

“Capacity Building and Strengthening Institutional Arrangement”

Workshop: “Sustainable Development”

**Environmental education  
for sustainable development**

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# 1. Introduction

Let's start with a question:

**Education for sustainable development is:**

- a) teaching basic reading, writing and arithmetic skills to all?
- b) convincing people why they should not pollute?
- c) developing knowledge, skills and programmes that will end poverty for good?
- d) learning how to make decisions for the good of the whole community?

**Answer: all of the above... and more!**

*(Extract from UNESCO website)*



# 1. Introduction

- If you type “environmental education” (EE) into an internet search engine, you’ll get more than 200 million hits!
- If you type “sustainable development” (SD), you’ll get more than 100 million hits.
- If you search under “education for sustainable development” (ESD), you’ll find close to 60 million entries.

This simple experience highlights the difficulty to find out an objective and universally shared definition of Environmental Education for Sustainable Development, and also shows how topical is the issue today.

However, talking about ‘environmental education for sustainable development’ requires to clarify what we mean for EE and for SD, and, briefly, which is the origin and the story of the evolution from EE to (E)ESD.

## 2. From EE to EESD (from Bangkok to Johannesburg)

**1960...** EE born as a discipline intended to the protection and conservation of natural resources (Conference of Bangkok, 1965)

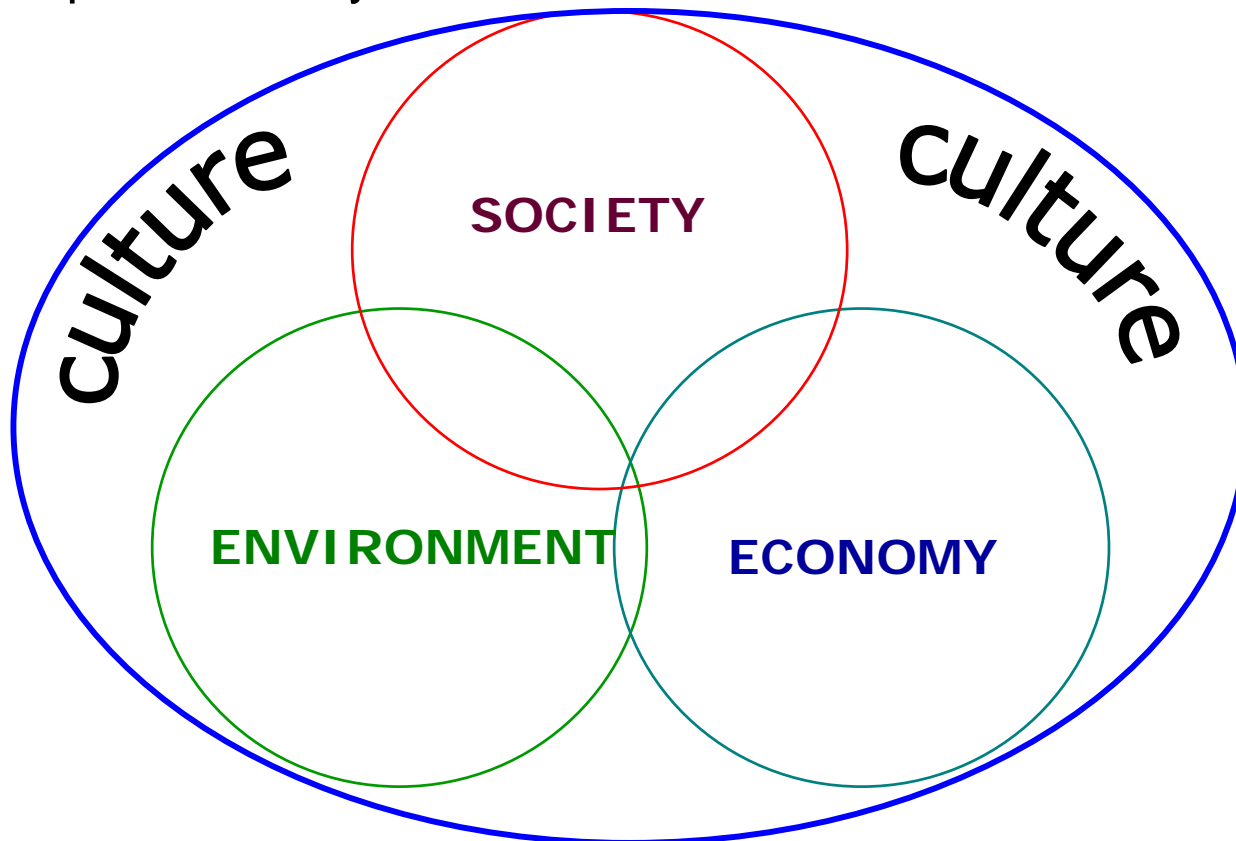
**1970...** the field of application of EE gradually changes as the concept of environment is not limited to nature but embraces all the physical, social and cultural space in which human beings live (ecosystems, interrelationship between biosphere and anthroposphere). The Tbilisi Declaration (1978):

