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Climate Cool Schools Project in Malaysia: Creating Awareness and Understanding of Climate Change

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APCEIU

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Asia-Pacific Centre of
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Foreword

As a regional centre mandated to promote Education for International Understanding (EIU) towards a Culture of Peace in Asia and the Pacific region, Asia-Pacific Centre of Education for International Understanding (APCEIU) under the auspices of UNESCO has been engaged in various endeavours aimed at fulfilling its mandate since its inception.

Faithful to this mandate, APCEIU launched the Best Case Studies in 2006, and it was renamed EIU Best Practices in 2009. The EIU Best Practices Programme aims to support existing, and encourage future, local initiatives on EIU in consolidated effort with 47 Member States in the Asia-Pacific. The EIU Best Practices Programme advocates “Learning to Live Together” - the most important of the four pillars of education set forth in the Report to UNESCO of the International Commission on Education for the 21st Century (Delors 1996) - by stimulating participatory learning and critical thinking to develop understandings of oneself and others. Over the past four years, the EIU Best Practices have explored and supported a wide range of manifold approaches to “Learning to Live Together”. Thanks to the continuous support from the National Commissions for UNESCO in the Asia-Pacific, APCEIU has published 16 monographs of selected cases and disseminated them throughout the region. This year, APCEIU has selected and published 5 new cases, issue numbers 17 to 21.

It is our heart-felt wish that issue No. 17- this year’s EIU Best Practices winner in Malaysia - be the issue that makes you stand up and start your

own initiative. The awarded practice has specified the relevance of EIU in our global era, and it highlights the crucial bond with Education for Sustainable Development (ESD). Both themes of education have been found in the project “Climate Cool Schools (CCS) - Global Platform Project”. This laudable project prompts students to take the lead in reducing their carbon footprints, and moreover it gives them the voice to influence local and global key decision-makers.

May this case, among many other best practice cases, spread the inspiration to construct a more open, more equal, and more diverse education system, as well as motivate us to reflect on many other issues that are essential for building a more peaceful world. I hope that through this endeavour, various EIU Best Practices can be shared among educators, scholars and activists who are committed to promoting a Culture of Peace in the region. I expect this project to provide a platform to share and exchange our experiences and perspectives.

December 2010



Lee Seunghwan
Director

EIU Best Practices is...

APCEIU has been committed to the promotion of a Culture of Peace since its inception, in line with one of the pillars of education “Learning to Live Together.” A Culture of Peace has been a key principle at the core of UNESCO’s ethical mission. It involves a set of values, attitudes and behaviours that can be taught, developed and improved upon to enhance mutual understanding and conflict resolution. Attaining a Culture of Peace requires transformation of institutional practices, as well as individual values and behaviours in which education plays a crucial role in the process. As a major educational tool aimed at promoting a Culture of Peace, EIU addresses issues related to cultural diversity, globalization and social justice, human rights, peace and sustainable development. It focuses on increasing the capacity of learners to deal with issues of everyday life, to resolve community conflict and to enjoy human, political and civil rights to a greater extent.

APCEIU launched EIU Best Case Studies in 2006 in cooperation with the UNESCO Member States in the region to encourage educators, scholars and activists to implement and share local initiatives on EIU. It is an outreach programme that invites them to share their efforts in promoting education for a culture of peace in different social and cultural contexts. Now renamed as EIU Best Practices in order to further encourage the participation of practitioners in the field, the programme seeks to promote and collect innovative practices based on optimal classroom conditions and activities, school climate, community and social atmosphere, and

disseminate them throughout the region.

The programme is conducted through the following steps: 1) Call for Applications: APCEIU sends announcement letters along with application forms and guidelines to the 47 National Commissions for UNESCO, UNESCO field offices, major National Institutes of Education in the region and APCEIU's MOU partners in the region; 2) Screening and Selection: Submitted applications are reviewed by the Screening Committee, composed of experts, who then select the best practices; 3) Field Visit: APCEIU staff undertake field visits to the programme sites of the selected cases to confer the EIU Best Practices awards, conduct field observation and interviews, and provide the selected applicants with the guidelines for the final report; 4) Submission of the Final Reports: Selected applicants submit the final reports to APCEIU based on the guidelines; and 5) Publication and Dissemination: Final reports are published as a monograph series and disseminated throughout Asia and the Pacific region.

