Report of the 6th Asia-Pacific Experts Consultation: Reorienting Teacher Education to Address Sustainability

22-25 August 2006
Penang, Malaysia

March 2007

Organized by
APEID, UNESCO Bangkok
Asia-Pacific Centre of Education for International Understanding (APCEIU)
Universiti Sains Malaysia

- Funded by Korean Funds-in-Trust -
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CONTENTS

Executive Summary  
Report on the 6th Asia-Pacific Experts Consultation:  
Reorienting Teacher Education to Address Sustainability  
1. Introduction  
2. Opening Session  
3. Overview  
4. Understanding of ESD/EIU  
5. Integrative Perspective  
6. Discussion on Issues of Concern in and the Asia-Pacific Region  
7. Reorienting Teacher Education to Address Sustainability  
8. Reports from Teacher Education Institutions: Sharing Information and Experiences  
9. Show Cases: Regional, National, Institutional Level  
10. Resources for ESD/EIU  
11. Learning, Teaching and Training in ESD/EIU  
12. Group Discussion on knowledge, skills, values/attitudes, and behaviours  
13. Areas of Collaboration and Action Plans  
   A. Advocacy  
   B. Joint Research  
   C. Capacity Building  
   D. Information/Resource Sharing  
15. Closing Session  
Annex 1: Programme  
Annex 2: List of Participants
Executive Summary

The “6th Asia-Pacific Experts Consultation: Reorienting Teacher Education to Address Sustainability” was held in Penang, Malaysia on 22-25 August 2006. The main objectives of the meeting were:

1. To provide a forum for participants to identify and recognize the key components of Education for International Understanding (EIU) and Education for Sustainable Development (ESD) with specific reference to teacher education,
2. To establish a regional network of teacher education institutions for reorienting teacher education to address sustainability; and
3. To develop action plans for participants to carry out in their own local context and institutional settings and activities for the network to carry out.

Understanding ESD/EIU

During the meeting, participants examined the perspectives, concepts and contents of ESD/EIU from the various angles including environmental, economic, socio-cultural aspects. In view of the many threatening situations throughout the world, there is an urgent need for a culture of peace which can be achieved through education for living with justice compassion, education for human rights and responsibilities, education for intercultural solidarity, education for environmental care use and management and education for personal peace. The underlying principles which link EIU closely to ESD are the values within EIU and ESD which include the importance of intercultural understanding, cultural diversity, mutual respect, equity, human rights, and socio-cultural inclusion as universally shared values. All these universal values have to be integrated into the school environment which in turn will have some very significant implications for teacher training.

Reorienting Teacher Education

Teacher education needs to be reoriented to address international understanding and sustainability. This implies that both the school and teacher education curricula need to be reviewed and analyzed so that the desired learning outcomes can be achieved through appropriate pedagogy. There is the need for reorienting existing curricula, in order to accommodate for syllabus flexibility, innovative pedagogy and assessment reform. Curriculum developers should take into consideration relevancy, balance representation of different cultures, and the negative aspects of consumerist lifestyle in reorienting the school curriculum towards sustainability. Teachers should be trained to know how to handle controversial and political sensitive issues in their classes and avoid ethnocentrism which can lead to serious social disorder and crisis. All the cultures and minorities have the right and should be involved in the school curricula. Furthermore, natural disaster
preparedness and gender mainstreaming should also be part of the ESD curriculum. In brief, experts advocate the use of participatory social analysis and popular education methodology in the training of teachers for transformative development.

To familiarize the participants with the use of participatory social analysis, participants discussed and analyzed issues that are threatening sustainability and international understanding in their respective countries and sub-regions. Throughout the discussion it was pointed out that ESD/EIU should be holistic and locally relevant. The links between ESD and the communities has have to be considered as a very important factor. Transformation of knowledge from classrooms to community is essential. Co-curriculum activities are also important and can be used as very powerful tools to achieve ESD objectives since the process of changing and designing the main curriculum takes a long time. Solidarity and critical thinking are important. Participants were reminded that in ESD teachers should not lead the students to the position they want, but rather the students themselves have to have the right to think and choose. Alternatives points of view should be encouraged. Participants also discussed the various kinds of learning outcomes which include knowledge, skills, values/attitudes and behaviours that are expected of students if ESD/EIU is taken on board in the school curriculum.

The following are a sample of the knowledge, skills and values identified by the participants:

**Knowledge** – globalization, indigenous knowledge, environmental concerns, socially sustainable development, issues of gender equity, human rights.

**Skills** – critical thinking, analytical thinking, creative thinking, strategic thinking, problem solving, negotiation skills, conflict management, consensus building, communication skills, leadership skills, stress management.

**Values** – compassion, empathy, collective spirit, enthusiasm, social responsibility.

Representatives from different teacher education institutions in the region shared their experiences in incorporating ESD/EIU in their respective institutions. The various ESD/EIU initiatives include the following:

1. **Universiti Pendidikan Sultan Idris, Malaysia**: instilling six crucial values among the staff, namely, integrity, professionalism, teamwork spirit, client-oriented attitude, sympathetic to for staff welfare, and creativity and innovation.

2. **Regional Institute of Education, Mysore, India**: making ESD compulsory through court order.

3. **East Normal China University, China**: the concept of “international understanding” and “learning to live together” is integrated in all curriculum areas and school subjects, e.g. history, geography, history and society, biology and other required subjects.
4. **Ewha Women’s University, Korea**: The obstacle to implementing of EIU/ESD in TEIs in Korea is that universities have little discretion in implementing teacher education programmes since the curricula for teacher education as well as K-12 education are regulated by the Ministry of Education.

5. **Chulalongkorn University, Thailand**: ESD-related courses for undergraduate students have been developed for more than a decade including Man and Environment, Peace Education, Teacher and Community Development, Environmental Education and Society, and Education for Sustainability.

6. **National Institute for Education Strategy and Curriculum, Vietnam**: EIU activities are conducted in a fragmented and incoherent manner and EIU programmes are lack of effective integration and consistency.

7. **National Institute of Education, Sri Lanka**: Some new subjects including 'Environment Studies', 'Technology', 'Life Skills' and 'Peace Education' have been introduced to the curriculum to supply the knowledge base.

8. **Department of Women’s Studies, University of Punjab, Pakistan**: The curricula of teacher education programmes in Pakistan using ESD Lens have been analyzed with the purpose of putting forward suggestions on how to reorient teacher education programmes to address sustainability.

