

2011

GREENMANY

Germany Environmental Education Study Tour



GREENMANY

The Hong Kong Institute of Education

05/25/2011

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1 · Project Objectives

1 · Participants should be able to acquire deep understanding about the concrete concept of environmental education through inter-institutional sharing and discussion with a local institution in Germany;

2 · Through school visits in local primary and secondary schools, participants should be able to know about how environmental education is integrated with other disciplines in local primary and secondary schools in Germany and also to learn about specific teaching strategies in environmental education classes;

3 · Through visits to NGO or other related organizations, participants should be able to know about how to utilize off-campus resources to assist schools in conducting environmental education;

4 · Participants should be able to explore public awareness of understanding environmental education in Germany through street interviews;

5 · Participants should be able to reflect how to further conducting environmental education via three aspects: school-based curriculum; off-campus organization and public awareness; also be able to demonstrate a real environmental education lesson in a primary or a secondary school in Hong Kong by applying teaching strategies they have learned in Germany.



2 · Participation Information

	Name (ENG)	(CHI)	Gender	Student No.	Programme
1	Zhu Ailin	朱艾琳	F	07461150	BEd (EL) –4
2	Chen Wei	陳薇	F	07461485	BEd (EL) –4
3	Li Meng	李夢	F	07462946	BEd (EL) –4
4	Tang Siu Mei	鄧筱薇	F	10487282	BEd (EL) –1
5	Wang Mengyuan	王夢媛	F	07460118	BEd(EL)-4
6	Zou hanrui	鄒寒蕊	F	10513641	BEd(EL)-1
7	Yu Siu Yi	俞兆懿	F	09095711	BEd(LS)-1
8	Chan Yen Ni	陳嬾妮	F	10147894	BEd(P)-1
9	Choi Yuet Yee	蔡悅頤	F	10065084	BSoSci -1
10	You Shuqi	游舒淇	F	07460338	BEd(CL)-4
11	Man Pui Fong	文佩芳	F	10094982	Bed(P)(CL)-1
12	Wong Wing Kwan	王穎群	F	09101778	Bed(P)(CL)-1
13	Zhao Yihui	趙依慧	F	07465417	BEd(EL)-4
14	Song Yujie	宋雨潔	F	07464322	BEd(EL)-4
15	Yeung Man Hei	楊文希	M	1017107	Bed(P)(CL)-1



3 · Itinerary

Time	Event	Useful Information	PIC
12/04 (Tue) Day One Detmold Horn Bad Meinburg YH			
05:35	Arrive Munich	Immigration, Bag claim, Register Rail Pass, Cell phone card	Ailin
06:30-07:15	Munich International Airport- Munich Hbf	DB Train 07:04- 07:45 (direct) Dep/Arr Platform 2	Karena, Mivan, Yuki
08:20-13:52	Munich Hbf- Horn Bad Meinburg	DB Train 08:20-11:34 Munich Hbf(19)- Kassel - Wilhelmshöhe (3) 11:48- 12:35 Wilhelmshöhe (10) - Warburg(Westf) (3) 12:39- 13:01 Warburg(Westf) (4) – Altenbeken (21) 13:33- 13:52 Altenbeken (21) – Horn- Bad Meinberg (1)	
14:00	Meet Mr. Norbert Fuhrmann at train station		Erin
14:30	Youth Hostel check-in		Ailin
15:00-17:00	Free Time (Shop for Daily Supplies)	Bread, Milk, Cereal, Ham, Tuner, Cheese	Ailin, Karena, Shuqi, Hunter
17:30	Dinner + Evening meeting briefing		Karena, Mivan, Yuki
18:00	Informal evening discussion		Ailin & Mr. Norbert Fuhrmann
21:00	Debriefing		Ailin, Karena
13/04 (Wed) Day Two Detmold Horn Bad Meinburg YH			
06:30-07:15	Briefing Go to The Felix-Fechenbach Vocational College (FFB)	Bus	Karena, Mivan, Yuki
07:30	Breakfast at FFB		Karena, Mivan, Yuki
08:30	Souvenir Delivery Group Photo		Ailin
08:40	Presentation about the German School system	To acquire a brief idea about German School System and compare it with Hong Kong/Greater China School System to see if there is any similarity or difference reflected.	Karena, Mivan, Yuki
09:00	Introduction to	To acquire a brief idea about TVET (Technical and Vocational	



	TVET(Technical and Vocational Education and Training)	Education and Training) that rarely appears in Hong Kong context.	
09:30	Curriculum Development with focus on Green Technology Q &A	To know about the importance on sustainable development in all German curricula development and to reflect on what Hong Kong curriculum has done and what aspect needs to improve. To acquire deep understanding about the concrete concept of environmental education through inter-instructional sharing and discussion.	
10:00	Presentation from HKIED Q &A		Yuli, Jane, Karol, Daisy
11:00- 12:30	Presentation of Project House	To know about how this Project House is renovated and restructured with focus on green technology and on sustainability, both in materials and technologies and the use of the building. And to see if there is anything we can learn from and transfer it to Hong Kong school.	Karena, Mivan, Yuki
12:30	Lunch		
14:30- 16:00	Tour of FFB		Mr. Norbert Fuhrmann Karena, Mivan, Yuki
17:00	Evening Tour of Detmold and Culture Visit		Mr. Norbert Fuhrmann local students Karena, Mivan, Yuki
21:00	Debriefing		Ailin, Karena

14/04 (Thur) Day Three Detmold Horn Bad Meinburg YH

06:30	Breakfast+ Briefing		Karena, Mivan, Yuki
07:15- 07:45	Go to Realschule Horn	Bus 709 (10:50 – 10:55)	
08:00	Presentation from Realschule Horn (to be confirm) Q&A		
08:45	Souvenir Delivery Group Photo		