*“Environmental Education is the result of a reorientation and rearticulation of the various disciplines and of various educational experiences (natural sciences, social sciences, arts and letter, etc) providing an integrated perception of the environment”*

**1980...** A more critical vision of the relation between human development and protection of environment begins to circulate (Club of Rome), with the raise of awareness that the natural resources of the earth are not illimited and that they are not equally divided among countries in the world (Bruntland Report: “Our common future”, 1986)

## 2. From E.E. to EESD (from Bangkok to Johannesburg)

**1990...** The “Earth Summit” on Environment and Development (Rio de Janeiro, 1992) launched the official definition of “sustainable development”, based on the integration among economic, social and environmental aspects, that is possible only in the consideration of the cultural context.



## 2. From E.E. to EESD (from Bangkok to Johannesburg)

Agenda XXI – Ch. 36 Promoting Education, public awareness and training:

Reorienting education towards sustainable development

[...] **Education** is critical for promoting sustainable development and improving the capacity of the people to address environment and development issues. [...] Both formal and non-formal education are indispensable **to changing people's attitudes** so that they have the capacity to assess and address their sustainable development concerns. It is also critical for achieving environmental and ethical awareness, **values** and attitudes, skills and behaviour consistent with sustainable development and for effective public participation in decision-making. To be effective, environment and development education [...] should be integrated in all disciplines, and should employ formal and non-formal **methods and effective means of communication**.

Some highlights:

- from “environmental education” to “education for sustainable development”
- from “school education” to “education for all people” in formal and non-formal contexts
- the focus on an education values-oriented (ethical dimension).

## 2. From E.E. to EESD (from Bangkok to Johannesburg)

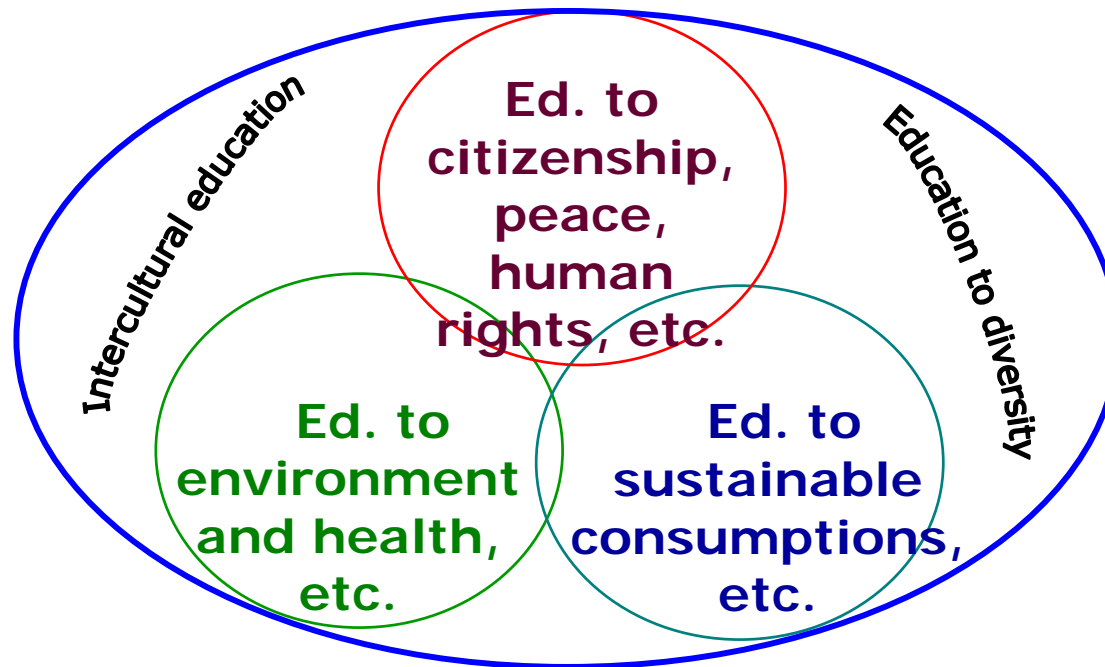
**2000...** In the years between Rio and Johannesburg, the concepts of EE and of SD shift towards the syntetical definition of “*environmental education oriented to sustainable development*”, underlining its function as means to raise citizens’ awareness to environment and their responsible participation in the decision-making processes. (VI U.E. Environm. Action Plan, “*Environment 2010: our future, our choice*” and the “*Memorandum on life-long education and training*”, 2000)

