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United Nations Decade of Education for Sustainable Development
(2005-2014)

International Implementation Scheme

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**United Nations Decade of Education for Sustainable
Development (2005-2014):
International Implementation Scheme**

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I. Objective of the International Implementation Scheme

In December 2002, the United Nations General Assembly (UNGA) adopted resolution 57/254 to put in place a United Nations Decade of Education for Sustainable Development (DESD), spanning from 2005 to 2014. UNESCO was requested to lead the Decade and develop a draft International Implementation Scheme (IIS) for the Decade. This document fulfils the request for an IIS and is the result of extensive consultations with United Nations agencies, national governments, civil society organizations and NGOs, experts and specialists.

Starting with an initial consultation with United Nations partners in September 2003, UNESCO shared a framework for the IIS worldwide. More than two thousand contributions were received, many of these representing the consolidation of opinions of hundreds. The draft Scheme was widely circulated and eventually reviewed by leading academics and experts in the field, before it was submitted, in July 2004, to the High-Level Panel on the Decade, which advises the Director-General of UNESCO on this topic. It was presented at the 59th session of the United Nations General Assembly (New York, 18-19 October 2004), and then at the 171st session of the UNESCO Executive Board (Paris, April 2005).

The IIS sets out a broad framework for all partners to contribute to the Decade. It is a strategic document that focuses primarily on what nations have committed to achieve through the DESD and under UNESCO's leadership. It summarizes the goals and objectives of the Decade, and its relationship to other key education movements. It 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. The IIS also lists key milestones for the DESD. It then lays out seven strategies for moving forward with ESD and describes how this wide range of partners can develop contributions based on their particular contexts. Those not familiar with the background of the Decade or Education for Sustainable Development are referred to Annex I of this document, which provides a succinct summary of key trends as well as other important background information.

The IIS should foster collective ownership of the DESD. The IIS describes pathways forward in the hope that it will stimulate imagination, creativity, and energy to make the DESD a success. It is envisaged that regions and nations will create plans, strategic approaches, and timetables on the basis of the framework provided by this International Implementation Scheme.

II. The United Nations Decade of Education for Sustainable Development

A. Goals of the United Nations Decade of Education for Sustainable Development

The United Nations Decade of Education for Sustainable Development is a complex and far-reaching 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 educational effort will encourage changes 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.

The basic vision of the DESD is a world where everyone has the opportunity to benefit from education and learn the values, behaviour and lifestyles required for a sustainable future and for positive societal transformation.

The primary goal for the DESD is laid out in the United Nations General Assembly resolutions 59/237 in which the General Assembly "encourages Governments to consider the inclusion … of measures to implement the Decade in their respective education systems and strategies and, where appropriate, national development plans". Furthermore, the General Assembly "invites Governments to promote public awareness of and wider participation in the Decade, *inter alia*, through cooperation with and initiatives engaging civil society and other relevant stakeholders, especially at the beginning of the Decade".

Within the broad goals established by the General Assembly, subgoals for the DESD at the national level are to:

- 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.

The objectives for the DESD are to:

- 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 millennium development goals through ESD efforts;
- provide countries with new opportunities to incorporate ESD into education reform efforts.

Recognizing that how sustainable development, and related educational processes are attained will vary from context to context, these objectives will share the key tasks for UNESCO to perform in support of Member States through its role as lead agency of the Decade. UNESCO's leadership role and,

in fact, the task of Member States are also defined by the four major thrusts of education for sustainable development:

- improving access to quality basic education;
- reorienting existing education programmes;
- developing public understanding and awareness.
- providing training.[1]

To set the stage for understanding the IIS, three areas require brief discussion. These are sustainability issues that need to be included in educational activities, the role of values in ESD, and the linkages between the Decade and other educational initiatives.

B. Sustainability issues

ESD prepares people of all walks of life to plan for, cope with, and find solutions for issues that threaten the sustainability of our planet. Many of these key issues were identified at the Earth Summit in Rio de Janeiro and further reaffirmed by the World Summit on Sustainable Development (WSSD) in Johannesburg, South Africa, in 2002. Understanding and addressing these global issues of sustainability that affect individual nations and communities are at the heart of ESD. These issues come from the three spheres of sustainable development – environment, society and economy. Environmental issues like water and waste affect every nation, as do social issues like employment, human rights, gender equity, peace and human security. Every country also has to address economic issues such as poverty reduction and corporate responsibility and accountability. Major issues that have grabbed global attention such as HIV/AIDS, migration, climate change and urbanization involve more than one sphere of sustainability. Such issues are highly complex and will require broad and sophisticated educational strategies for this and the next generation of leaders and citizens to find solutions.