Given the favorable and enthusiastic responses from the region, and support from the National Commissions for UNESCO, APCEIU wishes to expand the positive momentum built thus far and further its efforts for the coming years.

APCEIU encourages educators, scholars and activists from Asia and the Pacific region to apply and share their experiences and perspectives. The Centre expects that through the EIU Best Practices, diverse practices of EIU will be widely shared throughout the entire region, thus contributing towards achieving a Culture of Peace.

Author



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She has served as a teacher for 8 years in a secondary school, 9 years in the teacher training institution and 11 years when the same teacher training institution was changed to a university level. She was with the Faculty of Science & Technology at Sultan Idris Education University, Malaysia for 9 years and held the position as the Head of the Biology department from 2007 to 2008. Currently, she is at the Faculty of Education and Human Development which was just set up in September 2010.

She has conducted five researches at the university level of which three as the chief researcher and two as a research member. She has also conducted three major projects, two of which were funded by external organizations and one from the university funding.

She has published science textbooks, training modules and teaching & learning software. Her publications include local and international journal articles and chapters in books. She has presented numerous papers both at the local and international conferences, seminars, workshops and gave

public lectures at schools and colleges. Currently she is involved in a research with the Ministry of Higher Education on implementing 'Soft Skills in the Co-curriculum', as well as actively running courses and training workshops in Problem-based learning at the university. Her area of interest and expertise are: Curriculum and Teaching (Mathematics & Science); Teaching and Learning Strategies (Problem-Based Learning, Conceptual Change Teaching & Learning, Analogy); Science Cognition (Analogical Reasoning, Metacognition, Thinking-Based Learning); Environmental Education; Education for Sustainable Development (ESD) and Qualitative Research Methods.

Acknowledgement

We would like to acknowledge and extend our deepest gratitude to Asia-Pacific Centre of Education for International Understanding (APCEIU) for selecting and publishing the case. Also, our sincere thanks go to Dr. Seri Intan Mokhtar, the former Senior Manager of Science & Technology with the British Council who proposed the project to us. This remarkable project has instilled awareness in us and has succeeded in turning us into nature's keepers. Your effort to create awareness and understanding of the impact of climate change has reached the students of Perak and hopefully beyond. Thank you for opening our eyes and for letting us be a part of this wonderful project.

Thank you to the Vice Chancellor of Sultan Idris Education University (SIEU) for giving moral support throughout the trial run of the project. With this strong support, we were able to convince many academic staff from the different faculties to join us in the effort to raise awareness and understanding of climate change issues and other global issues. We call ourselves the Climate Cool Schools Project (CCSP) team and it is comprised of: Asso. Prof. Dr. Maria Salih as the project leader; Mr. Ahmad Nurzid b. Rosli as the secretary; Ms. Hasimah Ja'afar as the treasurer; Dr. Hashimah Alimon, Mr. Eimiza Faisha b. Azmi, Ms. Nor Azah Jusoh, Ms. Hasnatol Nazuha Hassan, Ms. Farah Natchiar Mohd Khaja, Mr. Azmi b. Ahmad Baharom, and Mr. Zahid b. Mat Said as the team members. Each of us contributed to the project in one way or another to make it a success.

The project would not have started without the participation of the schools. Hence, we owe our thanks to Mr. Mahbud Abd. Fatah, the Assistant Director of Science at the Perak State Education Department for assisting us in identifying and selecting the seven schools in Perak, Malaysia.

We would also like to convey our heartfelt gratitude to the principals of the seven participating schools, teachers, and their students who have willingly participated in this project. Their commitment and enthusiasm should inspire us all to attain a better and more sustainable future.

We thank the partners of this project who have contributed in one way or another to the benefit of the teachers and students and to the success of this project. They are UniServity, Nature's Conservation Society, Open University Malaysia (OUM), BP Asia Pacific Sdn Bhd., and the Forest Research Institute Malaysia (FRIM).

The introduction of and training on the collaborative learning community (cLc) platform would not have been possible without the support from UniServity, Hong Kong. A word of thanks to Phil Stubb and Janice Dii for conducting the master trainers workshop for the lecturers of SIEU, partners of this project, and the teachers from the seven participating schools.

