ESD, as the evolution of Environmental Education

Overview of the Conceptual Development based on a series of International Discussion on Environmental Education

UNESCO Expert Meeting on Education for Sustainable Development (ESD): Reorienting Education to Address Sustainability to be held for 1-3 May 2006 at Kanchanaburi, Thailand

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Education for Sustainable Development (ESD)

- Evolution Process -
Historical Background (1)

Basic Education, universalizing access and promoting equity

Quality Basic Education
(1990: WCEFA and Jomtien Declaration on Education for All – EFA, 2000-2015: MDGs)

Environmental Movement and Environmental Education

Sustainable Development & Education
1987-2002: Emergence then definition of the concept of Sustainable Development

Source: M.Sato (2005)
"Education for Sustainable Development (ESD)"

- 2002: Johannesburg World Summit on Sustainable Development (WSSD) > DESD Proposed & Endorsed
- December 2002: resolution 57/254 of the General Assembly of the United Nations
- December 2004: UNESCO submits the draft IIS to UN General Assembly (resolution 59/237)
- September 2005: UNESCO’s Executive Board (172) approves the IIS

Source: M. Sato (2005)
"11. Environmental education, as developed within the framework of the Tbilisi recommendations and as it has evolved since then, addressing the entire range of global issues included in Agenda 21 and the major UN Conferences, has also been dealt with as education for sustainability. This allows that it may also be referred to as education for environment and sustainability."

The THESSALONIKI DECLARATION
“Preliminary findings indicate that ESD is still predominantly conceptualized in the context of Environmental Education by many key stakeholders and decision makers. ... *Moving from EE to ESD will be a key challenge for the decade*”

Evolution from EE, EPD, EfS to ESD

- **Environmental Quality**
  - Environment (Quality, Quantity)
  - Development (Economic, Education, Social Services, Capacity Building)
  - Population (Size, Growth, Distribution, Structure)

- **Environment**
  - e.g. natural resources, climate change, rural development, sustainable urbanisation, and disaster prevention and mitigation;
  - Socio-culture
    - e.g. human rights, peace and human security, gender equality, cultural diversity and inter cultural understanding, health, HIV/AIDS, and governance
  - Economy
    - e.g. poverty reduction, corporate responsibility and accountability, and market economy

Evolution from EE, EPD, EfS to ESD (3)

EE (1970/2-)

RDDA Approach Employed (IEEP 1975-1995)

Characteristics: Top Down Approach, Quantity Focused, Knowledge Transfer, Major Focus: FE, Cause-effect Relations, Problem Solving

Learners as Defective Model

Skills
Knowledge
Awareness

Experts & Researchers

Teachers

Learning Environment

Balance Needed

EPD (1992-)

EfS > ESD (1997-)

Participatory Learning, High-order Thinking, Action Research, Capacity Development to be Employed

Characteristics: Bottom-up Approach, Quality Focused, Knowledge Acquisition & its Connection through Action, Participation and Collective Decision Making, Constructing Values and Ethics, Attitude Change, Life Long Learning through FE, NFE & IFE, Accommodation to the evolving nature of Concept of Sustainability, Vision & Scenario Building

Learners as well as Facilitators

Institutional Capacity / Civil Capacity / Context / Social Support System

Action & Participation for Social Change

Learning Environment & Opportunities
UNDESD-IIS
(UN Decade of Education for Sustainable Development)
The Process:
From Draft IIS to IIS in 2005

UNESCO (2005)
UNDESD International Implementation Scheme (IIS)
As of October 2005

UNESCO (2005)
Links between the Global Initiatives in Education
As of September 2005

UNDESD Draft International Implementation Scheme
-2005-2014-
As of January 2005
"The DESD is a far-reaching and complex undertaking. The environmental, social, and economic implications are enormous and touch many aspects of life of the world’s population”.

"The overall goal of the DESD is to integrate the principles, values, and practices of sustainable development into all aspects of education and learning. This education effort will encourage change in behaviour that will create a more sustainable future in terms of environmental integrity, economic viability, and a just society for present and future generations”
(1) Sustainability issues that need to be included in educational activities

“Society”
An understanding of social institutions and their role in change and development, as well as the democratic and participatory systems which give opportunity for the expression of opinion, the selection of governments, the forgoing of consensus and the resolution of differences.