**2002...** The Johannesburg Summit broadened the vision of sustainable development and re-affirmed the previous educational objectives (see also the “*Millennium Development Goals*” and “*Education for All Framework*”).

The Summit proposed the Decade of Education for Sustainable Development for the period 2005 – 2014, that was proclaimed by the United Nations General Assembly in its 57th Session in December 2002.



## 2. From E.E. to EESD (from Bangkok to Johannesburg)



The present step of this process is to consider Environmental Education an essential instrument aimed to develop critical and systemic approach to issues, and to create conditions and experiences that are the basis for change behaviours.

### 3. UNESCO Implementation Scheme for DESD

After the adoption by the UN General Assembly, UNESCO was asked to lead the Decade, by developing a Draft International Implementation Scheme (IIS). The main aspects of this document are:

#### OBJECTIVES

- The primary goal for the DESD is to encourage Governments to integrate principles, values and practices of sustainable development into all aspects of education and learning, in order to favour changes in behaviours that will create a more sustainable future, in terms of environmental protection, economic growth and social equity.
- The subgoals (to be implemented at national level) are:
  - facilitate networking among stakeholders;
  - increase the quality of teaching and learning in ESD;
  - help countries to achieve the MDG through ESD and provide them with opportunities to integrate ESD into education systems.

### 3. UNESCO Implementation Scheme for DESD

#### BACKGROUND OF ESD

- ESD is based on ideals and principles of sustainability, such as:
  - the right to a healthy life in a healthy environment
  - the right to peace and poverty eradication and / or alleviation
  - the right to gender equity
  - and so on...
  
- Chapter 36 of Agenda XXI provides the **4 major thrusts** of ESD, that are:
  - improving **access** to quality basic education
  - **reorienting** existing education programmes
  - developing public understanding and **awareness**
  - providing **training**.

### 3. UNESCO Implementation Scheme for DESD

#### **PARTNERSHIP APPROACH**

➤ IIS emphasizes the importance of partnership in the eventual success of the Decade and outlines how these might contribute at all levels – community, national, regional, and international.

It outlines UNESCO's leadership tasks, and foresees that regions and nations create plans, strategic approaches, and timetables on the basis of the framework provided.

Potential partners are identified at all levels - subnational (local, community), national, regional and international, and from all spheres – governmental, civil society and NGOs, and private.

They should cooperate, according to their specific mission, and according to a preferential “bottom-up approach”.