Educating to deal with complex issues that threaten planetary sustainability is the challenge of ESD. Education reform alone will not accomplish this. It will take a broad and deep effort from many sectors of society.

C. Values

The ways countries decide how to approach sustainable development will be closely linked to the values held in these societies, for it is these values that define how personal decisions are made and how national legislation is written. Understanding values is an essential part of understanding an individual's own worldview and that of other peoples. Understanding your own values, the values of the society you live in, and the values of others around the world is a central part of educating for a sustainable future. Each nation, cultural group, and individual must learn the skills of recognizing their own values and assessing these values in the context of sustainability.

United Nations history carries with it a host of values related to human dignity and rights, equity, and care for the environment. Sustainable

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[1]   These are discussed in greater detail in the last part of this IIS.

development takes these values a step further and extends them between generations. With sustainable development comes valuing biodiversity and conservation along with human diversity, inclusivity, and participation. In the economic realm, some embrace sufficiency for all and others equity of economic opportunity. Which values to teach and learn in each ESD programme is a matter for discussion. The goal is to create a locally relevant and culturally appropriate values component to ESD that is informed by the principles and values inherent in sustainable development.

D. Linking the Decade to other international educational priorities

The DESD starts at a time when a number of other, related international initiatives are in place, and the GA resolution asked UNESCO to ensure "additive" linkages among them. Thus, it is essential to situate the Decade with respect to efforts in which the international community is already engaged. In particular the Millennium Development Goal (MDG) process, the Education for All (EFA) movement, and the United Nations Literacy Decade (UNLD) have close links with aspects of the DESD. All agree on the central importance of basic education and the need to extend and enhance its quality.

- The eight goals and 18 targets of the Millennium Development Goals constitute an over-arching framework for international development cooperation, agreed at the level of the United Nations. The provision of primary education and gender equality in education are the two areas where the MDGs overlap with the EFA agenda – other aspects of basic education, such as literacy, quality and non-formal education, are implied as conditions for the realization of the MDGs.

- The six EFA goals are concerned with extending the reach of basic education to every child and adult and with the nature of such provision – it should be available to both female and male learners of all ages, offering relevant learning and life skills and striving for ever-increasing quality. While basic education is clearly intended to have a positive impact on the quality of life and on deprivation, the nature of this impact – and the content of education, which might be most appropriate to achieve it – is a broader question. In other words, the role and provision of education are central, and this drives the EFA agenda forward; the underlying purpose of education is either assumed or considered to be a matter for wider socio-political debate.

- The UNLD situates itself within the EFA movement, where literacy is a thread through all the six goals and a condition for their attainment. As a key instrument of learning, it must be factored into the realization of all forms and stages of education. There is no meaningful access to structured learning opportunities without close attention to the acquisition of literacy of sufficient quality. In some respects, the UNLD goes beyond the educational process, by demonstrating strategic links to other aspects of life – the acquisition and uses of literacy have an impact on mother and child health, on fertility rates, on income levels, as well as on less tangible effects such as an increase in self-confidence, initiative, participatory citizenship and cultural self-esteem.

What is the place of the DESD in relation to these significant international initiatives? It is clear that the concept of sustainable development goes beyond

education and touches upon all aspects of the social and institutional fabric. In this sense, sustainable development provides a way of articulating the overall social project and aim of development, alongside other over-arching concepts such as peace and human rights and economic viability. Education for sustainable development focuses therefore on underlying principles and values conveyed through education and is more concerned than the other three initiatives with the content and purpose of education, and, more broadly, of learning of all kinds. Conceiving and designing ESD also challenges all forms of educational provision to adopt practices and approaches, which foster the values of sustainable development. Thus, ESD also addresses pedagogical processes, the validation of knowledge and the functioning of education institutions.

To summarize:

- the MDGs provide a set of tangible and measurable development goals within which education is a significant input and indicator;

- EFA focuses on ways of providing quality educational opportunities to everyone,

- the UNLD concentrates on promoting the key learning tool for all forms of structured learning; and

- the DESD promotes a set of underlying values, relational processes and behavioural outcomes, which should characterize learning in all circumstances.