“Environment”
An awareness of the resources and fragility of the physical environment and the affects on it of human activity and decisions, with a commitment to factoring environmental concerns into social and economic policy development.

“Economy”
A sensitivity to the limits and potential of economic growth and their impact on society and on the environment, with a commitment to assess personal and societal levels of consumption out of concern for the environment and for social justice.
IIS - Four Major thrusts of ESD

(1) Improving access to quality basic education

(2) Reorienting existing education programmes

(3) Developing public understanding and awareness

(4) Providing training

UNESCO (2005) UNDESD International Implementation Scheme (IIS) As of October 2005
IIS - emphasizes the importance of:

(3) The linkages between DESD and other educational initiatives (MDGs, UNLD, EFA)

[Common Points]
- Goal to improve the quality of life
- Promotion of human rights – emphasis on gender equality and marginalized groups
- Commitment to education – as a key to development
- Primary education – a central strategy within education
- Broad participation – government, civil society, communities, individuals

[UNLD]
Concentrates on promoting key learning tool e.g. literacy, for all forms of structured learning, literacy as a key to learning

[DESD]
Promotes a set of underlying values, relational processes and behavioural outcomes, which should characterize learning in all circumstances; an emphasis on culture.

[EFA]
Focuses on ways of providing relevant, quality educational opportunities to all ages, with gender equality

*Literacy: key element of learning
*NFE, PE, IFE

[MDGs]
An agreed development framework, with focus on poverty reduction, and a set of tangible and measurable development goals within which education is a significant input and Indicator.

Source: M.Sato (2005)
**Education for Sustainable Development:**

(1) is **based on the principles and values that underline sustainable development**;
(2) deals with the well being of all three realms of sustainability – environment, society and economy;
(3) promotes **life-long learning**;
(4) is **locally relevant and culturally appropriate**;
(5) is, but acknowledges that fulfilling local **based on local needs, perceptions and conditions** needs often has international effects and consequences;
(6) engages **formal, non-formal and informal education**;
(7) accommodates the evolving nature of concept of sustainability;
(8) address content, taking into account context, global issues and local priorities;
(9) builds **civil capacity for community-based decision making, social tolerance, environmental stewardship, adaptable workforce and quality of life**;
(10) is **interdisciplinary**. No one discipline can claim ESD for its own, but all disciplines can contribute to ESD;
(11) **uses a variety of pedagogical techniques** that promote participatory learning and higher-order thinking skills.
IIs - Implementing the DESD: Seven Strategies

(1) Vision-Building and Advocacy
  e.g. Lobby to embed ESD in government policies and development plans. Establish a need for ESD by promoting the benefits of ESD.

(2) Consultation and Ownership
  e.g. Model transparency and inclusivity in conducting public participation events. Open the DESD consultation processes to all interested organizations and individuals. Identify roles and responsibilities for stakeholders.

(3) Partnership and Networks
  e.g. Actively seek a wide range of stakeholders. Identify existing advocates and work in unison. Identify partners and networks in all four thrusts of ESD.

(4) Capacity-building and Training
  e.g. Address professional development needs at all levels including leadership. Build upon existing actors and expertise including NGOs, private sector, and civil society. Link to ongoing local and national sustainability initiatives.

(5) Research, Development and Innovation
  e.g. Develop ESD materials to fill curricular gaps and develop associated assessment instruments. Create research and development agendas for all four thrusts of ESD. Disseminate ESD research, development and innovative practices to practitioners.

(6) Information & Communication Technologies
  e.g. Explore how sustainable development messages can be infused in games and popular culture through ICTs. Use ICTs in training and in-service professional development activities. Use ICTs to reach geographically isolated populations.