### 3. UNESCO Implementation Scheme for DESD

Table 3: National-level cooperation

Actors at national level	Working individually to:	Working together as a national ESD task force to:
Education ministry and other relevant ministries	<ul style="list-style-type: none"> <li>▶ provide a national policy framework for ESD</li> <li>▶ budget and mobilize resources</li> <li>▶ support sub-national departments</li> <li>▶ foster public awareness on ESD and SD</li> </ul>	<ul style="list-style-type: none"> <li>▶ debate and recommend ESD policy options which reflect local-level experience and challenges</li> <li>▶ integrate ESD into EFA and UNLD planning in the context of the FFA forum</li> <li>▶ provide a forum for exchange of experience, positive and negative, in ESD</li> <li>▶ identify research issues in ESD and plan cooperative research projects</li> <li>▶ identify capacity-building needs and the actor best placed to meet them</li> <li>▶ develop relevant monitoring indicators for ESD</li> </ul>
NGOs, NGO and civil society networks and alliances	<ul style="list-style-type: none"> <li>▶ facilitate exchange and information sharing among their members about ESD practices and experiences</li> </ul>	
Media groups and agencies	<ul style="list-style-type: none"> <li>▶ integrate ESD and SD awareness building into media strategies</li> </ul>	
Private sector companies and trade associations	<ul style="list-style-type: none"> <li>▶ provide a forum to identify SD challenges they face, and identify necessary learning needs</li> </ul>	

### 3. UNESCO Implementation Scheme for DESD

#### IMPLEMENTATION OF DESD

➤ Moving forward requires a wide range of activities – from preparing media releases to funding proposals; from hosting meetings to producing detailed action frameworks; from staging events to adapting existing curricula.

The global consultation to prepare the IIS led to identifying **seven strategies**, to support stakeholders in planning national and local implementation processes:

- Vision-building and advocacy;
- Consultation and ownership;
- Partnership and networks;
- Capacity-building and training;
- Research and innovation;
- Use of Information and Communication Technologies (ICTs);
- Monitoring and evaluation.

### 3. UNESCO Implementation Scheme for DESD

#### Capacity-building and training

The importance of share skills, competencies, knowledge and activities from different partners involved is particularly underlined, in order to start developing mechanisms for learning from one another.

A special mention in terms of capacity-building and training is reserved to the 60 million teachers and teachers' educators from all over the world, that need to reorient the educational methodologies, contents and materials (tools) towards sustainability, in order to influence young generations.

#### Monitoring and evaluation / 1

The goals of DESD wouldn't be reached if the activities are not accompanied by adequate monitoring and evaluation, by means of identification of suitable and relevant indicators (both qualitative and quantitative) at every level and for each initiative or programme (even if expensive!), to assess their real effectiveness and to measure the progress towards the objectives.

### 3. UNESCO Implementation Scheme for DESD

#### Monitoring and evaluation / 2

In the last days of January, the first meeting of the DESD Monitoring and Evaluation Expert Group was held to track the Decade's progress, with the guidance of a global framework and indicators, established by UNESCO and partners.

Moreover, for the UNECE Countries, three phases for implementation of the regional Strategy are proposed:

1. Phase 1 (by 2007): each country should review its current policies in educational field, identify what it is already done in coherence with the aims of the Decade and develop evaluation methods and indicators.
2. Phase 2 (by 2010): countries should review progress made and revise them, if necessary.
3. Phase 3 (by 2015 and beyond): progress in implementing ESD should be considerable, in terms of relevance of ESD in formal curriculum, training programmes for educators, tools development, media involvement.



### 3. UNESCO Implementation Scheme for DESD

At last, the IIS shows there is a correspondence, an overlapping between the characteristics of ESD and of a “quality education” (EFA + MDG).

#### Quality education

upholds and conveys the ideals of a sustainable world...

views the learner as an individual, community member, and a global citizen...

takes into consideration the social, economic, and environmental contexts of a particular place... is locally relevant

builds knowledge, life skills, perspectives, attitudes and values...

#### Education for Sustainable Development

is based on the principles and values that underlie sustainable development...

