



# China Environmental Education for Sustainable Development and Introduction of Typical Cases

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- I. Status of Environmental Education (EE) in China
- II. Typical projects and experience
- III. Priority areas for future environmental education China
- IV. Some ideas about future environmental education cooperation among China, Japan and Korea





Two factors causing environmental problems:

- Public environmental awareness need to be improved
- Lack of effective mechanism in existing policy & economic system





- Background
- Environment Education System in China mainly include the following four areas:

Basic Environment Education (Basic EE)
Higher Environment Education (Higher EE)
Adult Environment Education (Adult EE)
Public Environment Education (Public EE)

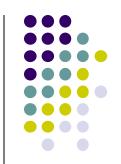




### Basic EE

- pre-school education
- primary education
- middle school education





### Higher EE

Main targets: polytechnic schools

vocational high schools

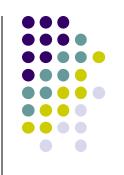
universities & colleges

Aim: to cultivate talented people for China in the field of environmental management, science & technology and industries.

#### Achievements of Professional EE:

- •Trained professionals with environment technical background
- •Basically meet the demand for environmental professionals by national economic development.

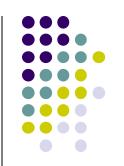




Status of Higher EE:Quality and amount are improving

- •300 universities and colleges including Tsinghua University have the major on environmental engineering with 86000 students.
- •Over 200 universities and colleges including Peking University have the specialty of environmental science with 44400 such students.
- •Optional courses on environment & sustainable development is offered





### Adult EE

- •on-the-job training
- •continuous education
- community education





### Public EE

#### Aim:

- disseminate environmental science knowledge and environmental legal knowledge,
- raise public environmental awareness,
- •advocate environment-friendly behaviors,
- •encourage and support public participation in sustainable development

#### Form:

- •publicity activities (June 5 World Environment Day, April 22 Earth Day)
- Contests and Exhibitions
- workshops
- •environmental protection columns on TV programs and printed

### II. Typical Projects & Experience

# (CEEC) of Ministry of Environmental Protection (MEP)

CEEC is a national non-profit making EE institution under the leadership of MEP. Its main task is to carry out EE and environmental publicity activities serving the government department, public, enterprises and media. It has complete equipment in training and developing film and TV programs and the largest information center on sustainable development in China.

CEEC has carried out many EE projects entrusted by MEP and Ministry of Education since its establishment in 1996. Our cooperation partners include WB, UNEP, UNDP, EU and countries like Japan, Britain, Norway, etc. Environmental organizations including WRI, Nature Step, climate organization, Conservation International as well as corporations like ExxonMobil, Fuji Xerox, Panasonic, Hitachi (Climate Group), Toyota, Siemens and Shell. In addition, we enjoy good cooperation with key media in Beijing including CCTV, Beijing Television Station and national key newspapers like China Environmental News. It also provides policy & technical guidance to the publicity and education center of each province as well as relevant training.



# II. Typical EE Cases in China & Experience



CEEC has carried out or is undertaking the following EE projects with big impacts:

### At university level:

- 1. 1000 Environment-Friendly Youth Ambassadors Action Program
- 2. China BELL project

### EE for juniors

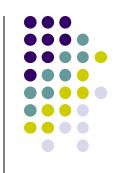
- 3. China Green schools project
- 4. Stockholm Junior Water Prize

#### EE for Public

5. Green Community Project



# II. Typical EE Cases in China & Experience



# 1. 1000 Environmental Friendly Youth Ambassadors Action Program

---A brand Program at national level



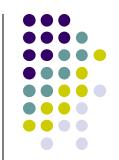




### I. Background

As an instrument for adjusting economic structure, energy saving and emission reduction is conducive to the development of a resource-saving and environment-friendly society and the establishment & implementation of the outlook on scientific development. The establishment of compulsory target for energy saving and emission reduction reflects high attention of the Chinese Government to environmental protection, which is a government commitment to Chinese people. To achieve this goal, government should play its guiding role and the entire society shall pay high attention to energy saving and emission reduction. Stimulating the enthusiasm of young volunteers for environmental protection, 1000 Environment-Friendly Youth Ambassador Action Program encourages and supports their active and practical actions in environmental protection, takes advantage of the principal force role of young people in environmental protection cause, drives one million people to pay attention to and take part in environmental protection, wins popular support to energy saving and environmental protection and turns it into voluntary action.