09:00	Visit Realschule Horn--Class observation Sharing	*a few people available for translation To observe in school based context how actual lessons are conducted about environment protection in an integrated way. To learn specific teaching strategies in Environmental Education Class	
10:30	Bus to Bachschule (Primary school)		
11:00	Bachschule (Primary school) -- Class observation Q& A	*a few people available for translation To observe in school based context how actual lessons are conducted about environment protection in an integrated way. To learn specific teaching strategies in Environmental Education Class	
11:45	Presentation from HKIEd Q &A		Yuli, Jane, Karol, Daisy
12:15	Souvenir Delivery Group Photo		Karena, Mivan, Yuki
13:00	Lunch		
14:00	Interviews in Detmold	To explore public awareness and understanding of Environmental Education.	
19:00	Dinner (invitation by the FFB)		Mr. Norbert Fuhrmann Karena, Mivan, Yuki
21:00	Debriefing		Erin, Mivan
15/04 (Fri) Day Four Berlin MEININGER Hotels			
07:45	Breakfast+ Briefing Checkout at YH		Ailin
08:00	Bus to University of Paderborn	09:09 Horn-Bad Meinberg (1)- 09:41 Paderborn Hbf (4)	Karena, Mivan, Yuki
09:30	Dept. Of Teacher Training Presentation (sustainability and green education)	To share understanding about environment education from college students' or prospective teachers' perspectives To learn specific teaching strategies	
11:00	Presentation from HKIEd Q &A		Yuli, Jane, Karol, Daisy
11:30	Souvenir Delivery Group		Karena,



	Photo		Mivan, Yuki
12:00	Lunch at the Mensa of the university		
14:00	Bus to Horn	WFB 09:09 Horn-Bad Meinberg (1)- 09:41 Paderborn Hbf (4)	
14:53- 19:42	Horn Bad Meinburg- Berlin	14:53- 15:27 Horn Bad Meinburg (1)- Herford (2) 16:08-16:30 Herford (4) – Minden (Westf)(3) 16:46- 19:42 Minden (Westf) (13) - Berlin Hbf	
20:15	Check in Hostel	Directly located at Berlin Main Station	Ailin
21:00	Dinner		
21:30	Debriefing		Vera, Yuki
16/04 (Sat) Day Five Berlin MEININGER Hotels			
08:00	Breakfast+ Briefing		Shuqi, Hanrui
09:00- 10:45	Unter den Linden (菩提樹大街) Questionnaire + Interview	Walk To explore public awareness and understanding of Environmental Education.	
11:45- 13:30	Reichstag (國會大廈) Cultural Visit		
13:30- 14:30	Lunch		
15:00- 16:15	Berliner Mauer (柏林牆博物館 隔離牆) Cultural Visit	Walk	
16:15- 17:30	Potsdamer Platz (波茨坦廣場) Questionnaire + Interview	Walk	
17:30	Dinner	Back Hostel:S –Bahn From Potsdamer Pl. to Hauptbahnhof	Ailin, Karena, Shuqi, Hunter
19:00- 21:00	Cultural Visit (Individual)		Ailin, Karena, Shuqi, Hunter
21:30	Debriefing		Karol, Hanrui
17/04 (Sun) Day Six Magdeburg InterCityHotel			
08:45	Breakfast+ Briefing Check out		Shuqi, Hanrui



09:30-14:30	Museumsinsel (博物館島) Berliner Dom(柏林大教堂) 猶太屠殺紀念館 Questionnaire + Interview	S3 09:22-09:27 From Hauptbahnhof (15) to Hackesher Market (3)	Ailin, Karena, Shuqi, Hunter
14:30-15:15	Centre Main(東側畫廊) Cultural Visit	S7 14:30- 14:36 From Hackesher Market (3) to Ostbahnhof (8)	Shuqi, Hanrui
15:15-16:30	Back Hotel and Pick up luggage	S7/5 15:05-15:10 From Ostbahnhof ((4) to Hauptbahnhof (16)	
17:11-18:53	Berlin- Magdeburg Questionnaire + Interview	DB Train Berlin - Magdeburg (platform 8)	
19:15	Check in Hotel	The InterCityHotel Megdeburg is located directly at the Magdeburg main station.	Ailin
20:00	Dinner		
21:00	Debriefing		Ailin, Shuqi
18/04 (Mon) Day Seven Hamburg MEININGER Hamburg City Center			
07:30	Breakfast+ Briefing Check out Hotel		Yuli, Daisy, Jane
08:00-08:30	Go to Gesellschaft für Internationale Zusammenarbeit (GIZ) Magdeburg	<i>Dr. Harry Stolte</i> Schellingstr. 3-4 39104 Magdeburg	
09:00-10:00	Visit GIZ Magdeburg Presentation by Division “Modern Media and Curricula Development in Vocational Training” - Approaches and projects within the UN Decade “Education for Sustainable Development” in national and international dimensions	To learn about some projects & approaches regarding TVET and ESD in national and international orientation, which would provide us a broader image about ESD in globalized context. To know how UNESCO utilizes off-campus resources to assist schools in conducting environmental education.	
10:30	Souvenir Delivery Group Photo		Yuli, Daisy, Jane