The continuous contribution of resources and activities by BP Asia Pacific Sdn. Bhd. to run the project was made possible by its External Affairs manager, Mr. Zulkifli b. Othman. No words can express our appreciation to him for spending his valuable time conducting the Carbon Challenge workshops and the BP MyScience activities to the university and school students.

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Finally, our utmost gratitude goes to the British Council for funding this pilot project (2007 – 2009) and making it a success. Without the funding, the project may have remained only an idea.

Table of Contents

■ **Foreword / 3**

■ **EIU Best Practices is / 5**

■ **Author / 7**

■ **Acknowledgement / 9**

1. Background / 14

1.1 How the Project Started / 15

1.2 Resources and Stakeholders / 16

2. Climate Cool Schools – Global Platform Project / 17

2.1 Introduction / 17

2.2 Relevance to EIU / 18

2.3 Pedagogy and Teaching Methods / 20

2.4 Activities / 22

3. Impact of the Project / 25

3.1 Acquiring Knowledge and Skills / 25

3.2 Enhancing Soft Skills / 26

3.3 Esthetical Values / 26

3.4 Community Relationship / 26

4. Lessons Learnt / 27

4.1 Problems and Challenges / 27

4.2 Suggestions and Recommendations / 27

5. Conclusion / 28

■ **Appendix / 30**

■ **Field Visit / 33**

Climate Cool Schools Project in Malaysia: Creating Awareness and Understanding of Climate Change

1. Background

The Climate Cool Schools (CCS)-Global Platform project is a multi-lateral learning portal for students in Malaysia, the UK, and Hong Kong to work together to explore local and global climate change issues. The learning portal enables these students to learn from each other about what actions are possible, and to find a voice to advocate wider actions at the local and global levels. The project was initiated in late 2007 and in early 2008 embarked on a two year trial basis with the British Council (BC), Sultan Idris Education University (SIEU), and the Perak State Education Department (JPN, Perak) as the partners. This project is a follow-up from the ZeroCarbonCity project launched in 2005 by the British Council.

Over the years, global warming has altered the Earth's climate. It poses one of the greatest threats to society and a challenge to young people of Malaysia and across the world today. Since the young of today will inherit and manage our world tomorrow, it is vital for us to instill in them awareness and understanding of climate change and other global issues. In addition, it is also necessary to equip them with the relevant knowledge and skills for them to collaborate across cultures in seeking solutions to these vital issues.

In Malaysia, Environmental Education is integrated into the Integrated Secondary School Curriculum. However, the discussion of global issues such as climate change is often being overlooked in the local classrooms. Thus, there is a dire need to expose the students to the real environmental

issues which transcend geographical boundaries. It is also important to ensure that students understand that environmental issues are both local and global. By understanding how our lives and that of others are affected by changes in the environment, students will be more able to relate the local environmental issues to a wider global perspective.

1.1 How the Project Started

The project was initiated by the British Council (BC) in collaboration with Sultan Idris Education University, and the Perak State Education Department. In late 2007, Dr. Sri Intan Mokhtar, who was a senior manager from the Science and Technology department at BC approached the faculty of the Science & Technology department at SIEU to introduce the project. The Vice Chancellor (VC) of SIEU and several lecturers from the Science department were invited to a short presentation of the proposed project. SIEU was approached for several reasons, some of which are:

- it is an education university that trains teachers;
- it is ideally located in Tanjong Malim, Perak which is about 80 kilometers away from Kuala Lumpur (KL) where the main BC office is; and
- the project wanted to target students who were on the outskirts of the bustling city but still had sound broadband service.

The short distance to and from KL makes it convenient for the project coordinator to monitor and evaluate the project once it began. Next, we approached the Director of Education Department in the state of Perak, and without much hesitation, they agreed to participate in the project. The

Assistant Director of Science, Mr. Mahbud Abd Fatah, took charge of the project for the schools in Perak. The official appointment of leaders for the respective organisations made it easier to run the project. The project coordinator then invited other universities, like the Open University and the National University of Malaysia, companies such as British Petroleum (BP), Asia Pacific; and several NGOs such as Forest Research Institute Malaysia (FRIM); and Indah Waters Consortium to join in the project. Another major partner in the project is UniServity, a company based in Hong Kong which provided the learning platform and the e-Portfolio space in the portal. Following this, a steering committee was established to brainstorm ideas and to plan the start of the project. With everyone playing their respective roles, the project finally got underway in early 2008 on a 2-year trial basis.