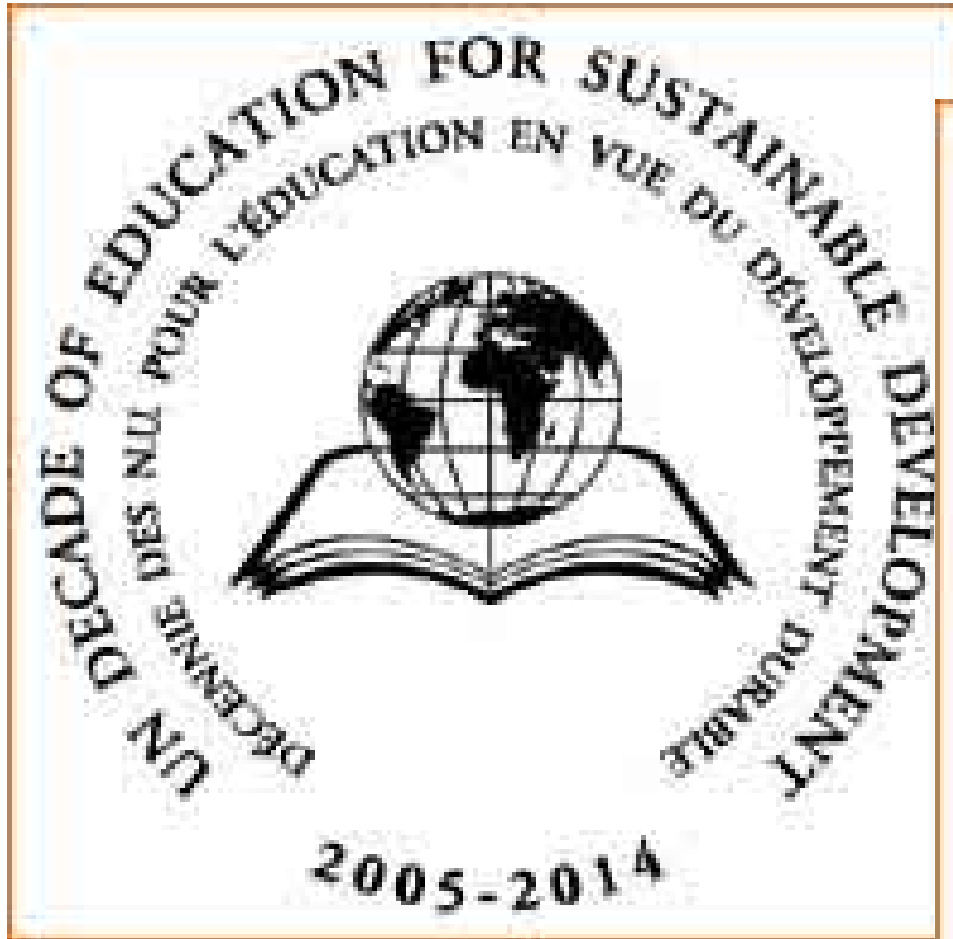
promotes life-long learning ... builds civil capacity for community-based decision-making

is locally relevant, is based on local needs, perceptions and conditions...

is interdisciplinary... uses a variety of pedagogical techniques that promote participatory learning and higher-order thinking skills.

The first goal of ESD is to improve the quality of education at all.

## 4. National activities for DESD (UNESCO Italian Commission)



This is the sculpture “*Il volo*” (“*The flight*”), that was chosen as *logo* of the italian campaign for DESD, with a famous sentence of Martin Luther King (“*I have a dream...*”), that underlines the need to go ahead together in order to win this challenge.



## 4. National activities for DESD (UNESCO Italian Commission)

- The UNESCO National Commissions have the task to promote the implementation of the DESD objectives in each Country that adopted the Implementation Scheme, by means of committing governments, institutions, education bodies, civil and cultural associations.
- In 2005, the Italian National UNESCO Commission, leading organism for DESD, started its activities with the constitution of a large network (the National Committee), to which adhered all the subjects involved, both institutional and non-institutional: from Government (Ministries), to Local Authorities (Regions), Environmental Protection Agencies (the **APAT/ARPA/APPA System**), environmental and consumers' associations, networks of schools and training entities, universities, NGOs, etc.
- All these subjects, after have met for many times, finally agreed with a Document (Guidelines) called: *“Sharing engagement of persons and organisations for the DESD”*.