**Regional Network of Teacher Education Institutions for ESD**

Participants in the meeting explore the possibilities of establishing a regional network of teacher education institutions for ESD to incorporate ESD/EIU in their teacher education policies, programmes and activities and to identify potential areas of collaboration. The four potential areas of collaboration that have been identified were as follows:

(i) **Advocacy** – seek the support of various stakeholders to incorporate EIU/ESD into the formal education systems.

(ii) **Joint research** – situational analysis on existing curriculum, pedagogy and policy that need to be changed.

(iii) **Capacity building** – training of trainers and policy makers on how to reorient teacher education.

(iv) **Information/resource sharing** – sharing ideas and innovative practices, experiences and lessons learned, as well as appropriate learning and training resources.

The Consultation Meeting ended with a number of follow-up actions to be carried out by the participants and UNESCO.
Report on the 6th Asia-Pacific Experts Consultation: Reorienting Teacher Education to Address Sustainability

1. Introduction

The 6th Asia-Pacific Experts Consultation: Reorienting Teacher Education to Address Sustainability was held on 22-25 August 2006 at Crown Jewel Hotel, Penang, Malaysia. It was co-organized by the Asia-Pacific Programme of Educational Innovation for Development (APEID) in UNESCO Bangkok, Asia-Pacific Centre of Education for International Understanding (APCEIU) and Universiti Sains Malaysia (USM) in Penang. The meeting was funded by the Korean Funds-in-Trust to UNESCO.

The major objectives of the 6th Asia-Pacific Experts Consultation: Reorienting Teacher Education to Address Sustainability were:

4. To provide a forum for participants to identify and recognize the key components of Education for International Understanding (EIU) and Education for Sustainable Development (ESD) with specific reference to teacher education,
5. To establish a regional network of teacher education institutions for reorienting teacher education to address sustainability; and
6. To develop action plans for participants to carry out in their own local context and institutional settings and activities for the network to carry out.

The Consultation meeting was attended by a total of 46 participants from ministries of education, universities, educational and research institutes, regional training institutes, regional centres of expertise on ESD, and schools from 15 countries, namely, Australia, Bangladesh, China, India, Indonesia, Japan, Malaysia, Pakistan, Philippines, Republic of Korea, Sri Lanka, Thailand, US, Uzbekistan and Vietnam.

2. Opening Session

Dato' Prof. Dzulkifli Abdul Razak, Vice Chancellor of Universiti Sains Malaysia (USM) warmly welcomed all representatives from the teacher education institutions in the region and other distinguished participants. He said that USM was honoured to host this Consultation in close collaboration with UNESCO and APCEIU, and wished the Consultation every success.

Mr Dai-Geun Kang, Director of APCEIU, made opening remarks. In his address, he expressed thanks to Dr. Molly Lee, UNESCO APEID Coordinator, for organizing the Consultation in collaboration with USM. He said that he firmly believed the Consultation would achieve its objectives.
Dr. Sheldon Shaeffer, Director of UNESCO Bangkok, welcomed all delegates and participants and expressed thanks to USM for their hard work and thanked all participants for giving their time in their busy schedules to attend. Dr. Molly Lee, also expressed her sincere thanks to USM for hosting the Consultation. She gave participants a briefing on the objectives and programme of the Consultation. She then invited all participants to give a brief introduction of themselves to others. Following the self-introduction, group photos were taken.

3. Overview

Dr. Sheldon Shaeffer gave a presentation on “United Nations Decade of Education for Sustainable Development (UNDESD)” and introduced the general ideas on Sustainable Development (SD), Education for Sustainable Development (ESD), Decade of Education for Sustainable Development (DESD) and UNESCO’s roles, strategies and the expected outcomes for the Decade to the participants. In his presentation, he emphasized that ESD was about learning rather than teaching and therefore required reforming the structure and nature of basic education and reorienting existing education programmes. He introduced the three pillars of ESD, namely, environment, economy and socio-culture.

Mr Dai-Geun Kang spoke on “Education for International Understanding towards a culture of peace”. His presentation focused on the introduction to Education for International Understanding (EIU) including the definition, historical development and conceptual framework of EIU, the Asia-Pacific Centre of Education for International Understanding (APCEIU) and its main activities.

Lively discussion among participants followed. They shared their views on ESD and human rights education. It was pointed out that in general there will be resistance to change among teachers. To overcome this resistance, teachers need to be reoriented and be made aware of the concept of sustainability and the importance of international understanding. Any new educational innovation/initiative should take into account the practical constraints and the local context of the teachers.

4. Understanding of ESD/EIU

In this session, participants examined the perspectives, concepts and contents of ESD/EIU from the various angles including environmental, economic, socio-cultural aspects. The invited resource persons were invited to present their areas of expertise.

- Prof. Kamarulazizi Ibrahim from USM, Malaysia introduced “Energy Efficiency and Renewal Energy Programme”, implemented by USM.
He explained that one part of the programme was for secondary schools and its aim was to raise awareness among pupils on energy conservation. Another part of the programme was directed at the university in implementing energy efficiency measures and to explore ways and means in using renewable energy in the campus.

- Dr. Lawrence Surenda from India focused on the economic perspectives of ESD and education for international understanding. He elaborated on the four systems in ESD, namely, bio-physical, economical, social and political and analyzed how these systems can be incorporated into the school curriculum so that the desired learning outcomes can be achieved through appropriate pedagogy.

- Ms Joy de Leo from UNESCO Asia Pacific Network for International Education and Values Education (APNIEVE), Australia talked about values education in her presentation entitled “Values within ESD and EIU”. She stressed on the importance of intercultural understanding, cultural diversity, mutual respect, equity, human rights, and socio-cultural inclusion as universally shared values. She showed how to integrate these values into the school environment and analyzed some of the implications for teacher training.

- Assoc. Prof. Chan Lean Heng from USM, Malaysia gave a presentation on the social dimensions of sustainable development and introduced the concept of Socially Sustainable Development (SSD). She also spoke on gender equality and equity as one of the essential elements of social justice and SSD. She advocated for the use of participatory social analysis, popular education methodology in the training of teachers for transformative development. She stressed that it is essential to incorporate gender perspectives and to provide for gender mainstreaming in teacher education curriculum if ESD and SSD were to be taken on board.

- Prof. Soon-Won Kang from Hanshin University, Republic of Korea introduced the history of Human Rights Education (HRE). After explaining the current situation of HRE in Asian countries, she pointed out that HRE in schools as well as in the lifelong education should be carried out in the Asia-Pacific region and all stakeholders should cooperate for the culture of peace and nonviolence.