1.2 Resources and Stakeholders

The SIEU lecturers from the different disciplines, namely; Science, English, Information Technology, Social Science, and Arts and two technical staffs from the ICT Unit who monitored the technical aspect of the project, also joined the project. Based on certain criteria stated by the project coordinator, the state Director of Education identified seven schools in Perak, a state in western Malaysia, to participate in the project. Meetings were arranged with the school principals, teachers, and lecturers to brief them about the project. They were informed about the nature of the project, the objectives, responsibilities of the teachers and lecturers, and the activities planned for the teachers and students.

The main resource used in this project was the Climate Cool Schools (CCS) global platform. Each school has its own dedicated group space which can be added to by creating sub groups relevant to the learning that is taking place. Individual schools were encouraged to share, partner, and collaborate with others in areas relevant to their individual curricula. This could be within their region or external. Through this platform alone, they could interact with teachers and students from their own schools, other schools

in the same locality, foreign students, foreign teachers, experts in Malaysia, and experts located abroad.

BP Asia Pacific Sdn. Bhd. provided the learning resources to conduct the activities in this project. It is a free three-element education programme targeting students from both primary and secondary schools in Malaysia. Two modules on topics related to science, maths and the environment particularly on the climate change were used in this project. The two modules are:

- 1) BP's Carbon Footprint Toolkit, which provides a flexible way to teach students about carbon emissions, impact, choices for reduction, and alternative energy supplies.
- 2) BP Carbon Challenge, in which students are tasked with looking at an imaginary school and assessing the social, environmental, and economic impact of its carbon footprint.

As for the CSeed project, the university's science laboratories and apparatus were used to conduct the herbarium and collage activities. The science lecturers who specialise in botany and plant anatomy provided their knowledge and expertise to run the project.

2. Climate Cool Schools – Global Platform Project

2.1 Introduction

The general aim of this project is to engage students around the world in raising awareness and understanding of the impact of climate change in their own and other countries, as well as to explore realistic solutions. It will also prompt students to take a lead in reducing their own carbon footprints; to give them a voice to influence other key decision makers, locally and globally; and prompt the students own responsible decision making and

citizenship as they approach adulthood. The project also supports education reforms and pedagogy related to personalized learning.

Some of the objectives of the project are to raise the awareness of students, teachers, and parents on global environmental issues and their impact both locally and internationally. This will lead students to consider their own impact on the environment and to adjust their behavior accordingly. Eventually, it will promote student advocacy to change the behavior of the wider population, both locally and internationally. The project also ties in with the Malaysian national curriculum, and it supports key learning goals across subjects like science, geography, English, and the arts and harnesses cutting edge ICT. Students' learning will be personalized and they will be connected to diverse collaborators and international audiences. In the long run, it helps promote international and intercultural understanding as well as to develop a global outlook. It is also anticipated that the project will be sustained over time as it is flexible to participants and the changing needs of the curriculum. The use of the collaborated Learning community (cLc) platform helped to reduce the workload of teachers, and created collaborative communities of practice at home and abroad. In this way, it helps to develop more effective practitioners.

The main targets of the project were students, teachers, and student teachers of SIEU. A total of 86 teachers, 657 students, 15 lecturers, and 114 student teachers participated in the project. The school students were 13-16 years old, while the student teachers were 19-22 years old.

2.2 Relevance to EIU

Since EIU is education for the benefit of the world's citizens, this project supports EIU in that it fosters better understanding between people from different regions of the world on the impact of climate change to the environment. The sharing of information on climate change, and the actions taken to mitigate it among other individuals across the globe, helps promote feelings of internationalism and contributes to international

understanding. The project taught the participants that the world is interconnected, and that any actions taken by one party could impact parties living on other continents. The project facilitated capacity building, particularly on environmental issues, through collaborative networking between domestic and international schools by allowing free access to information provided in the platform. It empowered the students by providing opportunities for them to advocate and act. These two important actions are crucial in preparing them to act responsibly in the future. The project also emphasized universal values, such as respecting cultural diversity as they engaged in interaction with students from other countries, and promoting an environmental friendly way of living. The product of their learning activities could be used as teaching and learning materials for others students. Working collaboratively with the partners within the country and also with partners internationally, upholds a clear and universal message, which is to seek actions in mitigating climate change. This action promotes unity and peace between the different countries of the world which is also one of the aims of EIU.