### II. Project Introduction

Organized by MEP together with:

Environment and Resources Protection Committee of the National People's Congress

Environment and Resources Protection Committee of the National CPPCC

National Development and Reform Commission

Ministry of Science and Technology

Ministry of Education

Central Committee of the Chinese Communist Youth League the All-China Women's Federation

Undertaken by: CEEC of MEP, Chinese Young Volunteers Association

Sponsored by: UNDP, John Controls, Inc. CEAP



















III. Project Activities

Under the guidance of MEP China and the other organizing Ministries, the Project Office has carefully organized and carried out the following activities since March of 2009:

- --Successful inception ceremony of "1000 Environment-Friendly Youth Ambassador Action Program";
- --active promotion of "1000 Environment-Friendly Youth Ambassador Action Program" in each regions of China;
- --compilation of training materials and ambassador action guide suitable to young people;
- --design & make relevant publicity materials (including pamphlets, posters and action guide etc.);
- --selection & training of young volunteers;
- --guiding youth ambassadors to carry out training at local level;
- --organization of the contest on the design for energy saving and emission reduction action program of "1000 Environment-Friendly Youth Ambassadors" as well as the development of website and network platform.







On June 5<sup>th</sup> the Environment Day, at the Launching ceremony of 1000 EFYA Program, representative students from six piloting cities were granted Ambassador Certificate signed by Minister of Environment China







Professor Jia Feng, Deputy Director General of the Department of Education and Communication of MEP giving instructions to the Ambassadors in Chengdu







2011 Ambassadors Training of North China







2011 Ambassadors
Training and Certificate
Awarding





# II. Typical EE Cases in China & Experience



### 2. China BELL Project



Business

**E**nvironment

Learning

Leadership



China BELL Project is an international EE project originally sponsored by WRI involving MBA schools of famous universities of foreign countries including USA and Canada and supported by many transnational companies. Beginning in North America and Latin America in early 1990s, BELL project has been extended to other regions in the world and implemented in Asia from 2000. CEEC is the organization and coordination institution responsible for its implementation in China.

This project aims to integrate the components of EE and sustainable development into the courses of MBA schools. With teacher training, development of textbooks and case studies providing the latest information, this project helps MBA schools obtaining industrial practice and skill change in relation to their courses. It also sets up close network by such measures as regular communications among the government, academic institutions, MBA schools and enterprises to jointly promote EE at higher level. In doing so, MBA students today – future managers tomorrow will become environment-friendly partners in future decision making.





From project preparation in 2000 to now, China BELL Project has evolved from the early stage dominated by improvement of awareness, project extension and building of working network, primary development stage dominated by the development of core resources including compilation of textbooks, translation and development of cases, and to the development stage dominated by such work as textbook extension, teaching trial, teachers training and topic study. Major achievement are the followings:

- Annual Conference: Totally 8 Annual Conferences have been held. Participants from government departments, enterprises, environmental NGOs, universities, environmental institutes and media discuss different topics each year, exchange experience and share the achievements of BELL.
- Establish Network: the network covers over 80 universities in China, and over 30 universities become China BELL Pilot universities by offering environment related courses.



- •Compile and publish textbooks: The project has published the "Commercialization of Environmental Technology" –Collections of Peking University BELL green demonstration courses and the book "Case Studies of Environmental Science" compiled by Beijing Normal University.
- Demonstration courses: The project has set up the demonstration courses of Commercialization of Environmental Technology " and "Study on public environmental policies" in Peking University and Beijing Normal University. In the course of Peking University, the study topics of students involve biofuel, wind energy, solar energy, sustainable transportation, ecological fertilizer, organic food, etc. In Beijing Normal University, the courses include environmental theory, environmental law, public policies and environmental management. The two universities have invited the experts and scholars of institutes, government and NGOs to give lectures with good effects.





In the future, the project will continue expand the network, share and extend the experience of the demonstration courses. It will develop more teaching sources for demonstration course and develop a complete China BELL course system.



Demonstration course at Peking university---visiting wind power plant



The 7th BELL Annual Conference



# II. Typical EE Cases in China & Experience



# 3. China Green School Project —a platform for junior environmental participation







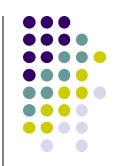
China Greenschools is a national level school EE project co-sponsored by the Publicity Department of CCCPC, Ministry of Education and MEP in 1996.

With the creation of green schools in China, the project aims to deepen the understanding of teachers and students on environmental problems and the idea of sustainable development, improve their environmental awareness, enable them emphasize environmental protection and actively take part in environmental protection activities in the future.