11:00	<p>University “Otto von Guericke” Magdeburg</p> <ul style="list-style-type: none"> - Introduction of structures of studies in the field of Vocational Education and Training – comprising: Bachelor /Master /PhD (with special focus on international cooperation) - Integration of aspects of Education for Sustainable Development in TVET Teacher Education 	<p><i>Prof. Dr. Klaus Jenewein</i></p> <p>Institute for Vocational Education and Human Resource Management Zschokkestr. 32 39104 Magdeburg</p> <p>To know about integration of ESD aspects in TVET Teacher Training & Overview of TVET in international cooperation.</p>	
11:45	Presentation from HKIED Q &A		Yuli, Jane, Karol, Daisy
12:15	Souvenir Delivery Group Photo		Yuli, Daisy, Jane
12:30	Lunch		
14:30	Wrap up / Short final discussion		
15:30	Back Hotel and Pick up luggages		
16:02-19:17	Magdeburg – Hamburg Altona Hbf	16:02-17:23 Magdeburg Hbf (6) → Hannover Hbf (12) 17:36 -19:08 Hannover Hbf (7D-G)→Hamburg Altona Hbf (7)	
19:30	Check in Hotel	<ul style="list-style-type: none"> - Take the S1, S2, S3 or S31 to station Altona - Leave the station in direction Große Bergstraße and turn left into Max-Brauer-Allee. - After ca. 200m turn left into Goetheallee. - After another 30m you can see our MEININGER on the left hand side 	Ailin
20:00	Dinner		Yuli, Daisy, Jane
21:00	Debriefing		Erin, Yuli,



			Jane
19/04 (Tue) Day Eight Hamburg MEININGER Hamburg City Center			
08:00	Breakfast+ Briefing		Yuli, Daisy, Jane
09:15- 10:00	Go to Karlshöhe	S1 Wellingsbuttel Bus 27 Stop: Umweltzentrum Karlshöhe Or U1 Farmsen Bus 27 Stop: Umweltzentrum	
10:00- 11:30	Karlshöhe	To learn to understand and appreciate the nature To participate in experience-oriented activities to experience the value of nature To explore how to utilize off-campus resources to assist environmental education	
11:30- 12:00	Back to City	Bus 27 S1 Wellingsbuttel/ U1 Farmsen--- Hamburg Hbf	
13:00	Lunch		
14:00- 15:30	Rathaus (漢堡市政廳) Alsterarkaden Cultural Visit		
15:30- 17:30	Hamburg Hafen (漢堡港巡遊) Questionnaire + Interview	To explore public awareness and understanding of Environmental Education.	Yuili, Daisy, Jane
17:30- 19:00	Dinner		
20:00	Debriefing		Vera, Daisy
20/04 (Wed) Day Nine Cologne Pathpoint Cologne			
07:00	Breakfast+ Briefing Check out Hotel		Hunter, Kristy, Man
07:32- 11:46	Hamburg Altona - Cologne	DB Train 07:32- 11:46 Hamburg Altona (10) - Cologne (7)	
12:15	Check in Hostel	From Cologne central station, exit “Breslauer Platz”, turn left and walk 400m towards Turiner Straße. The hostel’s entrance is on Turiner Straße opposite Savoy Hotel.	
13:00	Lunch		
14:00	Free time Questionnaire + Interview		



14:00-16:00	Kölner Dom (科隆大教堂) Questionnaire + Interview	Walk To explore public awareness and understanding of Environmental Education.	Ailin, Karena, Shuqi, Hunter
16:00-19:30	Free time + Dinner		
21:00	Debriefing		Karol, Hunter
21/04 (Thur) Day Ten Cologne Pathpoint Cologne			
07:45	Breakfast+ Briefing		
08:32-08:55	Cologne - Bonn	DB Train 08:32-08:55 Cologne (9 B-D)- Bonn (3)	Hunter, Kristy, Man
09:30	UNEVOC -Presentation on the work of UNESCO-UNEVOC in general with particular focus on the area of Education for Sustainable Development in relation to the UN Decade for Education for Sustainable Development	To learn about the Education for Sustainable Development policy from UN perspectives in international orientation and have deep reflection on its rational behind, acquire critical thinking about current issues of ESD and its implementation in globalized context, and look into its future development. By Train: An underground station (“Heussallee”) is about five minutes from the UNESCO-UNEVOC International Centre. The city centre “Universität/Markt” is four stops away; the main railway station (“Hauptbahnhof”) is five stations away.	
11:30	Presentation from HKIED		Yuli, Jane, Karol, Daisy
12:00	Souvenir Delivery Group photo		Hunter, Kristy, Man
12:30	UNEVOC Building visit	Mrs. Naing	
13:00	Wrap up/ discussion		
13:30	Lunch		
14:30-17:00	Beethoven House(貝多芬故居) Münster(波恩大教堂) Questionnaire + Interview	To explore public awareness and understanding of Environmental Education.	
17:22-17:42	Bonn - Cologne	DB Train 17:22-17:42 Bonn (1) - Cologne (2)	
18:00	Dinner		
19:30-21:30	Final Debriefing	Daily debriefing+ Overall Evaluation	Ailin, Kirsty, Man



4 · Introduction to Visiting Organizations

Felix-Fechenbach-Berufskolleg (FFB) in Detmold, Germany

The Felix-Fechenbach Vocational College (FFB), located in Detmold is a public school in North Rhine-Westphalia. It combines four types of schools under one roof. The FFB learners are able to obtain various qualifications from technical college or high school. The FFB is a training partner in the dual system of vocational training in Germany. Further training courses are conducted, leading to a vocational guidance, and basic education.

University of Paderborn

University of Paderborn was founded in 1972. Department of teacher training in it will deliver us a presentation on what they do in terms of sustainability and green education.