- Prof. John Fien from RMIT University, Australia looked at ESD from the environmental perspective. He introduced the study on youth’s attitudes towards environment and environmental education in the Asia Pacific region and extracted some implications for teacher education such as the need for reorienting existing curricula, in order to accommodate for syllabus flexibility, innovative pedagogy and assessment reform.
Dr. Zinaida Fadeeva from the United Nations University (UNU), Japan approached ESD from another environmental perspective in her presentation on “Sustainable Production and Consumption - Educating Future Consumers”. She explained that sustainable consumption was about consuming efficiently and having an improved quality of life. She emphasized that interdependence, understanding of leadership as well as good citizenship and quality of life and lifestyle should be learned for sustainable consumption/procurement.

At the discussion that followed, participants picked up on many of the interesting and relevant issues from the panel presentations including the threat to cultural diversity as reflected in the “death” of many languages worldwide. The notion that the role of the schools is to protect ethnic cultures and languages and save them from extinction was brought up, but unfortunately in most cases, some cultures get more representation in the school curriculum. The notion of human rights education was further discussed and it was pointed out that human rights education should be expanded to include the right to live, the right to livelihood, the right to work, etc. The role of the media in reporting conflicts was raised and it was stressed that media should not be biased but should report the conflicts from different perspectives. Instead of promoting cultural diversity, it has been noted that there is a homogenization of both culture and education in terms of the hegemony of the English language in many education systems across the region, and the homogenizing of students into classes which follows a common curricula despite their differences in age, sex, socio-cultural backgrounds, languages, etc. Curriculum developers should take into consideration relevancy, balance representation of different cultures, and the negative aspects of consumerist lifestyle in reorienting the school curriculum towards sustainability. Teachers should be trained to know how to handle controversial and political sensitive issues in their classes and avoid ethnocentricity which can lead to serious social disorder and crisis. All the cultures and minorities have the right and should be involved in the school curricula. Furthermore, natural disaster preparedness should also be part of the ESD curriculum.

5. Integrative Perspective

Prof. Toh Swee Hin from Griffith University, Australia gave a presentation on “Education toward a Culture of Peace”. He stressed on the need for a culture of peace in view of the many threatening situations throughout the world. He elaborated on how to achieve the culture of peace through education for living with justice and compassion, education for human rights and responsibilities, education for intercultural solidarity, education for environmental care and education for personal peace. He also presented a diagram showing the pedagogical principles which integrate EIU with ESD and other related fields.
This presentation was followed by a brief discussion on the need for ESD/EIU to be made locally relevant and take into account the basic needs of a society, and pay particular attention to those children who are not able to benefit from the national basic system of education. In the areas of economics and politics it was pointed out that fair trade should replace free trade.

6. Discussion on Issues of Concern in Countries and Region

Participants were divided into four groups and discussed issues that were threatening sustainability and international understanding in their respective countries and sub-regions.

Group 1 consisted of the participants from Malaysia, Philippines, Thailand and Uzbekistan. Their discussion focused on those matters which threatened intercultural understanding and sustainability in a society. They raised the following issues and concerns:

- We have to find strategies to integrate intercultural understanding, one of the most important key concepts in ESD, in the educational system, both formal system and the informal system.
- We need to consider the prevalence of materialistic lifestyle, short term interests, disparaging function of drugs and HIV/AIDS and environmental threats such as the depletion of natural resources, global warming, flooding, waste, in the curriculum for ESD/EIU.
- In multi-ethnic and multi-cultural societies, curriculum developers should be extra careful about cultural sensitivities.
- The role of co-curricular activities in ESD needs more attention and some subjects in the main curriculum should be revised to serve the objectives of the ESD.
- In reorienting and reforming the school curriculum, we have to pay more attention to younger children and teachers. The whole concept of ESD is quite new to the majority of teachers. They may have only some ideas about Environmental Education but do not know much about social and economic dimensions of ESD. We need to adopt a holistic approach to ESD.

Group 2 was made up of participants from Malaysia, India, Korea, Thailand, Vietnam and China. They discussed the following issues:

- There is limited understanding of the notions of ESD and EIU among teachers and government officials, nor do they know much about the distinction between Environmental Education and ESD. Much of what’s being taught in schools under the rubric of citizenship or moral education are fragmented elements of ESD/EIU.
The situation is further confounded by the fact the values underlying ESD/EIU are not in line with the socio-cultural values of parents and schools which places high values on materialistic acquisitions and school achievements in terms of grades and examination results.

Under these circumstances it will not be easy to bring about institutional change in schools and teacher institutions to reorient towards ESD and EIU. But these challenges are not impossible to overcome if there is cooperation among government officials, NGOs and other sectors in societies. Partnership is extremely important in achieving the objectives of ESD.

**Group 3** was composed of participants from China, Korea, Malaysia, Thailand and Vietnam. Their discussion identified the following needs:

- The need to develop a clear conceptual framework for ESD and how to integrate ESD and EIU conceptually so that they can be operationalized at the teacher education and school level.
- The need to analyse the teacher education curricula to see where are the gaps in relation to ESD and EIU.
- The need to inculcate values relating to ESD and EIU among teachers so that they can be role models to their pupils.
- The need for different teacher education institutions to collaborate in sharing their innovative and developmental work in ESD/EIU.

**Group 4** comprised of participants from Bangladesh, China, Japan, Korea, Malaysia, Thailand, USA and Vietnam. Their discussion focused mainly on the threatening factors to international understanding and sustainable development in their societies. They listed air pollution, huge plantations and multi-national corporations, lack of conservation of nature, high rate of population growth, poor sanitation, rampant corruption and lack of intercultural and international exchanges as obstacles to sustainable development. They also noted that the lack of communication skills, religious tolerance and understanding of other cultures, the rapid spread of fundamentalism and the different forms of colonial legacy may have contributed to the lack of international understanding among countries in the region.

7. Reorienting Teacher Education to Address Sustainability

Dr. Rosalyn McKeown from University of Tennessee, USA introduced “International Network of Teacher Education Institutions for ESD”, which was consisted of 30 international teacher education institutions from 30 countries. She explained that the International Network (IN) was set up to review national education policies and to reorient formal education systems and develop guidelines for the reorientation of teacher training to address
sustainability. She then introduced the survey of the Network participants conducted between 2002 and 2004. The guidelines and recommendations derived from the survey reached ministerial and national level involvement as well as community and regional/provincial involvement, and resulted in change among higher education institutions, particularly in faculties of education which are engaged in pre-service and in-service teacher training.

She stressed that the focus of ESD had to be on teachers’ education and the reorienting of the teachers’ education should be based on teachers’ experiences. She mentioned that the reorienting of the teachers’ education could also be expanded to all educational levels from primary to higher education.