## 4. National activities for DESD (UNESCO Italian Commission)

➤ The main goals of the national campaign for DESD, listed in this Document, are:

- to ask political institutions to put on their agenda the programme of DESD by sharing and supporting its objectives;
- to organise workshops and meetings with social and cultural actors and stakeholders, in order to raise their awareness on these issues so that they will promote sustainable models of life among consumers and public;
- to promote initiatives specifically addressed to the education field (schools, universities, teachers' and life long training centres etc.), also with the support of ad hoc materials;
- to define a general framework for the initiatives and activities to be carried out, mainly by choosing a yearly theme to which dedicate a National Week;
- to gather and to spread the 'best practices', by means of Reports and of a dedicated official website ([www.unescodes.it](http://www.unescodes.it)).

## 4. National activities for DESD (UNESCO Italian Commission)

### ➤ National Week of the Education to Sustainable Development

The first edition of the National Week of ESD has been dedicated to the theme of Sustainable Energy. During this week, that was held in the last month of november, over 250 events (seminars, local exhibitions and initiatives, information points) were organised in all italian regions, in order to raise awareness on the crucial issues of energy saving and the use of the renewables.

### ➤ National Conference of Education to Sustainable Energy

At the national level, the central event of the Week was the 1<sup>st</sup> National Conference, organised in the *Aula Magna* of the University “Roma 3” in Rome.

This was conceived as a great call for institutional and non-institutional representatives (Ministries, but also trade and labor unions, environmental organisations, etc.) to discuss about the perspectives (economic and also occupational ones) of the energetic sector in our Country (respect of the Kyoto Protocol, public incentives for the use of renewable energy sources, etc.).

## 4. National activities for DESD (UNESCO Italian Commission)

### ➤ Other initiatives to raise awareness

An example of the initiatives linked to the National Week is the campaign *“If you turn off, you’ll save energy and money!”*, promoted by some Environmental Agencies of the APAT / ARPA / APPA System, having the aim to reduce energy consumption in the local public administrations by adopting eco-friendly behaviours among workers (e.g. turn off lights and p.c. in the offices before going out, turn down the heating, use recycled paper, don’t use the lift, etc.) and by measuring the energy savings realized during the week.

This initiative, that produced a significant reduction (about 20%) in energy consumptions, is also linked to the National Day of Energy Saving that is celebrated every year on February 16<sup>th</sup>, (anniversary of the Kyoto Protocol’s come into force) and is spread by a radio channel.





**2**  
**Caterpillar**  
**M'ILLUMINO DI MENO**  
**ASCOLTA**  
**MUSICA**  
**FOTO**  
**VIDEO**  
**FORUM**  
**SONO IO?**  
**CULT**  
**NEL MONDO**  
**SOLETTE**  
**WEBCAM**

**16 FEBBRAIO 2007**  
**GIORNATA DEL RISPARMIO ENERGETICO**

**IL 16 FEBBRAIO, TERZA GIORNATA DEL RISPARMIO ENERGETICO, COLLABORA CON CATERPILLAR PER ABBATTERE GLI SPRECHI ENERGETICI.**

**ADERISCI ! COMPILANDO IL NOSTRO FORM**

**ADERISCO !** **L'INIZIATIVA** **PRESS**  
**CHI HA ADERITO** **MATERIALI** **LINK**

**M'ILLUMINO DI MENO 2007**  
**Giornata Internazionale del Risparmio Energetico**  
**Buone abitudini per il 16 febbraio (e anche dopo!)**

1. spegnere le luci quando non servono
2. spegnere e non lasciare in stand by gli apparecchi elettronici
3. sbrinare frequentemente il frigorifero, tenere la serpentina pulita e distanziata dal muro in modo che possa circolare l'aria
4. mettere il coperchio sulla pentola quando si bolle l'acqua ed evitare sempre che la fiamma sia più ampia del fondo della pentola
5. se si ha troppo caldo abbassare i termosifoni invece di aprire le finestre
6. ridurre gli spifferi degli infissi riempiendoli di materiale che non lascia passare aria
7. utilizzare le tende per creare intercapedini davanti ai vetri, gli infissi, le porte esterne
8. non lasciare tende chiuse davanti ai termosifoni
9. inserire apposite pellicole isolanti e riflettenti tra i muri esterni e i termosifoni
10. utilizzare l'automobile il meno possibile e se necessario condividerla con chi fa lo

Homepage of the 3<sup>rd</sup> National Day of Energy Saving, with a list of 10 good habits.