GIZ Magdeburg

With the rapid development of globalized world of today, the UNESCO has declared strategies such as “Education for all” and “Education for sustainable development” with specific goals and provisions for the field of vocational education and training. Contemporary development processes are very complex and thus necessitate a combination of different competencies. For this reason, the three Magdeburg institutions (GIZ) GmbH, Otto-von-Guericke-University and the Fraunhofer Institute for Factory Operation and Automation IFF have reached an agreement of cooperation with the aim to contribute to the implementation of the aims and strategies of UNESCO (United Nations- Educational Scientific and Cultural Organization) and the UNESCO-UNEVOC (International Center for Technical and Vocational Education and Training).

The UNEVOC Centre Magdeburg puts its main focus on “Education for sustainable development” and will concentrate on the following topics:

- Development of concepts for education and further training of VET teachers
- Development of curricula and learning and teaching materials for VET
- Human resources development
- VET and sustainable development
- Development of innovative learning environments for professional education and further training

University “Otto von Guericke” Magdeburg

The Otto-von-Guericke University Magdeburg (German: Otto-von-Guericke-Universität Magdeburg) was founded in 1993 and is one of the youngest universities in Germany. The



university in Magdeburg has about 13,000 students in nine faculties. It focuses on expertise in the traditional areas of engineering, the natural sciences and medicine. It also views economics and management, as well as the arts and humanities, as essential disciplines for a modern university in the information age.

UNESCO-UNEVOC International Centre (Bonn)

The UNESCO-UNEVOC International Centre for Technical and Vocational Education and Training was established as a result of a decision taken by the UNESCO General Conference in 1999. In 2000, UNESCO and the Government of Germany signed an agreement for the hosting of the Centre in Bonn, Germany. The UNESCO-UNEVOC International Centre for Technical and Vocational Education and Training (UNESCO-UNEVOC) assists UNESCO's 193 member states strengthen and upgrade their TVET systems. It currently has 10 full-time staff. In addition, UNEVOC regularly involves experts from various fields as well as interns to contribute to the work.

About TVET (Technical and Vocational Education and Training)

TVET is concerned with the acquisition of knowledge and skills for the world of work. Throughout the course of history, various terms have been used to describe elements of the field that are now conceived as comprising TVET. These include: Apprenticeship Training, Vocational Education, Technical Education, Technical-Vocational Education (TVE), Occupational Education (OE), Vocational Education and Training (VET), Professional and Vocational Education (PVE), Career and Technical Education (CTE), Workforce Education (WE), Workplace Education (WE), etc. Several of these terms are commonly used in specific geographic areas.

UNESCO-UNEVOC particularly focuses on contributing to the overarching UNESCO goals in TVET. These are to assist member states improve and integrate TVET as part of the global Education for All Campaign, and also to assist the alignment of TVET with the tenets of sustainable development. UNESCO-UNEVOC is also the hub of a network of key organisations and institutions specialising in TVET in UNESCO Member States worldwide. This UNEVOC Network includes government ministries, research facilities, planning and training institutions. The UNEVOC Network serves as a platform for information sharing and bringing people together in meetings and workshops as a means to improve TVET in different regions of the world.



5 · Outcome-Based Learning Report

The rationale of proposing this study tour is based on ‘Outcome-based Theory’, which can be substantiated by the following discussions.

Outcome I. Participants should be able to acquire deep understanding about the concrete concept of environmental education through inter-institutional sharing and discussion with a local institution in Germany;

During this tour, we visited several institutions at different levels and they are FFB, University of Paderborn, a local secondary school and a primary school. From the visit, we summarized a number of advantages that we can find in the implementation of environmental education in Germany.

First of all, different from other educational systems, vocational training is a distinguishing feature of German curriculum. Culturally, German hope their kids get to work once after schooling. Therefore, the government attempts to create more opportunities for students to acquire vocational training at various levels and we can realize that implementation of environment education plays an important role in vocational training. In the meanwhile a number of achievements can be observed more apparently in helping to increase public awareness in environment protection field as we can see that vocational school graduates can immediately contribute what they learn about environment protection knowledge especially ‘Green job skills’ to their work place, which also creates a greater and positive influence to their colleagues. In this way, public awareness could be directly increased and environment protection will no longer be a vague topic.

Secondly, teacher training is another dominant element for conducting environment education in Germany. In Germany, every school teacher needs to teach two subjects so in this way they can at least integrate these two subjects that we teach together, which increases the possibility for implementing environment education in an integrated way. Besides, some higher educational institutions like University of Paderborn usually organize some workshops for training teachers’ hands-on skills on conducting environment education in real classrooms. And different subject teachers can come to share their opinions and make discussions on various aspects in this kind of workshop so that they can broad their views of how to integrate environment knowledge into different disciplines.

Last but not least, we tend to agree that the concept of ‘environment education’ in Germany is more likely turned out to be ‘Education for Sustainable Development’ which includes a wider range of objectives that aim to cultivate students’ habits of utilizing local



resources and how to develop new projects from reusing or reconstructing old one in order to maintain continuous development to some extent. More importantly, it tends to develop students' awareness of continuous development and make them know that that resources existing around us are limited and they will be used up someday if we do not take actions right away and also make them to believe that every individual's effort makes great contribution to the whole society.

Outcome II. Through school visits in local primary and secondary schools, participants should be able to know about how environmental education is integrated with other disciplines in local primary and secondary schools in Germany and also to learn about specific teaching strategies in environmental education classes;

During this study tour, we visited a local primary school, a secondary school, an institution and a vocational training school. We noticed that environment education in Germany is completely integrated into normal classes and the common way of conducting it is mainly through cooperative learning and using current social issues as teaching materials which aims to connect closely what students learn and what the reality is.

Additionally, it is more noteworthy that school teachers are more likely to take real actions while teaching; for instance, a geography teacher asked the students to collect their used paper into a recycling box so that to tell them environment protection can be achieved through everyone's action and efforts.