III. Responsibility for the Decade – a partnership/alliance approach

With the announcement of the Decade in December 2002, many individuals, organizations, and networks from the educational community stepped forward with enthusiasm and optimism to volunteer to work on the DESD. With them they brought expertise, time, energy and resources – including financial resources. The resources assembled by governments and stakeholders will largely affect the success of national responses to the DESD. The most crucial element to the Decade's success is the scope of the human resources brought together, including these enthusiastic volunteers and others who have much to offer, but have not stepped forward yet.

As the agency designated to take the lead in coordinating the Decade, UNESCO has to build broad ownership at the very start, through a clear articulation of the value added by each partner. It also has to build momentum and participation and sustain the same throughout the Decade. The section below provides the partnership framework of the Decade, which also serves as a means for identifying the full range of partners that will work together and with UNESCO to realize the aims of the Decade. This is followed by a summary of how UNESCO will lead the Decade.

A. Partners

As Table 1 shows, there are partners at all levels – subnational (local, community), national, regional and international, and from all spheres –

governmental, civil society and NGOs, and private. The list will be added to or modified during the process of implementation of the Decade.

Table 1: A sample list of potential partners in DESD

	Governmental	**Civil society & NGOs**	**Private**
Subnational	‣ provincial/state/district departments of education and development sectors ‣ municipal authorities ‣ schools, adult learning programmes	‣ Community-based organisations ‣ local sections of NGOs ‣ faith-based groups ‣ village development committees ‣ adult learning groups	‣ local business ‣ clans and families ‣ individuals
National	‣ national government departments of education and development sectors ‣ universities and research institutes ‣ EFA networks	‣ national NGOs and NGO coalitions ‣ branches of international NGOs ‣ faith-based organisations ‣ teachers' associations and trade unions	‣ private sector businesses ‣ business associations
Regional	‣ regional inter-governmental groupings ‣ regional EFA networks	‣ regional CS and NGO groupings and networks	‣ regional business associations
International	‣ CSD ‣ EFA High-Level and Working Groups ‣ UNDG member agencies ‣ UN agencies and Bretton Woods institutions ‣ Millennium Project Task Forces ‣ official/semi-official watchdog bodies	‣ sustainable development education networks ‣ NGO UNESCO Liaison Committee ‣ CCNGO/EFA ‣ Global Campaign for Education ‣ international environmental NGOs	‣ international associations of businesses (eg in the extractive sector) ‣ TNCs (eg media corporations)

With such an enormous and diverse group of potential partners, there is a need to focus on networks and alliances. Participation, ownership and commitment will build the Decade's momentum. How can this be promoted? What mechanisms can be identified to structure the necessary communication and dialogue? Leadership and inputs at all levels are necessary to initiate such processes.

This section makes several proposals in response to these questions, beginning with a focus on mechanisms which will give voice to the local level –

a "bottom-up approach". Tables 2 through 5 provide suggestions at the subnational (community), national, regional and international levels.

Subnational (community) level

The term "community" is used here in a broad sense to indicate those who share a common milieu and therefore face an interlocking set of challenges in sustainable development. Table 2 illustrates examples in terms of action and broader cooperation.

Table 2: Subnational (community)-level cooperation

Actors at community level	Working individually to:	Cooperating in ad hoc or formal local groupings to:
▸ Community-based institutions and organisations such as schools, school support groups, cultural associations, youth organisations, cooperatives, faith-based groupings, self-help groups, development committees	▸ integrate ESD into regular learning activities and programmes ▸ identify and implement learning strategies	▸ identify local sustainable development challenges ▸ integrate local knowledge and skills into ESD ▸ exchange ESD experiences and learn lessons for better practice

National level

The Decade exists as a result of the requests of national governments both within the United Nations General Assembly and at UNESCO. Strong support for ESD at the United Nations Commission for Sustainable Development (CSD) meetings shows that governments from around the world recognize the important roles of education, public awareness, and training for sustainable development. Making the DESD a success, however, will depend largely upon actions taken by governments within their own countries. While the IIS does not suggest that national DESD plans are limited to government ministries, these government departments do have a major role to play in order to ensure the anticipated outcomes.

It is clear that input and leadership will be required to establish and initiate such processes. Input can be provided as governments and civil society networks distribute, in appropriately modified form for national circumstances, the guidance materials produced internationally – their principal emphasis will be how to generate local debate and identify locally relevant issues. Government departments at local level as well as civil society organizations could give leadership in forming ad hoc groupings. Table 3 illustrates many ways in which such important input and leadership can be provided. However, the importance of locally relevant action in ESD means that no one pattern can or should be mandated.

