

**ENVIRONMENTAL EDUCATION
IN MALAYSIAN UNIVERSITIES:
STUDY CASE IN
UNIVERSITY OF MALAYA
&
UNIVERSITY PUTRA MALAYSIA**

**BY
SUZANA ARIFF AZIZAN
DEPARTMENT OF SCIENCE AND TECHNOLOGY STUDIES
FACULTY OF SCIENCE
UNIVERSITY OF MALAYA**

Presentation outline

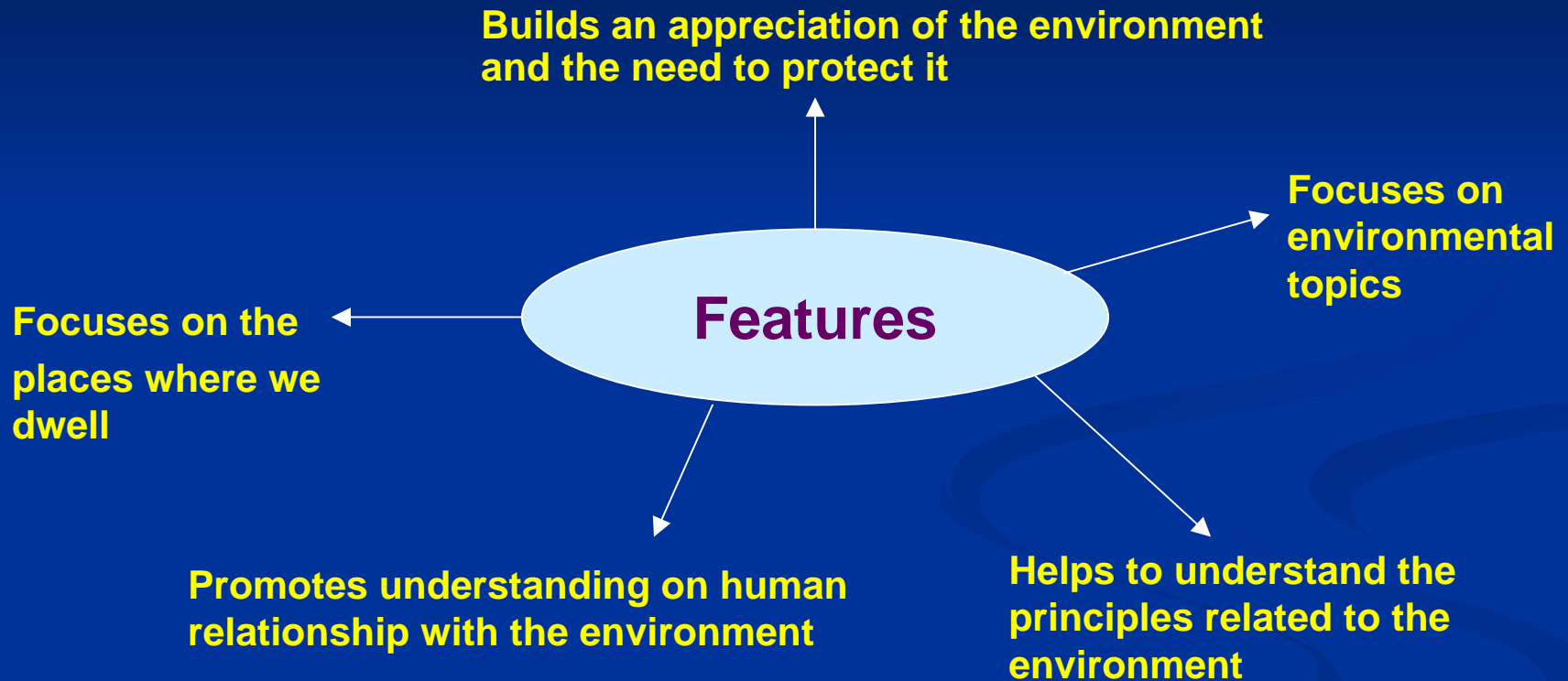
- **Introduction**
- **Environmental Education in Malaysia**
- **Environmental Related Courses at University of Malaya and University Putra Malaysia**
- **Conclusion**