As for teaching methodology in teaching environment education, teachers mainly use cooperative learning in order to enable students to learn from peers about environment issue. Besides, teachers also tend to guide students to know about the society and know about environment protection or even continuous development. For example, in FFB, the implementation of 'Project House' aims to train students to think about how to reconstruct the old sites and how to apply some green job skills that they learn from class to the real work place.

All in all, environment education has been put fair enough emphasis in almost all kinds of schools and the connection with social life makes it more integrated into our lives, which also enables students to take actions in lives as well.

Outcome III. Through visits to NGO or other related organizations, participants should be able to know about how to utilize off-campus resources to assist schools in conducting environmental education;

NGOs in Germany have different roles compared to ones in Hong Kong. They more



focus on giving support to professional education in university and vocational training schools, while Hong Kong stresses helping to conduct environmental education for secondary and primary schools. NGOs in Germany believe that it brings greater advantages to the society if they pass the ideas of sustainable development to future workers in any field, especially teachers, since they can conduct better environmental education in secondary and primary schools and integrate the idea of sustainable development with daily curriculum.

In addition, many NGOs in Germany pointed out that they had enough resource but they didn't know who needs help and what the clients really need. This is quite similar with the situation in Hong Kong. Many NGOs actually have very well organized resource and teaching material, however, since they don't know what schools need, they will not take active role to contact schools. This may results resource wasting.

We can conclude that, first, NGOs in Hong Kong may try to provide educational institutions and vocational training schools with more workshops related to environmental education which helps students well implement environmental education in their future careering; second, secondary and primary schools in Hong Kong should contact NGOs based on their needs and conduct projects cooperatively, thus resources of NGOs can be implemented into school effectively.

Outcome VI. Participants should be able to explore public awareness of understanding environmental education in Germany through street interviews;

We conducted our street interviews in major cities in Germany including Berlin, Cologne and Bonn. The questionnaire consists of seven questions for both German and Hong Kong people to answer so that the similarities and differences of their understanding of environmental education can be revealed.

The results show that German participants regard guiding people to think in new directions towards the future as the most important factor in environmental education. In contrast, Hong Kong interviewees consider real experience related to nature/field trip the key element. The difference demonstrates that German people have certain knowledge and concern for the new direction in environmental education like renewable energy while Hong Kong people lack real experience to nature.

In addition, German people treat low public awareness as the most serious problem in the implementation of environmental education. However, based on our observation during the trip, their environmental consciousness actually impressed us a lot. Our assumption is that their environmental awareness has already been integrated into their daily life, but this is not adequate enough in environmental protection. For example, their recycling is classified in great detail and recycling bins can be seen everywhere. In comparison, the recycling in Hong



Kong is restricted to plastic bottles, old clothes and paper. The statistics in our interviews also show that renewable energy is widely applied in Germany. Both interviewees in Germany and Hong Kong indicate their use of solar power. During our trip, we saw the universal use of solar panel to generate electricity and warm. On the other hand, solar water heater is greatly used in Hong Kong.

From the analysis above, we have learnt that environmental education in Germany is more comprehensive and advanced than that in Hong Kong. If German approach of environmental education can be properly applied, it will be beneficial in improving Hong Kong people's environmental awareness.

Outcome V. Participants should be able to reflect how to further conducting environmental education via three aspects: school-based curriculum; off-campus organization and public awareness; also be able to demonstrate a real environmental education lesson in a primary or a secondary school in Hong Kong by applying teaching strategies they have learned in Germany;

In the post-tour stage, a package of environmental education teaching materials was designed for the implementation in school-based curriculum. Our rationale behind the lesson design is that Environmental education can be implemented in every subject. Students can gain environmental knowledge and relevant skills by having different lessons of different subjects.

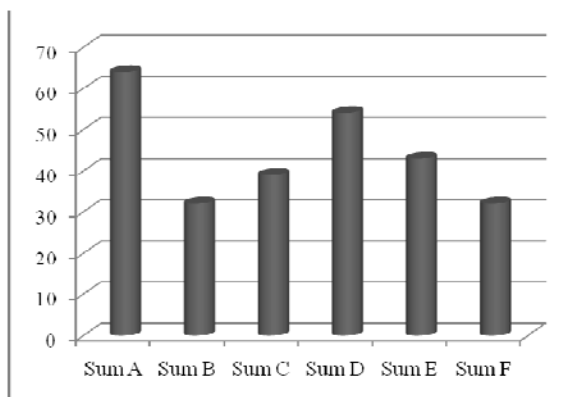
The presentation of the rationale is a package of environmental education lesson plans. The whole package is under one theme which can be any under-discussed environment issues (e.g. Water quality, wind power etc.). To discuss the issue critically and find out solutions, in different subject classes, teachers can instruct varieties of subject-related knowledge and skills to students. For example, in the lesson plan package of wind power topic, students can analysis data by reading articles in Chinese Class; they can practice discussion skills in English class and make easy wind powder dynamo by applying theory of magnetism and electricity learnt in Physics class. All the learning activities are designed to help students apply their learnt knowledge and skills to solve the environmental problems, to serve the earth in a more practical way.



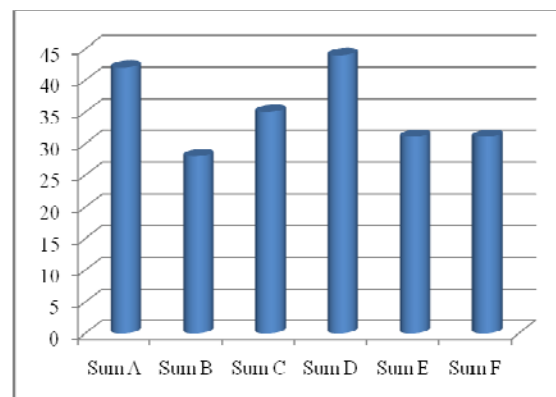
6 · Report on Questionnaire (for detail analysis, please see Outcome 4 on Page 16)

Q1. Please choose three most important elements that should be included in Environmental Education?

