



Monitoring and Evaluation of ESD in Asia

Research Project to develop regional Indicators for ESD

IGES, UNU-IAS & in cooperation with UNESCO

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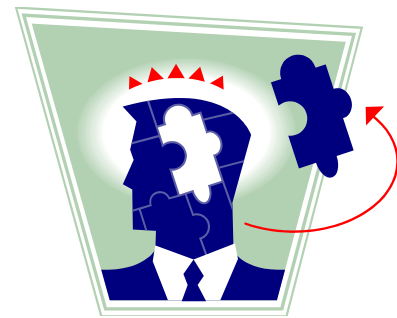
Institute for Global Environmental Strategies

Strategic Policy Research to Support a Sustainable Asia-Pacific

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FOUR MAJOR THRUSTS OF EDUCATION FOR SUSTAINABLE DEVELOPMENT



(1) Promote and improve the quality of education

(2) Reorient the curricula

(3) Raise public awareness of the concept of sustainable development

(4) Train the workforce, businesses & civil society



UNESCO. 2005. "UN DESD: International Implementation Scheme"

International and National Goals of ESD

- Promote and improve the quality of education: The aim is to refocus lifelong education on the acquisition of knowledge, skills and values needed by citizens to improve their quality of life.
- Reorient the curricula: From pre-school to university, education must be rethought and reformed to be a vehicle of knowledge, thought patterns and values needed to build a sustainable world.
- Raise public awareness of the concept of sustainable development: This will make it possible to develop enlightened, active and responsible citizenship locally, nationally and internationally.
- Train the workforce, businesses and civil society: Continuing technical and vocational education of directors and workers, particularly those in trade and industry, will be enriched to enable them to adopt sustainable modes of production and consumption

Seven Strategies for Implementing

DESD

Strategy	Examples
Vision Building and Advocacy	<ul style="list-style-type: none">• Lobby to embed ESD in government policies and development plans.• Establish a need for ESD by promoting the benefits of ESD.
Consultation and Ownership	<ul style="list-style-type: none">• 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.
Partnerships and Networks	<ul style="list-style-type: none">• Actively seek a wide range of stakeholders.• Identify existing advocates and work in unison.• Identify partners and networks in all four thrusts of ESD.
Capacity-building and Training	<ul style="list-style-type: none">• 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.
Research, Development and Innovation	<ul style="list-style-type: none">• 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.
Information and Communication Technologies	<ul style="list-style-type: none">• 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.
Monitoring and Evaluation	<ul style="list-style-type: none">• 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.

UNESCO-BKK National ESD Indicator Status Report

	Commence discussions on ESD and the Decade	Identify national "ESD Monitoring" focal point	Identify national ESD priorities and goals (Develop ESD NAP)	Form a working group on ESD indicators	Develop indicators and data collection mechanisms	Share initial indicator framework, integrate feedback	Pilot and revise indicators	Collect data and interpret results	Report on progress nationally and regionally
Afghanistan	█	█							
Australia	█	█	█	█					
Cambodia	█	█	█						
China	█	█	█						
India	█	█	█	█					
*Indonesia	█	█							
*Iran	█		█						
*Japan	█	█	█	█					
Kazakhstan	█	█	█						
*Kyrgyzstan	█	█	█						
***Mongolia	█	█	█						
New Zealand	█	█	█						
***Pakistan	█	█							
*Palau	█	█	█	█					
Philippines	█	█	█	█					
**Rep. of Korea	█		█						
Sri Lanka	█	█	█	█	█				
***Thailand	█								
Uzbekistan	█	█	█	█	█				
Viet Nam	█	█	█	█	█				

* based on the latest information received from the December 2007 Country Update
 ** based on the latest information received from the September 2007 Country Update
 *** based on the latest information received during the April 2007 workshop

Main Research Objectives

- To identify primary success factors and implementation barriers for effective ESD.
- To document and analyse best practices in ESD methodologies, pedagogies, curriculums and learning tools.
- To develop and pilot Indicators (relevant at a regional level) for ESD monitoring and evaluating.
- To provide a comparative evaluation on the success of ESD implementation in Asia-Pacific region.
- To provide policy recommendations for future actions ESD actions and strategic opportunities for improvement.