Definition

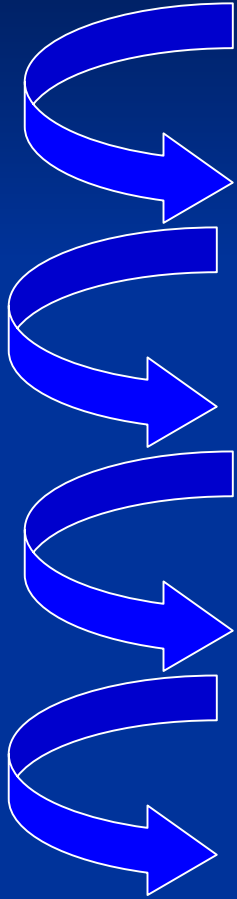
Environmental Education

Knowledge that focus on educate the society to value the earth and how the ecosystem functioning

What is Environmental Education?



The Needs of Environmental Education



To manage our environment

As a basic knowledge

Handle environmental issues

To achieve sustainable development

Environmental Education in Malaysia

- Third Malaysia Plan (1976-1980)
 - The impact that population growth and man's activities in resource development, industrialization and urbanization have on the environment
 - The need to maintain a healthy environment for human habitation

- The importance of EE is highlighted in the National Policy on the Environment, 2002
 - Integrate environmental consideration into development activities and in all related decision making processes
 - Sets out the principles and strategies necessary to ensure that the environment remains productive both ecologically and economically

- One of the key areas outlined in the policy - ‘Education and Awareness’
- Strategies for ‘Education and Awareness’:
 1. To devise and introduce comprehensive formal and informal EE and training strategies and information dissemination program
 2. To integrate environment and development into educational activities from school to tertiary institutions for which relevant methods and materials will be developed

3. To establish national centres for excellence in interdisciplinary research and education in environment and development.
4. To review educational curricula at all levels to ensure a multidisciplinary approach in environmental and developmental issues.
5. To actively promote non-formal educational activities at local and national levels.
7. To strengthen the role of the media in disseminating environmental information

■ Formal Education

- The Ministry of Education plays an important role to develop a curriculum for EE
- ‘Environmental Education across the Curriculum’ has been introduced in primary and secondary schools since 1998.
 - EE is taught across the subject board and integrated in each subject.

Malaysia National University

- Environment, Man and Culture
- Environmental Assessment and Management
- Atmosphere Studies
- Environmental Development and Management
- Climate Change
- Environmental Impact Assessment
- Statistic in Environmental Science
- Risk Assessment of Pollutants

University of Science Malaysia

- Environmental, Natural Resources and Development
- Biodiversity
- Land Development and Administration
- Man and Environment
- Environmental Quality Management

University of Technology Malaysia

- Man-Environmental Studies
- Sustainability and Sensitivity to Environment
- Air Pollution and Control
- Solid Waste Management
- Environmental Management
- Water Quality Management
- Water and Wastewater Treatment Engineering

University Malaysia Sarawak

- Environmental Law
- Forest Science and Management
- Environment and Development
- Environmental Conservation
- Tropical Biodiversity

University Malaysia Sabah

- Ecosystem Management
- Environmental Impact Assessment
- Environmental Science
- Conservation Biology
- Recreation Management
- Environmental Economics

Environmental Education at University Malaya

- University Malaya has its roots in Singapore with the establishment of King Edward VII College of Medicine in 1905. Universiti Malaya Kuala Lumpur was established in 1962
- Undergraduate students: 20,833
- Graduate students: 8,501
- International students
 - Undergraduate: 67
 - Postgraduate: 1,229