- A. Knowledge related to environmental protection
- B. Positive attitude and value toward lifelong learning
- C. Real experience related to nature / field trip
- D. Methods and skills for environmental protection and improvement
- E. Guiding people to think in new directions towards the future
- F. Caring the animals and nature



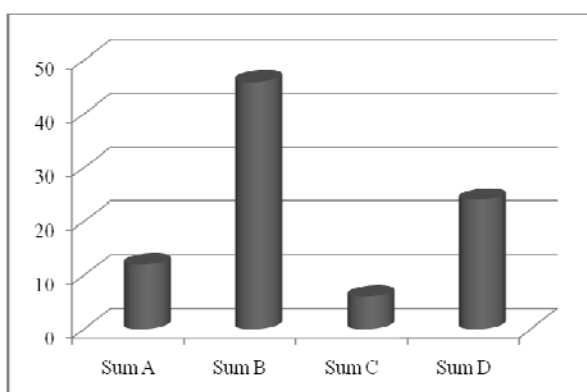
(Germany)



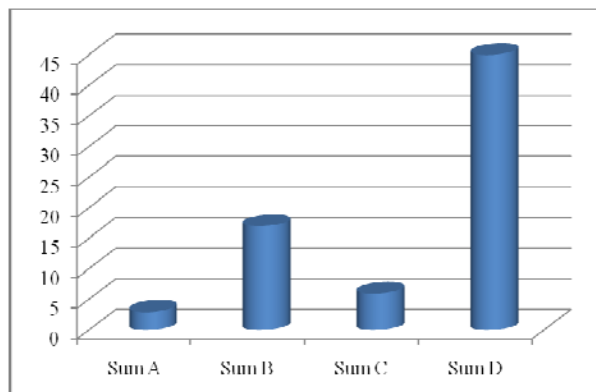
(Hong Kong)

Q2. What do you think is the most important element for Environmental Education in school?

- A. High quality textbook
- B. Teachers' qualification and teaching methods
- C. Public lectures related to Environmental Education
- D. Opportunities for students to reach nature



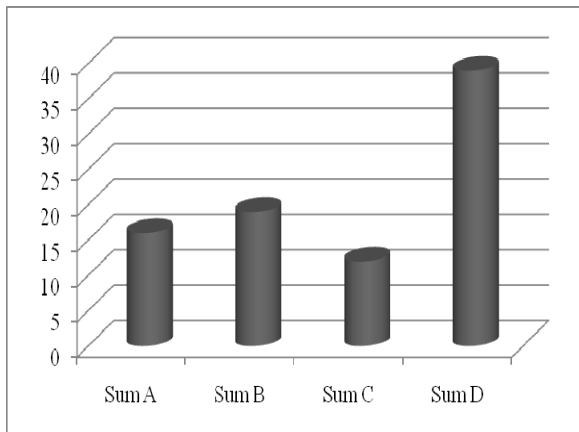
(Germany)



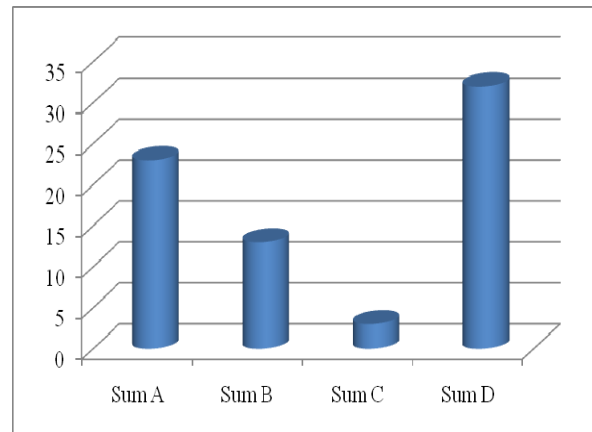
(Hong Kong)

Q3. What is the most serious problem you think in Environmental Education?

- A. Insufficient government funding?
- B. Inexperienced teachers
- C. Lack of supplementary resource outside school
- D. Low public awareness
- E. Others: _____



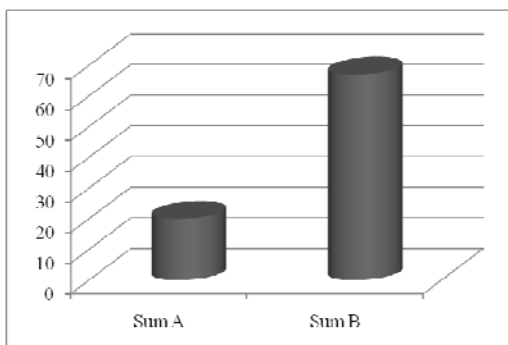
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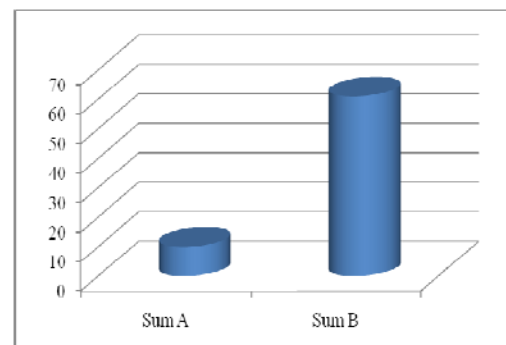
(Hong Kong)

Q4. Have you or your family ever participated in any activities related to Environmental Education?