FIGURE 1: Common Division of Measuring Approaches for Educational Evaluation

	<u>Examples</u>	<u>(General) Source of Information</u>	<u>Ease of Collecting</u>	<u>Quality of Information</u>
INPUTS	<ul style="list-style-type: none"> Funding amount Disciplines integrating ESD curriculum Available teaching materials Number of ESD Trained Teachers 	National Government; available from Ministries of Educations' statistics	Easiest	Least Beneficial; limited ability to evaluate quality of ESD
THROUGH PUTS	<ul style="list-style-type: none"> Number of students receiving ESD Variety of ESD programs Hours of ESD teaching 	School-Level or local/ school board-level; likely reported by principals and teachers	Medium	Medium; still mainly quantity assessment of ESD, but some quality factors can be implied
OUTPUTS	<ul style="list-style-type: none"> ESD Knowledge Gain Student Learning Behaviour Change 	Performance testing of students	Hardest	Most Beneficial for quality assessment of ESD

FIGURE 2: Types of Indicators and relevant information/topics

Status Indicators <i>(Institutional Frameworks & Resources)</i>	Baseline Indicators <i>(Knowledge and Leadership)</i>	Effect Indicators <i>(Learning Performance & Accountability Mechanisms)</i>
<p>Input Indicators looking at if appropriate policy and curriculum mandates exist. Is ESD linked with other mandates for SD and SCP? Are appropriate resources directed towards ESD implementation?</p>	<p>Throughput Indicators looking at the knowledge framing and structuring ESD implementation. Does the appropriate knowledge, expertise and leadership go into the system? Is the use of this knowledge done in a holistic and systemic manner?</p>	<p>Output Indicators looking at the learning achievements from ESD and its quality. What is the overall quality and performance of the ESD being implemented? What impact is ESD having on the learners?</p>
<p>Do mandates for ESD clearly exist?</p>	<p>Is education based on good knowledge & training?</p>	<p>Are learning outcomes being achieved?</p>
<p>Are the necessary resources made available?</p>	<p>How well are teachers trained in ESD?</p>	<p>Are learners gaining new learning methodologies?</p>
<p>Are SD principles applied to whole school management?</p>	<p>Are good teaching materials available?</p>	<p>Achieving Five Pillars of Learning?</p>
<p>Is the education system sustainable and resilient?</p>	<p>Are core ESD subjects addressed; ie. climate change, indigenous knowledge, DRR & SCP?</p>	<p>Are learners shifting behaviours to be contributors in achieving sustainable societies?</p>

FIGURE 3: Systems Map of M&E of ESD Focal Areas (developed during expert consultation)

Monitoring and Evaluation of Education for Sustainable Development

ESD Indicators: Comparability & Replicability

Target User on M&E Findings: National Governments and Policy Makers
 - Especially Ministries of Education & Ministries of Environment

National Curriculums

Formal Education

Teacher Training

Non-Formal Education

Private Sector & Civil Society

Partnerships

- Capacity Assessment Targets
- Institutional Capacities/ Frameworks
 - Knowledge & Leadership
 - Resource Capacities
 - Accountability

- Thematic Topics:
- Climate Change Education
 - Disaster Risk Reduction
 - Sustainable Consumption & Production / Education for Sustainable Consumption
 - Indigenous Knowledge

Structure of Evaluation Framework

Coverage based on 6 sectors and 3 levels of reporting (indicators)

Sectors: National Curriculum (main agent: national government),

Formal Education (main agent: school boards, school administration & teachers),

Teacher Training (main agent: teacher education institutes),

Non-Formal Education (main agent: national and local governments, continuing education systems),

Community & Civil Society (main agent: NGOs and civic participation, also role of media),