Faculties Offering Environment Related Courses

Academic/Faculty	Environmental related subject
Academy of Islamic Studies	
Academy of Malay Studies	
Faculty of Arts and Science Social	
Faculty of Built Environment	
Faculty of Business and Accountancy	
Faculty of Computer Science and IT	
Faculty of Dentistry	
Faculty of Economics and Administration	
Faculty of Education	
Faculty of Engineering	
Faculty of Languages and Linguistics	
Faculty of Law	
Faculty of Medicine	
Faculty of Science	

Under Graduates Courses

Academy of Islamic Studies

-Islam and Environment

Faculty of Arts and Science Social

- Environmental Ethics**
- Environmental Impact Assessment**
- Environment and Health**
- Environment and Man**
- Geography and Environmental Disaster**
- Environmental Cotemporary Issues**
- Environment and Sustainable Development**
- Etnography of Environment**
- Urbanization and Environment**

Faculty of Built Environment

- Environment Phisic**
- Sustainable Design**

Faculty of Economics and Administration

- Environmental Economics**
- Sustainable Development**
- Environmental Policy**
- Environmental Acts**
- Environmental Science**
- Environmental Risk Analysis**

Faculty of Education

-Environmental Education

Faculty of Engineering

-Environmental Impact Assessment

-Environmental Issues

-Environmental Management System

-Air Pollution and Noise

-Management of Environmental Risk

-Health and Environment

-Chemistry of Environment

Faculty of Law

-Environmental Law

Faculty of Science

-Pollution

-Earth and Man

-Philosophy and Management of Environment

-Environment and Religion

-Introductory to Philosophy of Environment

-Analysis Chemistry and Environment

-Environmental Impact Assessment and Risk

-Environmental Management System

-Sustainable Development

- Faculty of Science

- Undergraduate students: 4,002
- Graduate students: 586

- Department of Science and Technology Studies

1. Introduction to Philosophy of Environment
2. Philosophy and Management of Environment

- Every semester – 200 students

Post Graduates Courses

Institute of Post Graduate Studies

- Environmental System: Concepts and Issues**
- Environmental Monitoring and Assessment Technologies**
- Pollution Control and Waste Treatment Technologies**
- Environmental Management and Planning**
- Air Pollution and Noise Control Technologies**
- Environmental Impact Assessment**
- Environmental Health and Safety**

Theses

- **A Study of Malaysian Environmental Non-Governmental Organizations: Their Impact on Public Attitude and Awareness towards the Environment**
- **The Effect of Field Study Experience on Environmental Knowledge and Attitudes Among University Students**
- **A Study of Environmental Management Issues and the International Standard ISO14001**

- Rimba Ilmu (Botanical Gardens)
 - Rimba Ilmu or The Botanical Garden was established in 1974 out of a need to study and conserve the immense diversity of plant life found in the Malaysian tropical rainforest.
 - Besides having a general collection of species from a variety of plant families selected for teaching, Rimba Ilmu is also developing various special collections ranging from those of medicinal plants, wild orchids, palms, pandan, tropical fruit trees, gingers, aquatic plants, wild citrus relatives to rare and endangered plants in need of conservation
 - <http://rimba.um.edu.my>

- University of Malaya Field Studies Centre of the Ulu Gombak Biodiversity Centre
 - Sited on 120-hectares of secondary and primary forest is a veritable fount of biological & ecological knowledge
 - The centre is also open to school children who want to experience the wonder of nature firsthand

Activities

- **World Environment Day**
- **Rain Forest and Our Environment Exhibition**
- **Earth Day**
- **Green Day**
- **Workshops on Problem Based Learning in Environmental Education**
- **Hari Kesedaran Alam Sekitar**
- **Recycle Project**

Universiti Putra Malaysia

- The establishment of this university was the result of the merge between the College of Agriculture Malaya with the Faculty of Agriculture, University of Malaya
- Universiti Putra Malaysia started its first academic session in July 1973 with three central faculties: the Faculty of Agriculture, Faculty of Forestry, and Faculty of Veterinary Medicine and Animal Science.