- A. Yes, please indicate : _____
- B. No.



(Germany)

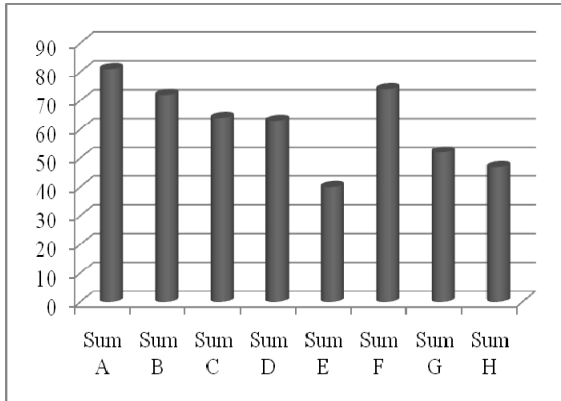


(Hong Kong)

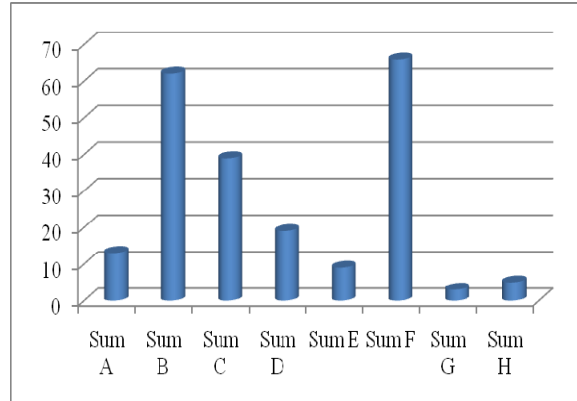


Q5. What kind of recycling do you do? (multiple choices)

- A. Glass
- B. Plastic tank
- C. Clothes
- D. Battery
- E. Furniture
- F. Paper
- G. Electronic devices
- H. Kitchen waste
- I. Others: _____



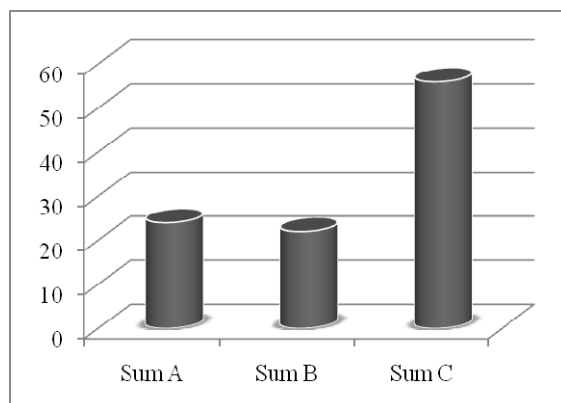
(Germany)



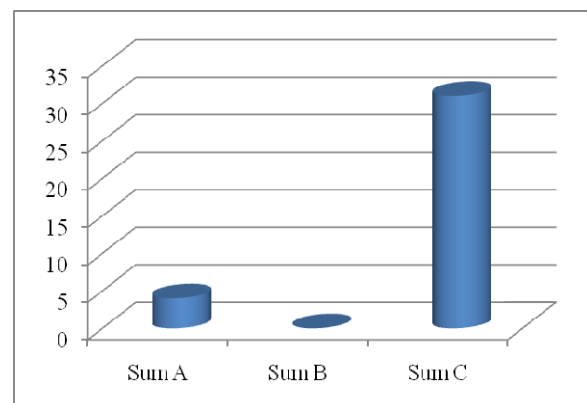
(Hong Kong)

Q6. What Renewable Energy have you ever used?

- A. Wind Power
- B. Biogas
- C. Solar power
- D. Others: _____



(Germany)

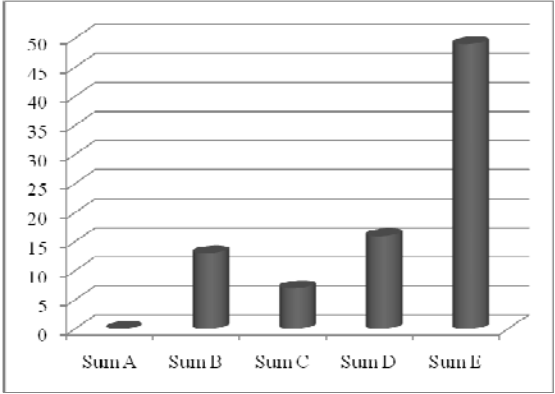


(Hong Kong)

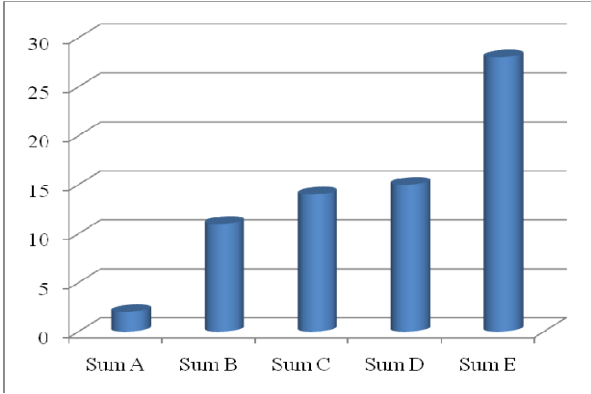


Q7. How important is Renewable Energy in your daily life?