## 5. APAT activities related to EESD

APAT, together with the Regional and Provincial Environmental Agencies (ARPA / APPA) is partner in the National Committee for DESD implementation led by UNESCO, by subscribing the “*Sharing engagement*” and by promoting its own initiatives and projects that meet the values and the objectives of DESD.

Namely, through the Working Group C.I.F.E. of the Environmental Agencies’ System, two main initiatives are carried out:

- the “**Laboratory Training-Course of Environmental Education for Sustainability**”, aimed to improve understanding and skills in Education for Sustainable Development related themes;
- the definition of “**Environmental Education Indicators**” for the APAT Environmental Data Yearbook, aimed to provide information on the improvement of activities of environmental education oriented to sustainability.

## 5. APAT activities related to EESD

### Laboratory Training-Course of Environmental Education for Sustainability

This initiative is aimed:

- to identify some relevant crossing issues in Education for Sustainable Development,
- to provide responsables and operators of environmental education local offices (namely of the Environmental Agencies' System) with basic technical and methodological training,
- to enhance their educational skills and competencies
- to share ideas for future common projects.

The Course is structured in **7 Modules**, each of them organized in a different region, according to the local relevance of the topics, in order to highlight also the 'best practices' carried out by the hosting Agencies.

## Laboratory Training-Course of Environmental Education for Sustainability

MODULES	ORGANISING AGENCIES	HOST AGENCY / CITY	DATE	DURATION (days)
I Environmental Education for Sustainable Development	APAT	APAT (Roma)	20-21/09/2005	✗ 2
II. Environment Health Education	Arpa E. Romagna Arpa Lazio	Arpa Emilia Romagna (Modena)	29-30/11/2005	✗ 2
III. Quality of Environmental Education. Experiences and debate	Arpa Liguria Arpa Sicilia Arpa Toscana Arpa Veneto	Arpa Toscana (Firenze)	16-17 Febbraio 2006	✗ 2
IV. Education to biodiversity	Arpa Veneto	Arpa Veneto	30 – 31 maggio 2006	✗ 2
V. Climate change	Arpa Piemonte	Arpa Piemonte	20-21/09/2006	✗ 2
VI. Education to landscape protection	Arpa Trento	Arpa Trento (Levico Terme)	23-24/04/2007	2
VII. The strategic planning into urban sustainability programmes	Arpa E. Romagna Arpa Lazio Arpa Marche	Arpa Lazio	<i>(to be defined)</i>	2

### Updated Timetable

## 5. APAT activities related to EESD

### **Environmental Education Indicators for APAT Environmental Data Yearbook**

The publication of the Environmental Data Yearbook is one of the main institutional tasks of APAT.

In this Report, the national environmental situation is represented, in order to provide citizens with data and information on the quality of the environment at national and local level.

The Yearbook is structured in 4 Sections, containing over than 250 indicators, according to the DPSIR model.

The chapter “Promotion and diffusion of the environmental culture” reports 10 indicators, classified as ‘Responses indicators’, aimed to describe the state and the trend of the activities of information, communication, capacity building and environmental education. The indicators are the outcome of the data collected from all the Environmental Agencies by means of periodic questionnaires.