(7) Monitoring and Evaluation
  e.g. Develop indicators to assess the impact of the DESD. Gather baseline data and set up longitudinal studies. Use data from EFA and other initiatives to track progress.
DESD Regional Strategy and its Evaluation & Monitoring
### Situation Analysis
→ Asia/Pacific Situation Analysis based on 5 Sub-regions, about 200 researchers and experts participation in the process
→ Dominant by environmental education, Highlighted the importance of role of youth, natives, villages. Highlighted the importance of respecting traditional value, role of NATCOM on national level

### Asia/Pacific DESD Strategy Workshop
(Workshop: Regional Strategy for the DESD in the Asia-Pacific, 1-3 February 2005, Bangkok)
→ role of stakeholders
→ implementation (discussion • joint programme • scenario building • information sharing • incentive action research, communication strategy • partnership • collective decision making, consultation process, policy planning, institutionalization, participation, …etc.)

### Asia/Pacific DESD Regional Launch
(UNU/UNESCO International Conference and Regional Launch of the DESD 28-29 June 2005, Nagoya)

### Asia/Pacific DESD starts

### Asia/Pacific DESD Regional Strategy
AP-DESD: The Process (2)

AP-DESD: The Process (3)
Regional Launch of the DESD

UNU/UNESCO International Conference and Regional Launch of the DESD (28-29 June 2005, Nagoya, Japan)
Asia-Europe Environment Forum Conference, a Partnership Approach to ESD (22-25, November 2005 Jakarta, Indonesia)
## Core ESD issues in the Asia-Pacific

<table>
<thead>
<tr>
<th>ESD issue</th>
<th>(example)</th>
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<tbody>
<tr>
<td><strong>Information and Awareness</strong></td>
<td>Eco-Media, Media Literacy, ICT</td>
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<tr>
<td><strong>Knowledge System</strong></td>
<td>Learning for local and indigenous knowledge, integrating traditional and modern technologies</td>
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<tr>
<td><strong>Environmental Protection and Management</strong></td>
<td>Biodiversity, Climate Change, Natural Resources, Conservation</td>
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<tr>
<td><strong>Peace and Equity</strong></td>
<td>Conflict resolution, Peace, Equity, Appropriate Development, Democracy</td>
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<td><strong>Local Context</strong></td>
<td>Community Development, Empowerment</td>
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<tr>
<td><strong>Transformation</strong></td>
<td>Rural Transformation, Urbanization, Sustainable Habitat, Water, Sanitation, Public Infrastructure</td>
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<td><strong>Culture</strong></td>
<td>Diversity and Inter-cultural / inter-faith Understanding</td>
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<tr>
<td><strong>Cross Cutting Issues and Themes</strong></td>
<td>Human Rights, Citizenship, Gender Equality, Sustainable Futures, Holistic Approaches, Innovation, Partnerships, Sustainable Production and Consumption, Governance</td>
</tr>
<tr>
<td><strong>Health</strong></td>
<td>HIV/AIDS, Malaria</td>
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<td><strong>Environmental Education</strong></td>
<td></td>
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<tr>
<td><strong>Engagement of Leaders</strong></td>
<td>Professional Training Courses, Executive Education, Partnerships, Networking</td>
</tr>
</tbody>
</table>
Recommendations for Engaging All Stakeholders in ESD

(1) **Advocacy** through activities such as scenario building (to help address long-term perspectives and uncertainties)

(2) Development of a **Shared Information Platform** in which stakeholders can access resources (human, financial, etc)

(3) **Provision of Incentives** for engaging ‘new’ partners such as the private sector.

(4) Promotion of **Action Research** by academia

(5) Provision of **Fora for Dialogue** amongst stakeholders at local, national, sub-regional, regional and international levels

(6) Development of **Communication Strategies**
UNESCO & IUCN-CEC Monitoring Project

UNESCO Asia and Pacific Regional Bureau of Education and the Commission on Education and Communication (CEC) of IUCN undertake a project on monitoring for the Decade.

Indicators for ESD are to show how well a system is working.

Indicators should be: relevant, easy to understand, reliable, and based on accessible data, balanced with both quantitative and qualitative information.
Evaluation & Monitoring
Points to be Considered..
WHY, we evaluate?

Monitoring & Evaluation, its importance of..

(1) Improve the quality of a project through constant feedback and real-time understanding,

(2) Improve the skills of the staff facilitating or managing the project through a continual process of self-testing and refining

(3) Improve the strategic focus of the project, increasing a project’s impact and effectiveness
WHEN, we evaluate?