- A. Not important
- B. Limited important
- C. Somewhat important
- D. Important
- E. Very important



(Germany)



(Hong Kong)



7 • Model Lesson Material (English)

English Lesson Teaching Plan

Level of students: Form 3

Topic: Writing if-poem on Water Pollution

No. of lessons: 1 double lesson (80 mins)

Students' relevant previous knowledge:

Students know:

1. The vocabulary of adjectives of description
2. The knowledge and the use of “wish”

Learning objectives

At the end of this unit, students should be able to:

Write up a three-stanza poem using I wish-clause to show their understanding of water pollution

Time	Procedure of use	Purpose	Resources
20 mins	Pre-task : 1. Show students some visual images about water pollution (local and from abroad) to ask students to speak out some adjectives to describe the water condition	<ul style="list-style-type: none"> ● To introduce students the topic and let them have general ideas about it. 	Appendix I
20 mins	While-task: 2. Introduce the task to the students: They are going to publish a poem about saving the local river from pollution on school's newspaper. 3. Ask students to compare some pictures or data (both before pollution and after pollution) and use I wish-clause to make sentence to describe the feeling after reading. 4. Show some examples of I wish-poem and ask students to comment on them.	<ul style="list-style-type: none"> ● To let students have general understanding about the water pollution and also let students write the poem with example 	Appendix II part 1
40 mins	Post-task: 5. Ask students to write up a three-stanza poem beginning with “I wish” and the poem will be decorated on Visual Art lesson.	<ul style="list-style-type: none"> ● To give students chances to practice if-clause knowledge and write up a poem using if. 	Appendix II Part 2



Appendix I Part 1 Photos of local water resource



Appendix II

Part 1

I Wish Poem Example

I wish I were a rock so the creek could push me down the water.

I wish I were a bird so when I fly I can land in the water and take a sip.

I wish I were a fish so I could swim in the cold water.

Can my wishes come true?

Part2

I Wish Poem Worksheet

I wish _____

I wish _____

I wish _____

Can my wishes come true?

I wish _____

I wish _____

I wish _____

Can my wishes come true?

I wish _____

I wish _____

I wish _____

Hope my wishes come true!



8 · Selection of Daily Report

Date: 16/4/2011 (day 5)

PIC: Zou Hanrui

Programme: BEd(EL)-1

Today, we went to under den linden first and did the questionnaire. Then we went to Reichstag, Berlin mauler and Posdamer Platz for culture visit. While visiting, we did many interviews.

After discuss the results of everybody, we made some conclusion or thoughts. First, while we did the questionnaire in Berlin, many of the people asked were not actually Berlin people. Next, we found that it seems that big cities are less clean than small towns. Third, though talking to the people while interviewing, we found that people in Germany are well involved in environmental protection. Many of them had joined some is environmental protection activities.

After the culture visit, we learned a lot. And we think there is something Hong Kong can learn. We found that every souvenir shops sell various environmental bags. It reminds people of protecting environment. And Hong Kong should encourage people to join in more related activities and of course offer more chances to them.

After today's experience, we concluded that: (1) as a team member, he or she should always take care of herself or himself and the whole team. Being responsible to him or her is being responsible to the team and others. Also, is everybody put care; the team work will be more effectively. (2) As a PIC, he or she should take care in all kinds of situation and make a perfect plan. She or he can face different situation and solve emergency problems.

Date: 21/4/2011 (day 10)

PIC: Yeung Man Hei

Programme: BEd(CL)-1

In the morning, we visited UNESCO-UNEVOC International Centre for Technical and Vocational Education and Training (TVET) in Bonn. It assists its member strengthen and upgrade their TVET systems. In the afternoon, we do questionnaire and have cultural visit in Bonn.

We heard four talks form the organization. They are “introduction of UNEVOC”, “environmental issues they concern”, “The Economics of Ecosystems and Biodiversity Mainstreaming the Economics of Nature (TEEB)” and “The United Nations in Bonn”. For the second talk, which is most impressive one, the speaker mentions that a “Green Glass”, which means our values and how we are going to see the world. In the part of teacher training, they will focus on teacher’s responsibility. And she also mentions sustainable development is not equal to environmental education (EE); the previous one contains things like social and cultural issues. For the third talk, the speaker links environment and economic together like the economic significance of the global loss of biological diversity. Also, this organization



will design textbook for international student, which helps student in all over the world. The study leader of TEEB, Paven Sukhder said that "Economics is mere weaponry; its targets are ethical choices". It is a good attitude to make money. For the forth talks, it mainly focus on the role of Bonn in EE. Bonn plays the role as an international actor which holds international conference. Also, it concerns about sustainable development worldwide like climate change and desertification, volunteerism, conservation of wild migratory species, health and human security and technical and vocational education and training.

There are two things I have learnt today. Firstly, as we visit an international organization today, we study EE in global aspect. I think that can we teach we student think globally as environment affect all people in the world. Secondly, we should internalize our knowledge and teach it to our student. It means that it should not be our knowledge only but our sense, our attitude because during cultural visit, most of the interviewee has a good sense of environmental protection their mind. What we have to do is not put the knowledge in the student's mind but to breed a culture of environmental-friendly in our environment.

During the second talk, the speaker asks us what issue is discussed in Hong Kong (like energy, deforestation...). However, I stated that most of the issue on the list is not discussed in Hong Kong because Hong Kong is a concrete jungle and already have no place to talk some environmental issues. Moreover, people in Hong Kong are relatively seldom to talk environment issue as they are too far away from nature, they do not concern the nature. I am very envy that they can raise environmental issue in their country with good response.

In the visit, there are only one and a half hours for five presentations (four from them and one from us). It maybe a bit short for it. Because of this, some presentations are cut and some good idea cannot be presented. I think the time management can be improved by better communication can be made before that day. To me, as a PIC, I think that I am responsible to discuss it with the organization too to smoothen the visit and make a better arrangement.