8. Reports from Teacher Education Institutions: Sharing Information and Experiences

In this session, initiatives/activities/programmes on EIU/ESD were reported by the representatives from participating Teacher Education Institutions (TEIs) in the region. Full presentations are available in a CD-Rom. The following is a synopsis from each TEI’s presentation and issues raised for discussion and consideration by the participants.

- Universiti Pendidikan Sultan Idris (UPSI), Malaysia – Presented by Dr. Ong Eng Teck

The underlying belief and conviction in UPSI’s ESD-related programmes is that future leaders and decision-makers across all sectors of society are educated at the university. UPSI has on-going programmes on ESD ranging from instilling amongst its staff six crucial values, that is, integrity, professionalism, teamwork spirit, client oriented attitude, sympathetic to staff welfare and creativity and innovation. The overall aim of UPSI is to set up a higher education institute that preserves and promulgates the Malay Civilisation, conserving of old but significant buildings within the university campus, promotes quality of teaching and learning by optimizing the use of information and communication technologies.

- Regional Institute of Education, Mysore, India – Presented by Dr. Rajaram Sharma

The national curriculum framework in India changes every 5 years and the first happened in the year 2000. But there is no need to wait for 5 years to change the current curriculum since each state is independent in designing curriculum in India. Some issues such as relation between poverty and social issues has been addressed in the Indian new curriculum but the old curriculum was mostly on environmental issues. It has been mentioned in the Supreme Court action of India that option courses in regard to ESD should be made compulsory.
The perspective on ESD in educational and developmental context of China has been embodied as one of the approaches in the strategic goal of national development, that is, “to build a harmonious well-off society”, based on “sustainable development strategy” and “nation building through education and science”, and a strategy of “nation building through qualified human resources”. Teacher education is considered as a foundation and a determining key factor of educational quality as well as equality for Sustainable Development in China.

The perspective on EIU has also been made as priority in education at all levels in correspondence with the foreign policy of peace and the state policy of education “oriented to modernization, to the future and to the outside world” and the concept of “International understanding” and “learning to live together” is integrated in all curriculum areas and school subjects, e.g. history, geography, history and society, biology and other required subjects.

The Chinese government has established a number of Confucian Institutions overseas because the Chinese government respects harmony and diversity and the value education in China is based on understanding others since the core of the philosophy of Confucianism is harmony.

Ewha Women’s University has various EIU/ESD-oriented courses in their curricula both for pre-service teachers and for in-service teachers, including courses on chemistry and technology in society, modern society and biology, current issues in physics education, international relation and education, western civilization history, political change and education, environment geography, world geography, education of resources and population and environment education. The proportion of these courses, however, is less than 10 percent of the total courses required for graduation and the curriculum has been changed every four years according to the social, economic and political change in Korea.

The obstacle to implementing of EIU/ESD in TEIs in Korea is that universities have little discretion in implementing teacher education programs since the curricula for teacher education as well as K-12 education are regulated by the Ministry of Education. Thus, it is important to build and maintain a supportive and collaborative relationship with the government. It is also important to get financial support from colleges, universities and government for the successful implementation of EIU and ESD.
Chulalongkorn University, Thailand – Presented by Dr. Athapol Anunthavorasakul
ESD related courses for undergraduate students have been developed for more than a decade including Man and Environment, Peace Education, Teacher and Community Development, Environmental Education and Society and Education for Sustainability. Programs and courses for doctoral and graduate students have also been developed since 1992 and 2000 respectively.

However, the challenges are the following:

1. The contents tend to be overlapping.
2. Most of ESD courses are elective courses.
3. The curriculum framework for EE and ESD in school curricular is unclear.
4. The abilities of teachers in designing their school curriculum are limited.

National Commission for UNESCO, Republic of Uzbekistan - Presented by Mr Qodir Djuraev
Most of SD/IU issues in Uzbekistan are inherited from the Soviet period and these issues include the lost of natural resources, decreased productivity of land, exhaustion of water system and soils, Aral sea disaster, desertification, Stalinization and intercultural dialogue. So, ESD is considered as one of the key priorities and the national policy on ESD has been implemented from 2006. Coordination Council for Environmental Education and Education for Sustainable Development has been created.

The main objectives in future will include the following:
1. To improve the quality of Basic Education
2. To develop values education
3. To incorporate SD issues into the formal and nonformal education systems

National Institute for Education Strategy and Curriculum, Vietnam – Presented by Ms Dao Van Vy
Education in Vietnam focuses on educating students to maintain national characters and acquire human culture. EIU concepts initially are incorporated in schools and teachers are gradually becoming more familiar with EIU materials.

However, no comprehensive survey to evaluate the outcomes and implications of EIU in Viet Nam has been conducted. EIU activities are conducted in a fragmented and incoherent manner and EIU programs are lack of effective integration and consistency. EIU seems to be a part of the hidden curriculum. EIU is adopted with a content-based approach in implementation process. “Project-Based-Learning” (PBL) can be used to anchor real-world problems to classroom practice through “driving question”. PBL can create
opportunities for students to make active investigations that enable them to learn concepts, apply information, and represent their knowledge in a variety of ways.

- National Institute of Education, Sri Lanka – Presented by Mr Nihal Wickramasinghe

In Sri Lanka, principles on sustainable development and international understanding, such as developing environment friendly attitudes and respecting the cultural points of view of others and learn to live in harmony with others, are emphasized in designing the curriculum and the learning-teaching process. Some new subjects including ‘Environment Studies’, ‘Technology’, ‘Life Skills’ and ‘Peace Education' have been introduced to the curriculum to supply the knowledge base.

The problems encountered in the country are the lack of overall national policy or national plan, no proper system to monitor and evaluate the implementation of new programs and no prioritization in national agendas.

- Department of Women’s Studies, University of Punjab, Pakistan – Presented by Prof. Munawar S. Mirza

Prof. Mirza analyzed the curricula of teacher education programs in Pakistan using ESD lens with the purpose of putting forward suggestions on how to reorient teacher education programs to address sustainability.

The analysis shows the following:

1. ESD has not been explicitly pronounced in the education policy of Pakistan and the sustainability concepts and issues have been neglected by the teacher education/training programs in general.
2. Completely neglected areas are gender equality, governance, disaster prevention, corporate responsibility, market economy.
3. The undergraduate teacher training programs have addressed the sustainability issues in a much better way including their diversity and understanding. At the post graduate level not only that the listed topics are too few, those are under optional/elective courses not being offered.