The widespread use of the Internet in society today has opened a new dimension of how people communicate. It has also changed the dimensions of how people collaborate and created a whole new perspective of working locally and collaborating globally. The impact can be seen in the teaching and learning (T&L) environment, and this is especially true in EIU. One of the specific goals of this project is to share the significance of "greening" education and to discuss the role of education institutions in developing skills, knowledge, and values that promotes behaviour in support of sustainable development. The cLc platform supports EIU whereby the global sharing of information to mitigate climate change and other global issues create a sense of learning to live together among all the participants and the necessity to preserve and conserve the environment. It also explores the best practices that go beyond raising awareness and makes learning and teaching sustainability an integral component of their lives.

With the Climate Cool Schools - Global Platform, students from the three different countries - Malaysia, Hong Kong and the United Kingdom - can come together to share, teach, collaborate, and exchange cultural differences and ideas on climate change and other related topics. The introduction of the collaborated Learning community (cLc) has created a global social network where everyone is connected, either directly or indirectly, allowing them to exchange, share or collaborate on information.

This project also aspires to create collaborative communities of practice for teachers in Malaysia and abroad. It aspires to develop more effective practitioners and to provide professional development with regards to incorporating collaborative learning into planning, teaching and learning. This again is significant to EIU to promote cultural diversity and globalization, especially in addressing climate change issues and other global issues. We believe that all the activities organized helped to create bonding between local students in a multi-racial society, thus strengthening unity and peace in Malaysia. These values can be shared with students from the other participating countries via the platform so that students from across the globe will understand and appreciate diversity, and at the same time learn to live together in peace as envisioned in EIU.

2.3 Pedagogy and Teaching Methods

The teaching model used in this project is cLc. It entails a learning community comprised of people, not only content. It engages personalized learning which encourages moving from a teacher-led model to a learner-led organization. This model of teaching is hoped to develop 21st century learning skills.

21st century learning blurs the boundaries between formal and informal learning. Learning can take place anywhere - in schools, at home, or on the playground - and at anytime. 21st century learning believes that students are the consumers of knowledge drawn from teachers, experts, and other students from around the world or from mass media. There are no barriers

to learning. Learning can take place with collaborators and audiences within and beyond the classroom. The students also have access to experts, professionals, educators, and audiences other than their teacher. In the 21st century everyone is a teacher and a learner.

The learning also advocates a student's voice and choice. With a sophisticated, dynamic e-Portfolio and personal space, the students can pursue their own lines of enquiry and become autonomous learners. 21st century learning is authentic learning. The subject matter, content, and problems used are authentic, and so are the assessment methods and the collaborators and audiences.

The teaching method that is in-line with the teaching model used in this project is a web-based collaborative learning environment that enables learners, teachers, expert collaborators, and invited guests to collaborate online for learning and teaching purposes. Currently, the multilateral learning portal caters to students in Malaysia, Hong Kong, and the UK to work together to explore local and global climate change issues. The platform gave students the opportunity to learn from one another about what actions are possible to mitigate climate change and a voice to advocate wider action at the global and local levels.

The project also employed collaborative learning where the students worked collaboratively with their peers within their schools to produce presentations and then share their experiences with other learners nationally and internationally. Together, they look for common themes and issues in the global debate. Reflection on the issues affecting each region was built into the learning experiences. Next, peer evaluation of work at an international level was carried out. What had been learned was discussed internationally based on local and global understanding. Finally, the work was stored at each student's e-Portfolio and published on the platform.

2.4 Activities

There were four activities conducted during the 2-year trial basis of the project. Prior to the running of the activities, the training of the cLc platform was carried out by a team of two people from UniServity. The first training was for the participating SIEU lecturers, teachers, and partners of the project so that they could become familiar with the learning platform and become Master trainers. They then trained the student teachers at the universities and the students in school on using the platform. There were two Master training workshops conducted. The first was a beginner's course, And the second offered more advanced training.