Private Sectors (main agent: businesses and corporations, professional organisations)

Breakdown of Indicator Levels

Input Capacities (for Status Indicators):

- Institutional Arrangements (*including Streamlined Process, Clear definition of Roles/Responsibilities, Merit-based Appraisal mechanism, Coordination mechanism*)
- Policy Mandates
- Resource Capacities (*include financial, material, infrastructure and human resources*)

Throughput Capacities (for Facilitative Indicators):

- Leadership (*including Vision, Communication Standards, Management Tools, Outreach Mechanisms*)
- Knowledge (*including Research Supply & Demand, Brain Gain and Retention, Knowledge Sharing*)
- Pedagogies and Methodologies

Output Capacities (for Effect Indicators):

- Accountability (*include audit systems and practice standards, participatory planning mechanism, stakeholder feedback mechanism, monitoring & evaluation process, and systems learning cycles*)
- Learning Outcomes/Performance
- Value and Behaviour Change

Evaluation Framework – base format

SECTORS		Sub-Sectors		<u>Status Indicators (Input Capacities)</u> - Institutional Arrangements - Policy Mandates - Resource Capacities	<u>Facilitative Indicators (Throughput Capacities)</u> - Leadership - Knowledge - Educational Pedagogies and Methodologies	<u>Effect Indicators (Output Capacities)</u> - Accountability - Learning Performance/Impact - Value and Behaviour Change	Sectorial Assessment
National Curriculum <small>(agent: National Government)</small>	Leverage Points						
	Barriers						
	Indicators						Score/rank?
Formal Education <small>(agent: school boards, schools, classrooms)</small>	Leverage Points						
	Barriers						
	Indicators						Score/rank?
Teacher Training <small>(agent: teacher training institutes)</small>	Leverage Points						
	Barriers						
	Indicators						Score/rank?
Non-Formal Education	Leverage Points						
	Barriers						
	Indicators						Score/rank?
Community & Civil Society	Leverage Points						
	Barriers						
	Indicators						Score/rank?
Private Sectors	Leverage Points						
	Barriers						
	Indicators						Score/rank?
Indicator Assessment			Inputs Score/rank?	Throughputs Score/rank?	Outputs Score/rank?		12

Developing Target Areas of the Evaluation Framework

	Status Indicators	Facilitative Indicators	Effect Indicators
National Curriculum	<ul style="list-style-type: none"> •Clear Policy Mandate for ESD •Funding/Budget for ESD •ESD integration into the curriculum •Is the process streamlined/ connected to previous educational policies •Roles and Responsibilities for ESD 	<ul style="list-style-type: none"> •Inter-governmental coordination and international cooperation •Curriculum Development •Objectives and Achievement Targets for ESD •Knowledge Sharing and Dissemination 	<ul style="list-style-type: none"> •ESD as a stimulus for wider curriculum reform •Feedback Mechanisms and M&E systems
Formal Education	<ul style="list-style-type: none"> •Teaching Strategies & Course Content •Progressive Learning Objectives •Whole School Management •Merit-based appraisal •Roles in Implementing ESD 	<ul style="list-style-type: none"> •Thematic Content of ESD: climate change, disaster risk reduction, sustainable consumption and production, indigenous knowledge •Teaching Materials for ESD •Innovative Learning Methodologies •Progressive Teaching Approaches 	<ul style="list-style-type: none"> •Practice Standards and Auditing •Learning Outcomes •Promoting value and behaviour change
Teacher Training	<ul style="list-style-type: none"> •Mandate for ESD training for student teachers •Budget for ESD in TEIs •How is ESD being implemented by TEIs •Roles and Responsibilities for implementing ESD teaching 	<ul style="list-style-type: none"> •Thematic SD topics •Innovative learning methodologies and progressive educational theories •In-service Training and Continuing Education on ESD 	<ul style="list-style-type: none"> •Methods for teachers to share good practice on ESD •Assessment of teachers qualifications on ESD

Target Areas of the Evaluation Framework, ctd.