The project has carried out series of colorful activities in the development of green schools with active participation of local educational department, environmental protection department and many schools. It has greatly improved environmental awareness of teachers and students and school environmental management level, which facilitates the quality oriented education and dissemination of the idea of sustainable development. At present, there are over 35000 green schools at various levels across China, 703 of them are at national level. China Green School Project covers a broad range which includes kindergarten, primary school, middle school and vocational school.

Below are the main branch projects conducted under the umbrella of Green Schools:





#### --- Campus Environment Management Project:

At present over 460 schools involved in this project.

Aim: by way of administration, education, technique and financial support, to improve the efficiency of resource utilization and and the recycling use of resource, to improve campus environment quality and environmental awareness of staff.



图二: 2006年校园环境管理项目节约总额(元)

This diagram shows analysis results of sum of money saved by Campus environment management project in 78 schools in 2006. by effectively control the use of electricity, water, paper, fuel and by refuse sorting, totally 1.13 million RMB was saved during one year.





#### ---Environment Yong Master Program

A cooperative program with Lund University, Sweden since 2003 for school students aged 15-18 and for school teachers by taking online courses on environment and sustainable development. Over 4000 teachers and students from 178 schools involved in this program. Certificate will be awarded by CEEC and Lund University.

#### ---Yong Reporter Program

Sponsored by Fund of Environmental Education (FEE), aims at encouraging students all over the world to conduct environment related problems investigation and broadcast environmental news through mass medias. Excellent works such as news articles and pictures will be awarded by FEE. Over 500 students research groups from 17 countries involved in this program.

#### ---Eco-School Program

Sponsored by FEE, an update of Green School, aim at by in-classroom learning and out classroom practice improving students' understanding of sustainable development issues. This program emphasizes on participation, expecting the influence on the society through students' environmental actions.





Young Master Program---Certificate Awarding



Young Reporter Program---interview by yong reporter



# II. Typical EE Cases in China & Experience



# 4. Stockholm Junior Water Prize ---nomination contest at national level











In order to publicize the importance of conservation of water resources, raise environmental awareness of juveniles and build their capacity in conserving water scientifically, CEEC launched the National Contest for Middle School Students on Water Scientific Invention & Competition for Stockholm Junior Water Prize (China Region) in 2003. The winners of the first prize in China each year compete with the best candidates from other countries in Stockholm, Sweden for the Junior Water Prize, which is reckoned as "Nobel Prize among Juniors" by the mass media.



In 2006, the project of "Application and Study on Eco Rehabilitation Technology in the Treatment of Caoxi River" by students from Shanghai won the Stockholm Junior Water Prize and got the opportunity to attend the 79th US International Exhibition on Water Treatment Equipment and Technology in Dallas in October that year.

In 2007 and 2010, students of Guangdong Province respectively won the Special Award, only second to the Prize.

In the competition each year, many middle school students carry out wide investigations and studies targeting the innovative methods, technology and application of natural science and social science to address water problems. They have put forward many methods, ideas and new ways to conserve water resources. This is of great importance for them to improve their capacity in observing and studying problems as well as in taking part in environmental protection activities in an all round way.





















# II. Typical EE Cases in China & Experience



### 5. Green Community Project





### **Green Community Project**



Green Community Project aims at advocating green consumption, guiding citizens seeking for green life style, rationally use resources, establish new value outlook so that environmental protection will become voluntary action of each citizen and household. In doing so, the communities where harmony between man and the environment and among people have been created.

At present, there are 236 national green communities across China.

The development of green communities has become a micro mode of sustainable development an effective tool for the implementation of basic national policies on environmental protection in China. It is also an important link to enhance urban environmental protection and improve spiritual development at community level. It has far reaching significance for the promotion of sustainable development and improvement of comprehensive quality of urban residents and their environmental awareness in an all round way.



# III. Priority Areas for Future EE in China



- 1. Set up complete laws, regulations and policy system for environmental publicity and education.
- 2. Establish multi-level EE network, achieve EE information exchange and resource sharing.
- 3. Develop EE readings and CDs targeting on various readers with different topics to enrich EE resources.
- 4. Set up wide international exchange and cooperation channels for EE, enhance the exchanges and cooperation among governments, international organizations and NGOs.



### IV. Some Ideas About Future EE Cooperation among China, Japan and Korea



- •To carry out comparative study on EE in China, Japan and Korea, hold workshops to enhance information exchange and experience sharing.
- To jointly develop EE materials on hot global environmental issues .
- To jointly promote the piloting of "China-Japan-Korea Environment Common Textbooks for Children".
- •Organize tripartite university student EE forum and visiting activities.
- Promote Tripartite EE Network and the exchange & cooperation with other international EE networks.





# Thank you!