Similarly, two training workshops were conducted for the student teachers and students for all 7 participating schools. All training focused on the following aspects:

- gaining an understanding of the cLc layout, appearance, key components and functions;
- setting up a sub-group community structure ready for a training session;
- learning how to manage cLc user accounts;
- understanding how to collaborate with other cLc users; and
- gaining an understanding of the cLc with help and support provided.

In line with the training sessions, several projects and activities were conducted by the cLc project managers (SIEU lecturers and teachers) and partners (FRIM and BP, Asia Pacific).

The first activity was jungle trekking and a canopy walk. The CCS team celebrated World Environment Day (WED) 2010 by organizing a field trip to the Forest Research Institute Malaysia (FRIM) in Kepong, Selangor. About 30 individuals, comprised of SIEU lecturers, supporting staff, teachers, and students from the seven participating schools went on the trip.

The auspicious event began with a brief introduction of FRIM by the Assistant Director. After the presentation and a quick breakfast, the party immediately headed to the jungle. But before that, we were divided into two groups of 15 people each. Each group was led by a FRIM guide and both groups took two separate routes. Everyone was reminded of the photography competition in which the best photograph taken by any group member would receive a grand prize.

The objective of this activity was to appreciate and care for nature, the environment, and its surrounding flora and fauna. The photograph competition sought to explore individuals with a sense of art and creativity and a taste of quality besides the technical aspects of photography. All the experiences and artifacts collected were shared both locally and abroad by publishing them on their respective e-Portfolios, be it on the school page or their individual page.

As the training for students was conducted at schools, the BP myScience project was also conducted, organized by BP Asia Pacific. The myScience project is a free, three-element education programme targeting students in Malaysia. The project comprised several modules on topics related to science, math, and the environment, particularly on climate change. In Malaysia, the focus was on the use of BP's Carbon Footprint Toolkit as it provided a flexible way to teach students about carbon emissions, impact, choices for reduction, and alternative energy supplies. The resources used were the Carbon Footprint Toolkit, the Climate Change resource pack, Climate Change online activities, Carbon Crisis online activities, Energy for the World DVD, Oil products, and 'Sembang Sains' – science based talk sessions delivered by partners and celebrities.

The third activity was the CSeed project, conducted by SIEU Biology lecturers. Realising the importance of tropical rainforests to the world, the CSeed project aims to conserve germplasm and better utilize genetic resources through education and research with local and international

cooperation. Some of the objectives of the CSeed project are:

- identifying type of seeds and plant species which have value such as medicinal, pharmaceutical, or for flavour/coloring;
- gathering information on the plants and build databases;
- creating awareness in students on the importance of seed conservation and preservation; and
- initiating seed centres (seed banks) at the University and schools.

Apart from the above objectives, a collage and herbarium competition was organized to explore the teachers' and students' creativity and innovative skills. Here, again they shared knowledge about seeds and their experiences and products with other students, both locally and internationally via the learning platform.

The next activity was an essay writing competition entitled "The Fuel Price Hike: A Blessing in Disguise". The objectives of this activity were:

- helping students understand the catastrophic effects of climate change;
- creating awareness in the students so that they would love and appreciate nature; and
- enhancing students' understanding on the importance of conserving and preserving nature.

The competition was for the seven secondary schools and divided in two categories. The first category is for Form 1-3 students and the second category is for Form 4 students. The winning essay was published on the e-Portfolio for others to read and share.

Finally, a Green Trail was conducted by a group of six people from the CCS team to Kuala Tahan, in Taman Negara, Pahang. The objective of the trip was to identify a trail into the countryside and jungle, across roads and rivers, to meet with the communities along the journey and to carry out green activities with them. The project was planned to be carried out the following year (2009) for rewarding students and teachers who had

actively participated in the learning platform and all other projects and activities conducted by the project managers. The trip was also organized to commemorate WED. The outcome of the trip was a green trail drawn on a map along with the respective activities conducted along the trip. These experiences were also shared with the rest of the team, schools, and partners via the learning platform.

3. Impact of the Project

The evaluation of the learning portal and the reflection from all the participating partners, university staff, teachers, and students revealed a positive impact, best practices, and challenges from this project. The positive impact and best practices contributed to the strength of the project and could be references for other organizations, academics, and teachers. On the contrary, the challenges served as reminders to all the participating parties to reflect on and improve the project for the betterment of others.