The suggestions put forward are:

1. The education policy should explicitly state the inclusion of ESD in the curriculum of all levels and programs of education.
2. There is a need to approach higher education institutions in general and teacher education in particular for creating awareness about the sustainability concepts and issues and to include those in the relevant curricula.
3. The collaboration among MOE, Ministry of Environment and HEC will help in designing a widely acceptable policy and workable strategy to utilize education for the attainment of many of the goals of sustainable development.
4. The materials developed by UNESCO and other organizations on sustainable development should be widely circulated and shared.
5. The in-service programs should be equally rather more responsive to focus on ESD through short courses for immediate intervention.
6. Teacher training institutions and other relevant organizations should be encouraged to undertake research on ESD.

9. Show Cases: Regional, National, Institutional Level

Activities of Regional Centres of Expertise (RCEs) for ESD and showcases were presented and shared in this session.

- Dr. Zinaida Fadeeva explained that one of the UNU Strategies to promote ESD is to promote Regional Centres of Expertise on ESD (RCEs) and their networking throughout DESD and to establish the Global RCE Service Center in UNU-IAS. In total 12 RCEs have been launched by now. Thematic areas for RCEs collaboration suggested by RCEs and RCE candidates during the RCE Conference in April 2006 included: business in the society/corporate citizenship, sustainable financing strategy, governance/decision-making, natural resource management, resources and poverty mapping, urban biodiversity, sustainable production and consumption, evaluation of ESD and RCE, youth/schools and mainstreaming ESD.

- Dr. Rhodora M. Bucoy from the University of the Philippines Visayas Cebu College, RCE Central Visayas, Philippines, introduced their courses and activities as a RCE. The university has developed general education curriculum and undergraduate courses which mainstream and integrate SD concepts in the curriculum and graduate programs in environmental studies, gender and environment and development. They also put in effort on developing creative and inter-active ways of teaching.

- Dr. Omar Osman from Universiti Sains Malaysia, Malaysia explained its strategies as a RCE which comprised of situational analysis, engagement of potential stakeholders, multilevel and contextual approach, optimization of collaborative program, synergizing formal and non-formal education, centre for training and re-training for ESD and content building, and related activities according to each strategy. Then he introduced USM’s nine strategies as a sustainable research university, namely, commercialisation and branding, trans-national and national linkages, intra-institutional integration, lateralisation of bureaucracy, stewardship and rewards on teamwork, resource development and training, financial savings and accumulation, multi-culturation in student development and healthy campus and community.

- Ms Janet Pillai from Universiti Sains Malaysia, Malaysia introduced two pilot projects on World Heritage Education (WHE), that is, one for non-formal education to map and interpret heritage education for young
people and the other for formal education to integrate heritage education into it. Based on these pilot projects, the following innovations for teacher training systems have been derived:

1. At the level of training and pedagogy, upgrade teachers skills in ‘tools’ and ‘facilitation’ skills and train teachers to modify syllabus to incorporate heritage and sustainability perspectives.

2. At the level of attitudinal/mental mode, change perceptions of teachers/children towards local cultural systems and traditional ways of working, change attitude of teachers to look beyond the classroom by providing training in ‘real’ settings.

3. At the level of values, produce teachers/learners with social responsibility through ‘interpretive’ projects that benefit the school/community.

4. At the level of learning, engage learners in daily life and local environment through field trips, interviews, site visits, projects.

- Ms Susan Tung Nyuk Lin from SJK (C) Chi Hwa, Malaysia shared their experiences on environment education school project as a showcase. She introduced the environmental education curriculum and activities, particularly focusing on co-curriculum activities such as recycling programme, school in a park programme and composting programme. She mentioned that teachers and pupils have developed positive and loving attitude towards the environment, parents practice recycling and composting at home through these programmes.

- Ms Watcharee Amplord from Trang Municipal, Thailand showed a lot of projects and effort on SD conducted by Trang Municipal including tree planting for treatment of waste water, composting at sanitary landfill, network meeting, re-habitation of ponds, air quality monitoring, checking toxic substances in vegetables fruits and salted seafood sold in the local market. She also presented activities that have been carried out by Trang Municipal as a RCE for ESD such as round table discussion in Trang and a workshop on first step of ESD, leadership workshop on ESD, leadership workshop on ESD and ESD learning seminar.

10. Resources for ESD/EIU

Five speakers were invited to speak on the resources for ESD/EIU developed by various organizations in this session.

- Prof. John Fien introduced the multimedia teacher education programme of “Teaching and Learning for a Sustainable Future” which had been developed for UNESCO by Griffith University and RMIT University. He explained that it had 25 modules around 100 hours of interactive activities for use in pre-service teacher education courses as well as the in-service education of teachers and other education
professions. The programme enables teachers to plan learning experiences that empower their students to develop and evaluate alternative visions of a sustainable future and to work creatively with others to help bring their visions into effect.

- Dr. Rosalyn McKeown introduced the ESD Toolkit. The ESD Toolkit is an easy-to-use manual that will help educators and community leaders create education for sustainable development programs. It is designed to help schools and communities to develop locally relevant and culturally appropriate materials for ESD. The Toolkit contains an introduction to sustainability, a description of the major thrusts and components of education for sustainable development, a discussion of 12 major issues that have slowed the progress of ESD, a case study of the Toronto Board of Education's community consultation and subsequent curriculum revision, a description of management techniques for initiating change in schools, a brief description of public participation methods for including the citizenry in community decisions regarding sustainability and ESD, and exercises to help schools and communities to understand sustainability, create sustainability goals, reorient the curriculum to address sustainability, and initiate change within an educational system.

- Dr. Sookhee Kwak from APCEIU introduced the resources on EIU developed and published by APCEIU including resource book for teachers on EIU learning to live together, story books on EIU in Linguistic Diversity, Trainer's Guide on Designing Training Programmes for EIU/ESD (Trainer's Guide). She elaborated on the Trainer's Guide which has been developed from the Training of Trainers' (TOT) workshop on EIU and ESD which was held in Chiangmai, Thailand in September 2005. It aimed to empower and enable teacher educators to organize similar training programmes for teachers and trainee teachers. She explained that the Guide was structured to enable a reader to plan, organize and conduct a training workshop step-by-step using EIU and ESD as the conceptual and content focus.


- Dr. Chan Lean Heng shared with the participants a long list of resources on ESD and EIU that are found in the internet.
11. Learning, Teaching and Training in ESD/EIU

Dr. Molly Lee, Prof. Toh Swee Hin and Ms Joy de Leo introduced the session.

Ms Joy de Leo mentioned that education about peace, sustainability and human right is accommodating response, education for peace, sustainability and human right is adaptive response, and education as peace, sustainability and human right is transformative response. She stressed on the importance of whole school approach, that is, cognitive, affective, behavioural and spiritual approach.

Dr. Chan Lean Heng emphasized on the participatory training for transformation in teacher education for ESD/EIU.