Faculties Offering Environment Related Courses

Faculty	Environmental related subject
Faculty of Agricultural	
Faculty of Veterinary Medicine	
Faculty of Forestry	
Faculty of Built Environment	
Faculty of Environmental Studies	
Faculty of Computer Science and IT	
Faculty of Economics and Management	
Faculty of Educational Studies	
Faculty of Food Science and Technology	
Faculty of Engineering	
Faculty of Modern Languages and Communication	
Faculty of Human Ecology	
Faculty of Medicine and Health	
Faculty of Agriculture and Food Sciences	
Faculty of Biotechnology and Biomolecular Sciences	
Faculty of Science	

Under Graduates Courses

- **Faculty of Forestry**

- Forest Ecology and Science

- **Faculty of Human Ecology**

- Society, Development and Environment
- Social and Environmental Psychology

- **Faculty of Biotechnology & Biomolecular Sciences**

- Waste Water Treatment Technology

■ **Faculty of Agriculture and Food Sciences**

- Recreation and Wildlife Management
- Forest Ecology
- Environmental Assessment

■ **Faculty of Science**

- Environmental Biology
- Biodiversity and Conservation of Natural Resources
- Environmental Chemistry

- Faculty of Environmental Studies
 - Bachelor of Science (Environment)
 - Bachelor of Environmental Management

Bachelor of Science (Environment)

- Environmental Health
- Environmental Measurement Technique and Method 1
- Principles of Environmental Biology
- Hydrology and Water Resource
- Hydrogeology
- Man and Environment
- Chemical Principles In The Environment
- Principles of Environmental Physics
- Principles of Drinking Water Treatment
- Air Pollution and Noise
- Environmental Chemistry

Bachelor of Environmental Management

- Natural Resources Management
- Planning and Management
- Physical Sciences
- Biological Sciences
- Environmental Economics
- Laws
- Information System
- Solid Waste Management
- Air and Water Quality
- Policy Administration
- Economics and Management

Post Graduates

- Master of Environment (M.Env)
- Master of Science (M.Sc.)
- PhD

■ **M.Env**

- Man and Ecosystem
- Environment Pollution and Treatment Technology
- Research Design and Methodology for Environmental Sciences
- Environmental Law
- Environmental Impact Assessment Techniques

■ M.Sc

- Environmental Quality Conservation
- Environmental Pollution Control Technology
- Environmental Analysis and Modeling
- Environmental Systems and Processes
- Environmental Planning and Management
- Environmental Ethics
- Environmental Policy and Governance

■ **Doctor of Philosophy (PhD)**

■ **Field of study**

- **Environmental Planning and Management**
- **Environmental Policy and Governance**
- **Environmental Economics**
- **Environmental Ethics**
- **Environmental Education**
- **Environmental Quality Conservation**
- **Environmental Pollution Control Technology**
- **Environmental Analysis and Modeling**

Benefit

- **Better understanding of the environment**
 - By taking these courses students will have a better knowledge regarding the topic. The experiential learning adopted gives the opportunity for students to understand the relationship between human and the environment

- **Raise awareness on the importance of environment**
 - Students will be exposed to the various issues pertaining Mother Nature and its environment. This will give them ideas on how they can contribute in protecting and preserving the environment and allow students to be more responsible with their surrounding

■ **Form an ethical society**

- Throughout the courses, students are taught to look at the impact of human actions on environment and how the environment influences our life.
- Discipline the students and help them to be environmentally ethical; to think wisely and make appropriate decisions to protect and preserve the environmental value.

■ **Enhance students' good characteristics**

- The strategies applied in the curriculum such as the development of critical thinking and skills motivate students to build up good characteristics in them. This includes making the right decision, problem solving and learning to work as a team.

■ **Produce a balanced human being**

- With EE in their syllabus, it will balance the students' life so that it does not solely focus on career-based education in the various fields they are originally doing; for instance, law, engineering and architecture

Conclusion

In order to become an environmentally responsible society it takes more than a formal education. Environmental education must be conveyed through both, formal and non-formal education. The combination of both sources will be a perfect recipe to spread environment education and thus, promote and produce environmental literate society that is vital to save the planet and the future of mankind.