Different Evaluation Types

- Diagnostic
- Formative (Monitoring)
- Summative
- Follow-up

$t$
Different Evaluation Types

Participatory

- External
- Internal
- Joint

Self

By WHOM, evaluated?
HOW, evaluate?

Different Evaluation Types

Interviews, Questionnaire, Observation, Longitudinal Study

Quantitative

Qualitative
Different Evaluation Types

**Characteristics:** Top Down Approach, Quantity Focused, Knowledge Transfer, Major Focus: FE, Cause-effect Relations, Problem Solving

**Characteristics:** Bottom-up Approach, Quality Focused, Knowledge Acquisition & its Connection through Action, Participation and Collective Decision Making, Constructing Values and Ethics, Attitude Change, Life Long Learning through FE, NFE & IFE, Accommodation to the evolving nature of Concept of Sustainability, Vision & Scenario Building

**Points to be Considered:** Content (as subject), Teaching / Learning Methods & its process, Individual Capacity (teachers), Learning Environment & its Access

**Points to be Considered:** Values & Ethics, High-order Thinking & its Process, Content (inter-discipline), Participatory Teaching / Learning Methods & its Process, Decision Making Process, Individual Capacity (facilitators and learners), Learning Environment & its Access, Learning Opportunities, Institutional Capacity, Civil Capacity, Contexts, Social Support System

Source: M. Sato (2005)
Reference
Roles and Functions of Each Stakeholder (Summary)

**Governments / UNESCO National Commissions**
(1) Policy-making and framework setting, (2) Promotion of Public Consultation and Input, (3) National and International Public Campaigns, (4) Restructuring of Educational System to Enable the Implementation and Operationalization of ESD, (5) Initiation of Demonstration / Pilot Projects in Cooperation with relevant Stakeholder, etc.

**Communities**
(1) Community participation in visioning, (2) strategic planning and resourcing discussions, (3) Institutional Arrangements such as Partnerships, Consensus-Building, Conflict Resolution, Transparency and Accountability, (4) Cross-Cutting elements such as Capacity Building, Gender Sensitization and Quality, (5) Research and Documentation for Influencing Policy, etc.

**Private Sector**

**Formal Education Institutions**
School-based curriculum development, Teacher Education about ESD, Cross Curriculum, Action Research in higher education institutions.
Roles and Functions of Each Stakeholder (Summary)

**Civil Society**
(1) Public Awareness-raising, advocacy, Campaigns and Lobbying, (2) Consultancy and Input into policy Transformation, (3) Delivery of ESD, primarily in non-formal Setting, (4) Participatory Learning and Action, (5) Mediation between Government Agencies and People, etc.

**Media**
(1) Playing an integral role in creating awareness and developing public ownership of the ESD vision, (2) Playing a key role in the transformation process of moving from EE to ESD, (3) Widespread Advocacy and a responsible media committed to encouraging informed and active citizens, (3) development of high-level communication strategy, (4) Public Service Announcements, information sharing and discussion forum by ICT, etc.

**Youth**
(1) Involve youth in Planning, Policy-Making, and Decision Making for ESD, (2) Youth Network, (3) Action Research, etc

**International Agencies**
(1) incorporating ESD into existing programmes and activities, and Strengthening these programmes, (2) influencing the direction of educational reforms in many countries, (3) encourage these donors to support ESD, (4) integrating ESD into existing UN initiatives such as MDGs, EFA and UNLD, (4) sharing information, opportunities and resources, (5) Establishment of Asia/Pacific UN-interagency Steering Committee, and Asia/Pacific Regional Consultative Group, etc.

**Monitoring and Evaluation**
(1) Evaluation Scheme by UNESCO-IUCN, National Framework Indicators, Qualitative & Quantitative Evaluation Methods etc…
Provide an opportunity for refining and promoting the vision of and transition to sustainable development – through all forms of education, public awareness and training.

Give an enhanced profile to the important role of education and learning in sustainable development.
facilitate networking, linkages, exchange and interaction among stakeholders in ESD;

- foster an increased quality of teaching and learning in education for sustainable development;

- help countries make progress towards and attain the MDGs through ESD efforts;

- provide countries with new opportunities to incorporate ESD into education reform efforts.