3.1 Acquiring Knowledge and Skills

All those who participated in the project became more IT savvy and technically skilful, especially with the use of e-Portfolios, blogs, emails, and online forums and discussion. Those who initially were IT blind, managed to capitalize most on the training workshops of the learning platform conducted. They realized the importance of ICT in the teaching and learning process, and this was especially true for the SIEU lecturers and teachers. They also gained abundant knowledge about global issues, and climate change in particular, as well as other knowledge from related disciplines. They became holistic in their learning and more world-aware, which is one of the characteristic of 21st century learning.

The students not only consumed knowledge about the environment, but also generated and contributed new knowledge and ideas, and then disseminated them to the other parts of the world. This enabled the

students to feel a sense of ownership for Mother Earth, and a sense of responsibility as their contribution assisted other people as well, even though they were miles away.

3.2 Enhancing Soft Skills

The project managed to develop and enhance the lecturers', teachers', and students' soft skills. They became critical thinkers, problem solvers, and capable leaders able to work wonderfully in teams and able to efficiently gather and manage information. The students developed a sense of responsibility, ownership, team work, tolerance, and respect for one another when they were engaged in a project or activity. The personalized learning and student-led organization model of learning greatly improved students' autonomy in learning and gave flexibility to their learning.

The project also enabled them to be pro-active in taking initiatives to preserve and conserve the environment, and they learned that every individual has the responsibility and capability to act towards a better tomorrow. Nonetheless, through the collaborative activities, they were also aware that acting together is always better than acting alone.

3.3 Esthetical Values

The project provided opportunities for the students to explore nature in a meaningful way. Before this, they only learned about nature and the environment through textbooks and the media. The activities conducted enabled them to use their five senses to understand and be closer to nature, helping them to better appreciate nature.

3.4 Community Relationship

The cLc model helped enhance cooperative work and understanding between the students, organizations, and the communities at large. By working with the surrounding communities, awareness that action needs to be taken to address global issues especially climate change is increased. This enables a wider audience of people to gear towards a more sustainable living

environment. This aspect is one the many goals of sustainable development.

Since the project involved many parties, it also served as part of the participating organization's corporate social responsibility to the community. The ties between these parties improved and were reinforced through the projects and activities carried out. The universities and experts shared expertise with the teachers and students on global issues and climate change through information gathered over the learning platform.

4. Lessons Learnt

4.1 Problems and Challenges

The learning portal provided by UniServicy was underutilized by the teachers because of their teaching workload and other school commitments. The slight user-unfriendliness of the portal is one reason for its lack of use, especially by the students. This is because the learning platform was controlled and operated by a company in Hong Kong and, thus, it was quite difficult to provide support and maintenance from afar.

There was a lack of participation and contribution to this project from public and private organizations. Although discussions and meetings were set-up to introduce them to the project, CEOs were not optimistic and very few were willing to join and commit. More effort in publicizing the positive aspects of this project is necessary, and it should be done on a large scale.

4.2 Suggestions and Recommendations

Future projects should aim for more support from private companies and government agencies. Due to financial constraints, some of the activities limited participation to a few students and teachers from each school. More students should be included as they could gain new knowledge and experiences that were not taught in classrooms.

It is recommended that SIEU develop a similar platform of this kind to cater to all the schools in Malaysia. In order to motivate teachers and students to participate, awards could be given as a sign of appreciation towards their contribution. Furthermore, students' participation should also be counted as part of the formal curriculum, thus turning these activities into assignments which would benefit their overall academic results. It could act as extrinsic motivation for the students to participate actively.

5. Conclusion

Today's young people are generally IT savvy. Thus, digital technologies must be used in order to capture their interest and imagination when dealing with matters pertaining to global issues. In this sense, the use of a more sophisticated, closer, and friendlier approach to learning is recommended as compared to the normal teacher-led classroom experience.

The challenge for educators at Sultan Idris Education University (SIEU) is that the language and the concepts of climate change have become such a major feature of our lives that it is difficult to capture public attention. Young people appear to be well informed about the existence and causes of climate change, but how are we to maintain their attention and ensure that they continue to be concerned about these issues? This is of utmost importance because we have seen that knowledge alone is insufficient to motivate people to take appropriate actions to address global issues.