	Status Indicators	Facilitative Indicators
Non-Formal Education	<ul style="list-style-type: none"> •Budget for non-formal ESD initiatives •Quantity and diversity of EE and ESD learning centres •Roles and Responsibilities for promoting ESD in non-formal education 	<ul style="list-style-type: none"> •Vision/Strategy outlining objectives for ESD in non-formal education •Public outreach and awareness raising events on SD •Application of good learning methodologies
Community & Civil Society	<ul style="list-style-type: none"> •NGO and Multi-Stakeholder networks/partnerships for ESD • Government support and cooperation with these networks/partnerships •Citizen involvement in SD planning •Civil Society engagement 	<ul style="list-style-type: none"> •Diversity of knowledge on SD among civil society (thematic ESD areas) •Involvement in international ESD activities •Good usage of media technologies in promoting ESD
Private Sectors	<ul style="list-style-type: none"> •Networks and partnerships for business cooperation in ESD •Government led training for business leaders on SD/ESD •Mandate on CSR <p><i>(focused on activities led by the government)</i></p>	<ul style="list-style-type: none"> •In-service Training and Continuing Professional Development for supply chain greening and SCP approaches •Consumer Awareness Raising initiatives <p><i>(focused on activities led by businesses and corporations)</i></p>

Survey & Questions on M&E of ESD

- To have National Commission member or M&E focal person complete.
- To be utilised in the first round of research process with NE Asian countries.
- Following this, the survey is to be refined (removing questions that seem insignificant or impossible to answer), then second round survey to be utilised with SE Asian countries.
- A second round of revision should narrow us down to a core indicator set.
- Currently though, there are 58 questions in total and the whole survey is just over 10 pages. So it will need a lot of refining to reach a core indicator set

Good Practice Reporting Framework (for first and second research round)

- This framework is to be used with the RCE members to collect a good practice case on ESD from each RCE (or each country)
- The purpose of this two-fold:
 1. To identify success factor, strengths and weaknesses in regards to implementing effective ESD initiatives
 2. To be able to provide some story/qualitative material to the country ESD status report.

** See attached good practice reporting framework for following discussion*

Good Practice Reporting Framework, ctd.

1. Major objectives, focus and activities of ESD initiatives
2. How does the partnerships established by the RCE bring benefit to the initiative
3. Learning methodologies, approaches and strategies applied to initiative
4. Main outcomes and achievements of initiative
5. Strengths and success factors of the initiative
6. Barriers that had to be overcome for the success of this initiative (i.e. weaknesses and constraints)

Country Selection Criteria & Selected Countries

Country Selection Criteria

- Geographic Location: from Northeast and Southeast Asia
- Recent Active Involvement with UNESCO-BKK's M&E process (including cooperation with clear M&E focal point or National Commission)
- Has at least one Regional Centre of Expertise (RCE) on ESD

Northeast Asia:

- ❖ Japan
- ❖ China
- ❖ Republic of Korea

Southeast Asia:

- ❖ Indonesia
- ❖ Malaysia
- ❖ Philippines
- ❖ Viet Nam
- ❖ Thailand
- ❖ Cambodia

Research Plan/Schedule and expected outputs

September 2011

October 2011

- M&E research framework (round 1)
- *Meeting with UNU-IAS on research framework*

November 2011

- Survey (ver. 1)
- Initiate contacts with NE Asia Partners

December 2011

- *NE Asia workshop (possible location: Yokohama)*
- **Proceedings of workshop (short version)**

January 2012

- M&E research framework (round 2)

February 2012

- Survey (ver. 2)
- Initiate contacts with SE Asia Partners

March 2012

- *SE Asia workshop (possible location: Bangkok)*
- **Proceedings of workshop (short version)**

April 2012

- **Research Report: Country ESD Status Reports; based on findings from workshops**

May 2012

- *Expert Consultation Meeting for review of indicator framework*

June 2012

- **Policy Report on M&E of ESD in East Asia and**

**Thank You
for your time!**

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