Prof. Toh Swee Hin commented on the contributions of NGOs as teachers and students can get an insight on EIU/ESD from their activities, aims and experiences by inviting them to the classrooms

These other issues were also being discussed: The links between ESD and the communities has to be considered as a very important factor. Transformation of knowledge from classrooms to community is essential. Co-curriculum activities are also important and can be used as very powerful tools to achieve ESD objectives since the process of changing and designing the main curriculum takes a long time. Solidarity and critical thinking are important. We have to be careful that in ESD we should not lead the learners to the position we want, but they themselves have to have the right to think and choose. Alternatives points of view should be encouraged.

12. Group Discussion on knowledge, skills, values/attitudes, and behaviours

Participants were divided into four groups again in this session to discuss knowledge, skills, values/attitudes, and behaviors required by learners for integrating ESD/EIU in education.

**Group 1** consisted of participants from Thailand, Philippines, China, Malaysia and Bangladesh. The issues they discussed include: In term of knowledge; the macro context of globalization like free trade and multi-national corporations and their roles should be re-examined. Indigenous cultures and practices should be preserved to maintain balance and harmony within the societies. Some issues like mining projects (which are very important throughout Southeast Asia), their costs and their prices should be re-inspected in terms of hazards and impact they make for the societies. In term of thinking skills; critical thinking should be developed in education systems. Developing analytical thinking among people seems very vital today and planning for ESD has to be considered in both short and long terms. Developing negotiation skills and conflict management skills should be
considered. Compassion, empathy for each other and such values are crucial for the education systems. Appreciation of cultures and thoughts can lead us to a better and more socially sustainable future. Promoting justice, human security (basic needs for the dignity of people), transparency, human rights, and accountability are also essential factors in teaching values at schools.

**Group 2** consisted of participants from China, Uzbekistan, United States, Korea and Sri Lanka. Their scenario was based on a town with economic prosperity which now is confronting economic downfall. One of the main reasons for their economic downfall was their economy’s extraction of natural resources, poor water supplies and management, desertification. Having essential knowledge on harmonious societies, environmental concerns, interdependence between human and nature can be helpful to sustainable future. 3 major strategies were derived from the discussion to deal with this problem, that is, creative thinking, strategic thinking and problem solving. In terms of values and attitudes; some values such as collective spirits, enthusiasm, consensus and solving problems together should be promoted. Educating inner-values and changing the propensity to consume are also essential. Apart from these efforts, ideas such as human rights and freedom should be valued in the education system. In terms of skills for action; communication skills using different media can be a great help to achieve the goals. Development of leadership skills, citizen expert witness, evaluating skills, learning together, responsible citizenship, social responsibility, understanding and respecting other people ideas, anger and stress management are useful skills in sustaining social life and future.

**Group 3** was comprised of participants from Malaysia, Australia, Korea and Philippines. Migration and its related issues was the scenario this group was working with. In terms of knowledge; understanding is the key factor for multi-ethnical countries. Ignorance about each other is the centre point of conflicts. Cultural diversity should be recognized in each society and in doing so, tolerance is should be endorsed. Minorities should be addressed and given voice. In terms of thinking process; critical thinking is essential to understanding. The vital role of religion in the society should be recognized and respected. Religious extremism can be a source of problem in any multi-ethnic society and understanding is the key to avoid conflicts and clashes. In terms of values and attitudes: conflict management and the ways to address it are important to avoid problems. This should be done hand in hand with respect. Partnership with civil societies like NGOs can help us to sustain the society. Media plays an important role in both constructive and destructive ways. Media should be without discrimination and should give voice to all segments and classes of the society such as minorities’ TV and radio stations.

**Group 4** had participants from Malaysia, Japan, Vietnam and Thailand. In their opinion, the gap between the rich and the poor should be addressed. Educational opportunities should be fair to all children, youth and adults. The educational system needs more school, financial aids and active involvement from the society. For adults some issues are important and have to be dealt with such as business, job information, child labour, low wages, housing, etc.
The idea of social responsibility should be endorsed among all the members of the society. In terms of knowledge: understanding of the social problems and identifying the key factors to these problems are important. For thinking process: we have to pay more attention to methods such as data analysis, problem analysis, action research. As for skills for action: communication skills to reach people mainly children, youth and adults, other NGOs, advocacy and finding partners within NGOs and other sectors are needed. Organizational skills are also necessary. Innovation is a key factor in addressing issues. In terms of values: compassion, empathy to poor people should be endorsed. Rationality and awareness of social responsibilities can be useful means to make a sustainable society.

The main knowledge, thinking process and skills for action derived from the group discussions are the following:

1. Knowledge
   - Globalisation (free trade, multi nationals, economic policies), effects (impacts of foreign investment on the local, critical review of globalisation), traditional practices, welfare (well-being of indigenous people) and alternative (eco-tourism, cultural tourism, minimal / regulated mining)

2. Thinking skills
   - Critical and analytical thinking, reflective thinking, thinking from different perspectives, comparing and contrasting, long term and short term thinking and integrative systems thinking

3. Other Skills
   - Negotiation, mediation for finding commonalities, conflict resolution, creative, empowering, problem solving, enquiry-based approach to search for solutions, balancing moral and ethical dilemmas, questioning skills and facilitation skills

13. Areas of Collaboration and Action Plans

Participants worked in four small working groups to explore the possibilities of establishing a regional network of TEIs to incorporate ESD/ EIU in their teacher education policies, programmes and activities and to identify potential areas of collaboration.

The working groups came up with four potential areas of collaboration, namely, advocacy, joint research, capacity building and information/resource sharing. The following is the way forward derived from each area.

A. Advocacy

We have to identify various stakeholders including teacher educators, curriculum developers, the ministry of education and universities.
Communities play a key role in this issue as well. The potential people in the communities should be identified for further co-operation. We have to engage private sector as well.

Different strategies are required to conduct advocacy. Lobbying is really essential. We have to give the public and media a chance to participate in this process. Workshops, consultations and internet can be used as useful means.

In terms of the objects for advocacy, ESD and EIU should not be separated. In the meetings the groups can present their national, regional or international experiences. The actions should be contextual and seeking the support of people who can help should come into consideration. On the other hand, successful cases and innovative practices should be promoted and shared.

B. Joint Research

Situational analysis on curriculum, pedagogy and policy should be conducted first in joint research area. The development of database is very important in conducting research. These data can be shared between different countries and organizations to improve the quality of the research. Adopting an appropriate methodology is very vital in making a research successful. The methodologies and results of the research can be shared with other parties. Questionnaires and other researching tools can be useful in conducting research on ESD and EIU. Correct sampling is another important aspect in conducting research. Online discussions can be a useful tool. Publishing the results in journals and website of the network plays an important role in disseminating the research findings.