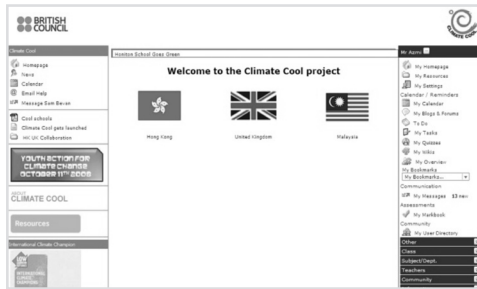
The introduction of the Climate Cool Schools – Global Platform project is indeed timely and in-line with 21st century teaching and learning as advocated by SIEU. The cLc Platform introduced by UniServity allows personalized learning which is learner-led. This approach to learning prompts students to be more flexible, creative, and innovative in mitigating climate change and other global issues. It offers students within Malaysia,

and across the world, to deliberate, collaborate, and share realistic experiences to mitigate environmental issues specifically on climate change using e-portfolios, blogs, forums, and email. In addition, the portal provided for 21st century smart teaching and learning utilizing the advent of ICT. The cLc platform further gives them a voice to influence key decision-makers, both locally and globally.

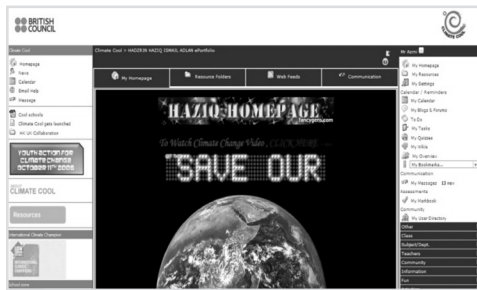
The Climate Cool Schools project is one of many actions undertaken to build on students' existing knowledge and understanding of the importance of global issues. This fulfils the aspirations of the university and the country in creating a generation of future teachers that could lead the younger generation towards a sustainable future. This project strongly supports the cohesive initiative of EIU which involves the different authorities, organizations, and partners. Although this is a pilot project lasting only 2 years, the impact was felt by many, especially the participating parties. The problems and challenges faced in this project should be a reminder to any future project organized by other organizations so that the aims and objectives of EIU could be successfully achieved.

Appendix

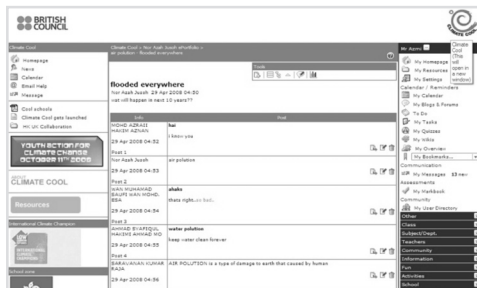
I. The Collaborated Learning Community Platform



◀ The front page of the platform



◀ The e-portfolio space on the platform



◀ The forum space for discussion



◀ The blog space to share information

II. List of 7 Schools Participating in the Climate Cool Schools Project

- Khir Johari Secondary School, Tanjong Malim
- Ave Maria Convent Secondary School, Ipoh
- Raja Perempuan Secondary School, Ipoh
- Clifford Secondary School, Kuala Kangsar
- Raja Tun Azlan Shah Secondary Science School, Taiping
- Dindings Secondary School, Lumut
- Teluk Intan Secondary Science School, Lumut.



◀ Students working attentively on the cLc platform



◀ Teachers and students with their CSeed products



◀ A short briefing by the FRIM officer before the jungle trek and canopy walk

Field Visit

On behalf of APCEIU, Ms. Supatra Pongpiboon, Junior Programme Specialist of the Education and Training Team, undertook a field visit to Sultan Idris Education University, Malaysia from 18 to 22 November 2010 to carry out the following missions: 1) to confer the EIU Best Practices Award, 2) to give a congratulatory remarks for the official launch of “Coffee Table Book” and the official ceremony of Climate Cool Schools Project, 3) to provide the guidelines on finalizing the report, and 4) to have an in-depth interview with students and teachers participating in the programme and discuss how to continue and enhance further activities related on EIU.



◀ Conferring the EIU Best Practices Award



◀ Group photo with Professor Dato' Dr. Aminah Ayob, Vice Chancellor of Sultan Idris Education University (SIEU), professors from SIEU and the Climate Cool Schools Global Platform team.