupils from SRSD</p>
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Name : _____

Group : _____

OBSERVATION	
<p>The Water Village situated in the Brunei River and it is at the heart of the city, Bandar Seri Begawan which is in the Brunei-Muara district. Please note that water around some of the area are not suitable for swimming, however the Water Village offers a good place for tourism. There are many different kinds of plants and animals found in the area. Many of these plants and animals are found either in the water or the mangrove area along the side of the river. However, because of people's intervention, some of these plants and animals are rarely found in the area.</p>	
<p>1. Observe the environment of the Water Village</p>	
<p>2. Can you smell the fresh air?</p>	
<p>3. Can you see rubbish scattered around? If yes, can you identify what kind of rubbish that are scattered around the Water Village? Can you guess where did that rubbish come from?</p>	
<p>4. Please try to collect as much rubbish as you can. If possible, weigh them.</p>	

5. Can you observe plants and animals around the Water Village?	
6. Can you see these plants on land?	
7. Please count how many kinds of plants and animals can you find? If you know their names, state and list them down.	
8. Can you tell why these plants and animals are important?	

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WALKING EXPERIENCE	
1. How do you feel throughout this activity?	
2. Why do you feel that way?	
3. What do you expect before you go to this tour?	
FACTS	
<p>Not long ago, the number of water village is rather small. As times passes, it grew as it extended outwards along the Brunei River. Construction along the side of the river has causes the clearance of mangrove trees and man-made parking area needed to accommodate the public. This has exposed our water to pollution due to lack of awareness of the effects it may cause to the environment and human. Furthermore, with an increase of commercial activities along the area are rapidly polluted the water and killing its habitat.</p>	
1. Based on your observation, what are the functions of the mangrove trees?	
2. Why are mangrove trees in some area being cut down?	

3. How does a mangrove trees affect our environment?	
4. What causes water pollution and how does it affect our lives?	
5. What are the positive and negative effects of development?	

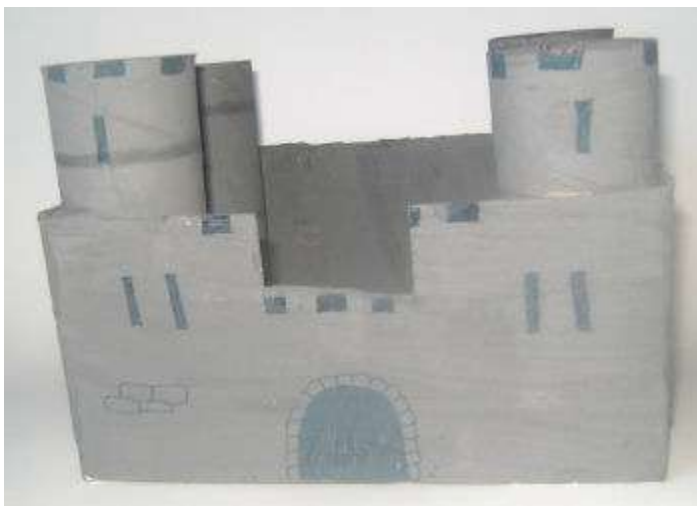
RECYCLING ACTIVITIES

ACTIVITY 1:

The students sort out the rubbish.



ACTIVITY 2: Recycling Crafts



All sorts of ideas for repurposing junk from around the home! Making flower pots from plastic bottles, making bracelets, key chains, etc.