## 5. APAT activities related to EESD

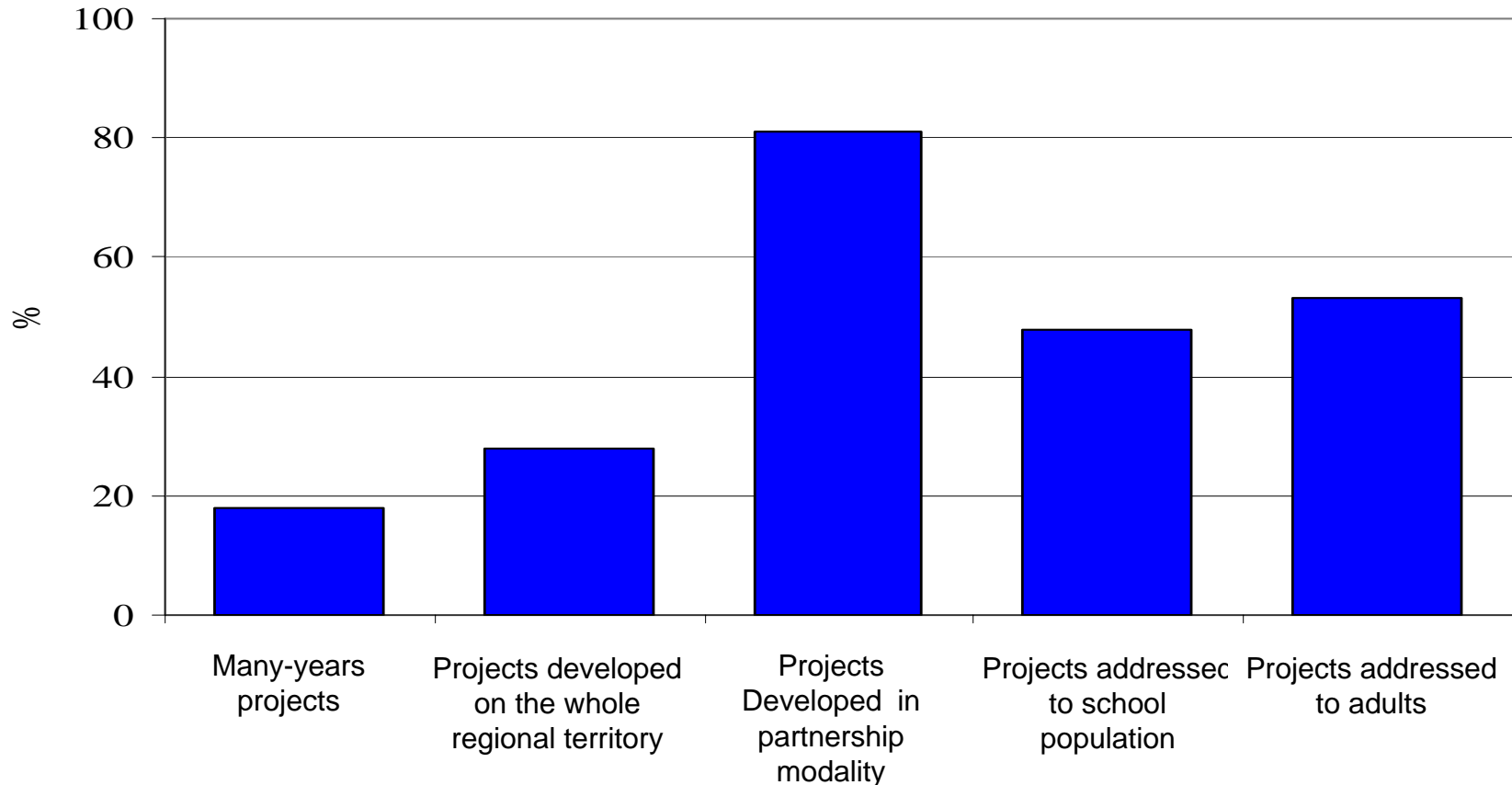
### Environmental Education Indicators for APAT Environmental Data Yearbook

In particular, for the Thematic Area of Environmental Education, the following two indicators have been chosen, aimed to evaluate the effective capacity of the Environmental Institutions to improve knowledge and awareness in citizenship through the activities performed.

<b>Name of the indicator</b>	<b>Objectives</b>
<b>ENVIRONMENTAL EDUCATION'S SUPPLY</b>	To describe the state of the art of the initiatives, programmes and projects of e.e. (number / typology) realized over an year
<b>WORKING CAPACITY AND INTEGRATION IN THE LOCAL NETWORK</b>	Provide a synthetical representation of the operative methodologies adopted by subjects in their local educational network (typically regional level).

## 5. APAT activities related to EESD

### Environmental Education Indicators for APAT Environmental Data Yearbook



**Graphical representation of the indicator “Environmental Education’s Supply”**

## References

[www.unesco.org/education/desd](http://www.unesco.org/education/desd)

[www.unescodes.it](http://www.unescodes.it)