C. Capacity Building

Capacity building can be started with meetings of experts to put together the information they have. Representatives of different organizations can be participants in these meetings. The first meeting can be to make a set of principals that can be discussed among the participants. The initial training should be used to strengthen the network. Training guidelines and materials needs to be developed and shared.

Educational principles, socio-cultural principles and specialized principles should be considered. The training can be done locally, regionally or internationally. The topics that need to be addressed in capacity building include a holistic understanding of SD and IU, training of trainers (TOT), developing trainer’s manual, source books, content and methodology (training design), identifying who should be trained such as academic heads, local chiefs, administrators, etc. Building a network should be achieved through an ongoing process of training and program development.
D. Sharing Information and Publication

In the issue of exchanging information, the socio-cultural and developing backgrounds of the members are important. The role of teachers in using the materials is important and also the content of the materials itself plays an important role. Language and cultural background should come into consideration in the time of sharing the experiences and knowledge especially in multi-ethnical societies. The issue of the relevancy of what we want to share should come into consideration as well. Not only the information on ideas and best practices but also the information on problems and obstacles should be shared. The platform of APCEIU can be used for sharing information.


Institutional/National level of action plans were discussed and reported by the country-based working groups as below.

- **Bangladesh**
  The participant from Bangladesh said that he would try to find ways to change the curriculum in his institution in order to accommodate more issues on ESD and EIU. He added that he would try to convince his department to look at the issues involving ESD in larger scales and that he would try to show them some successful cases of implementing ESD topics in educational curriculum. He stated that emphasizing on action research would be his priority upon his going back to his department. He also mentioned that he would try his best to work on the issue of partnership and seeking national and international support for his ESD related activities and research.

- **China**
  The two participants from China reported that they would make every effort to reform the teacher education curriculum and to merge ESD into EIU. They added that they would report the outcomes of this Consultation to the Chinese ministry of education as well as UNESCO National Commission for China.

- **Indonesia**
  The Indonesian participants stated that the idea of networking seemed really interesting for through it we would be able of sharing our ideas together. She said that she would try to raise the awareness on this network upon return to her country. As a university lecturer, she planned to try her best to convince her university to establish more courses related to ESD and its related issues. She added that she would try to change the policies of her university on ESD to a more holistic one.
Malaysia
The Malaysians said that their priority would be to try changing the school curriculum to a more ESD-friendly one. They said that it might be very important for all the Asian countries and institutions to be involved in ESD to share their knowledge and experiences to learn from each other. They would like to initiate a national network of research on ESD.

Pakistan
The Pakistani mentioned that there were a number of courses for Master degree and PhD in her institution which could be somehow related to ESD. She said that women education as part of ESD was important in Pakistan and there is a need for strong advocacy on this subject. She pointed out that the analysis of the curriculum based on ESD values seemed necessary and that the initiative of making a national network was important. She stressed that the ministry of education and environment had to play a more active role. She mentioned that they needed the help to establish the national network for ESD in Pakistan.

Sri Lanka
The participant from Sri Lanka mentioned that it was important to improve the understanding of students on ESD and this issue was the main element in empowering the societies and communities to fulfill a sustainable future.

Thailand
The participants from Thailand said that they would strengthen ESD in teacher education in Chulalongkorn university and that they would try to spread ESD/EIU into teacher networks in Thailand.

Uzbekistan:
The participant from Uzbekistan said that he would try to initiate a massive PR campaign for ESD as many people in his country were not aware of such concept and its importance in today’s life. He added that he would try to implement some courses related to ESD in his university at the institutional level and also try to set up a network of teachers in his country to address the issues on ESD and EIU at the national level.

Along with these action plans, Dr. Molly proposed to form the regional TEIs network and encouraged the participants to join according to the area in which they had interest. Many of the participants from IER from Bangladesh, ECNU from China, SEAMEO BIOTROP from Indonesia, RECSAM, USM and UPSI from Malaysia, Pakistan, UP Visayas Cebu from the Philippines, NIE from Sri Lanka, Chulalongkorn University from Thailand, NIESAC from Vietnam agreed to join the network.
15. Closing Session

Dr. Molly Lee wrapped up the Consultation Meeting by reporting UNESCO Bangkok’s follow-up actions based on the suggestions from the participants, which is including setting up the listserve of regional network of TEIs, producing a set of advocacy briefs on ESD and EIU, compiling and disseminating available resources on ESD and EIU and other related areas, initiating a joint research and exploring the possibilities of organizing capacity building workshops on how to design courses on ESD and how to train teachers to incorporate ESD in their classroom practices and schools.

She then reminded the participants of the importance of keeping in touch and collaborating with one another on each area at the personal/institutional/national level.

She thanked USM for their hard work in making sure that the Consultation ran smoothly and thanked all the participants for their active participation.

On behalf of APCEIU, Dr. Sookhee Kwak also thanked all resource persons and participants for their participation and valuable contributions.

Dr. Omar Osman closed the Consultation by expressing his thanks to all participants on behalf of USM and wishing everyone a safe journey home.
Annex 1

6th Asia and Pacific Experts Consultation on
“Reorienting Teacher Education to Address Sustainability”
22-25 August 2006
Crown Jewel Hotel, Penang, Malaysia
- Supported by Korean Funds-in-Trust -

Programme

**22 Aug 2006 (Tue)  Understanding of EIU/ESD**

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
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<tbody>
<tr>
<td>08:30 – 9:00</td>
<td>Registration</td>
</tr>
<tr>
<td>09:00 - 09:30</td>
<td>Opening</td>
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<tr>
<td></td>
<td>Welcome remarks by Vice Chancellor, USM</td>
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<td></td>
<td>Opening remarks by Director, APCEIU</td>
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<td>Opening remarks by Director, UNESCO Bangkok</td>
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<td>Self introduction</td>
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<td>Group photo</td>
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<tr>
<td>09:30 – 10:00</td>
<td>Session 1: Overview</td>
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<td></td>
<td>Chair: Sookhee Kwak</td>
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<td></td>
<td>• United Nations Decade of Education for Sustainable Development (DESD) by Sheldon Shaeffer</td>
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<td>• Education for International Understanding (EIU): Towards a Culture of Peace by Kang Dai-Geun</td>
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<tr>
<td>10:00 – 11:00</td>
<td>Session 2: ESD/EIU – Perspectives, Concepts and Content</td>
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<tr>
<td></td>
<td>Chair: Molly Lee</td>
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<td></td>
<td>• Energy Efficiency and Renewal Energy Programme by Kamarul Azizi Ibrahim</td>
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<td>• Economic Perspectives of ESD and International Understanding by Lawrence Surenda</td>
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<td></td>
<td>• Cultural Diversity and Intercultural Understanding within EIU/ESD by Joy de Leo</td>
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<tr>
<td>11:00 – 11:20</td>
<td>Coffee/tea break</td>
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<tr>
<td>11:20 – 13:15</td>
<td>Session 2: Continued</td>
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<tr>
<td></td>
<td>• Reorienting Teacher Education to Socially Sustainable Development by Chan Lean Heng</td>
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<td>• Human Rights Education by Kang Soon Won</td>
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<td>• Environmental Perspective of ESD by John Fien</td>
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<td>• Sustainable Production and Consumption – Educating future Consumers by Zinaida Fadeeva</td>
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24
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<tr>
<th>Time</th>
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<tr>
<td>13:15 – 14:30</td>
<td>Lunch</td>
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<tr>
<td>14:30 – 15:00</td>
<td><strong>Session 3: Integrative Perspective</strong></td>
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<td></td>
<td>Chair: Omar Osman</td>
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<td></td>
<td>• Integrative Framework for EIU/ESD by Toh Swee Hin</td>
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<tr>
<td>15:00 – 16:30</td>
<td><strong>Session 4: Mapping Contexts and Issues of Concern in our Countries and Region</strong></td>
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<td>Group discussions on issues that are threatening sustainability and international understanding in respective countries and sub-regions.</td>
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<td>16:30 – 16:50</td>
<td>Coffee/tea break</td>
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<tr>
<td>16:50 – 17:45</td>
<td><strong>Report back</strong></td>
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<td>20:00 – 23:00</td>
<td>Reception Dinner</td>
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### 23 Aug 2006 (Wed) ESD/EIU in Practice

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<tr>
<th>Time</th>
<th>Session/Activity</th>
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<tbody>
<tr>
<td>09:00 – 09:40</td>
<td><strong>Session 5: Reorienting Teacher Education to Address Sustainability</strong></td>
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<td>Chair: Abdul Rashid</td>
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<td>International Network of Teacher Education Institutions for ESD by Rosalyn McKeown</td>
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<td>09:40 – 11:00</td>
<td><strong>Session 6: Sharing Information and Experiences</strong></td>
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<td>Chair: Lawrence Surenda</td>
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<td></td>
<td>Reports of initiatives/activities/programmes on EIU/ESD from representatives of participating Teacher Education Institutions (TEI)</td>
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<td></td>
<td>• Bandgladesh by Hedayet Hossain</td>
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<td>• China by Wang Jianpan</td>
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<td>• India by Rajaram Sharma</td>
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<td>• Iran by Seyed Hossein Naghavi</td>
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<td>• Korea by Woun Sik Choi, Lee Myungjoon</td>
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<td>• Malaysia by Aminah Ayob</td>
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<td>11:00 – 11:20</td>
<td>Coffee/tea break</td>
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<tr>
<td>11:20 – 12:45</td>
<td><strong>Session 6: continued</strong></td>
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<td>• Pakistan by Munawar S. Mirza</td>
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<td>• Sri Lanka by Nihal Wickramasinghe</td>
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<td>• Thailand by Pruet Siribanpitak</td>
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<td>• Uzbekistan by Qodir Djuraev</td>
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<td>• Vietnam by Dao Van Vy</td>
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<tr>
<td>12:45 – 14:00</td>
<td>Lunch</td>
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### 14:00 – 16:00  
**Session 7: Show Cases: Regional, National, Institutional Level**  
Chair: Toh Swee Hin  
- Regional Center of Expertise (RCE) by Zinaida Fadeeva; RCE in Indonesia by Hartrisari Hardjomidjojo, RCE in Philippines by Rhodora Bucoy  
- Penang RCE (including Healthy Campus) by Omar Osman and Zainal Abidin Sanusi  
- World Heritage Education for ESD by Janet Pillai  
- Environmental Education School Project in Malaysia by Susan Tung  
- ESD project in Trang Municipality and school by Watcharee Amplord  

### 16:00 – 16:20  
Coffee/tea break  

### 16:20 – 17:45  
**Session 8: Resources for ESD/EIU**  
Chair: Soonwon Kang  
- Teaching and Learning for a Sustainable Future by John Fien  
- Toolkit for ESD by Rosalyn McKeown  
- APCEIU publications (including Trainer’s Guide on Designing Training Programmes for EIU/ESD) by Kwak Sookhee  
- APNIEVE resources by Joy de Leo  
- Resources in the Internet by Chan Lean Heng  

### 20:00 – 22:00  
Dinner  

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### 24 Aug 2006 (Thu)  
**Learning, Teaching and Training in ESD/EIU**  

### 9.00 – 10.30  
**Session 9: Teaching, Training, Extension and Research on ESD/EIU**  
Chair: Molly Lee  
Speakers: Joy de Leo, Chan Lean Heng, Toh Swee Hin, John Fien

### 10:30 – 11:15  
**Session 10: Cross-cutting Methodological Principles and Underlying Values**  
Chair: Toh Swee Hin  
Speakers: Chan Lean Heng, Joy de Leo

### 11:15 – 11:35  
Coffee/Tea break

### 11:35 – 13:00  
**Session 11: Development of Matrix**  
Facilitator: Joy de Leo  
Group discussions on knowledge, skills, values/attitudes, and behaviours required by learners for integrating ESD/EIU in education.
13:00 – 14:15  Lunch
14:15 – 15:30  Session 11: continued
               Report back
15:30 – 15:50  Coffee/Tea break
15:50 – 17:30  Session 12: Case study applications
               Facilitator: Toh Swee-Hin
20:00 – 22:00  Dinner

25 Aug 2006  (Fri)  Preparing for Actions

09:00 – 10:15  Working groups on Stoplight activity
                by Content-based groups
                Facilitators: Rosalyn Mckeown, Chan Lean Heng
10:15 – 11:30  Working groups on action plans
                by Country-based groups
                Facilitators: Rosalyn Mckeown, Chan Lean Heng
11:30 – 11:50  Coffee/tea break
11:50 – 12:30  Working groups on action plans
                continued
12:30 – 14:30  Lunch
14:30 – 15:30  Presentation of country action plans
15:30 – 16:00  Closing session
16:00 – 16:20  Coffee/tea break
20:00 – 22:00  Dinner
Annex 2

6th Asia-Pacific Experts Consultation: Reorienting Teacher Education to Address Sustainability
22-25 August 2006
Crown Jewel Hotel, Penang, Malaysia

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