Table 3: National-level cooperation

Actors at national level	Working individually to:	Working together as an national ESD task force to:
Education ministry and other relevant ministries	▶ provide a national policy framework for ESD ▶ budget and mobilise resources ▶ support sub-national departments ▶ foster public awareness on ESD and SD	▶ debate and recommend ESD policy options which reflect local-level experience and challenges ▶ integrate ESD into EFA and UNLD planning in the context of the EFA forum
NGOs, NGO and civil society networks and alliances	▶ facilitate exchange and information sharing among their members about ESD practices and experiences	▶ provide a forum for exchange of experience, positive and negative, in ESD
Media groups and agencies	▶ integrate ESD and SD awareness building into media strategies	▶ identify research issues in ESD and plan cooperative research projects
Private sector companies and trade associations	▶ provide a forum to identify SD challenges they face, and identify necessary learning needs	▶ identify capacity-building needs and the actor best placed to meet them ▶ develop relevant monitoring indicators for ESD

At national level, the objectives of an integrated approach to the DESD from government ministries at all levels are to:

- declare ESD a priority and where possible to incorporate it into national sustainable development plans and national education plans;

- align policy, mandates, and other such frameworks to support ESD;

- enable widespread awareness and understanding of education for sustainable development;

- assist educators and trainers with the relevant knowledge and information to address ESD;

- promote research and development for ESD;

- build cooperative networks of human and financial capital.

Building a national plan is an important initial step in creating a national response to the DESD. One approach includes building inter-ministerial (health, employment, environment, education, finance, statistics, planning, and resource management, etc.) teams or committees. In this approach, the whole government addresses issues for a more sustainable future and education for sustainable development. This approach is desirable because education for sustainable development is the responsibility of all ministries, not simply one or two ministries, such as education or environment.

Regional level

Wider regional groupings for ESD will be useful coordinating bodies also. However, since EFA regional forums exist (or at least EFA regional meetings take place), it would be best to organize ESD regional groups in conjunction with them. Since ESD draws potentially on a wider range of actors/sectors, this would have the advantage of including such participants in the EFA meeting. (Indeed, cross-sectoral links are a key concern of EFA). Examples of regional processes are illustrated in Table 4.

Table 4: Regional level cooperation

Actors at regional level	Working individually to:	Working together as a regional ESD group to:
National government representatives	(see national level)	▶ conduct regional consultations on priorities for DESD ▶ share policies, practices, knowledge and progress ▶ identify common challenges ▶ learn from diverse strategies ▶ forge consensus on regional challenges and action ▶ organise cross-national training and capacity-building
Regional intergovernmental organisations	▶ support national-level policy-making ▶ foster exchange of experience and information	
Regional civil society and NGO networks, coalitions and alliances	▶ foster exchange and learning among member networks and organisations	
Regional media groupings	▶ share media strategies for SD and ESD	
Regional private sector associations	▶ promote cooperation of private sector with other actors in ESD	
Regional representatives of international agencies	▶ learn and communicate common lessons from cross-national experience ▶ facilitate cross-national exchange on ESD	
Regional representatives of bilateral cooperation	▶ assess ways to support national and regional ESD initiatives	

United Nations Regions are also working on Decade efforts in a collaborative manner. For example, the Asia-Pacific region held a major planning meeting in Bangkok in 2004 and held a regional launch of the Decade in Nagoya, Japan in June 2005. The United Nations Economic Commission for Europe (UNECE) has been working on the DESD for several years and held its regional launch of the Decade in Lithuania, in March of 2005. The UNECE region has the following as the aim of their implementation strategy:

> "The aim of this Strategy is to encourage UNECE member States to develop and incorporate ESD into their formal education systems, in all relevant subjects, and in non-formal and informal education."

The Latin America and Caribbean Region (LAC) has developed its Regional Plan and the other United Nations Regions are under way. These United Nations Regional Strategies take into account the overarching goals of the Decade and build regionally relevant approaches to address the realities of needs, priorities, and resources in their respective regions.

The IIS encourages all regions to assemble representatives of every nation in the region and other appropriate stakeholders to not only prepare a strategy for the DESD but to also be a catalyst in its implementation. A Regional Strategy could include a general plan of action, aims and objectives, key themes or priorities for the region, expected outcomes, mechanisms for coordination and cooperation, roles and responsibilities, avenues for monitoring and evaluation, and resources – both financial and human. The Regional Strategy could also include provisions for revision throughout the Decade.

International level

There are already several forums where ESD issues can and should be prominently and regularly on the agenda. For example, the Commission for Sustainable Development (CSD), relevant conferences of all United Nations agencies, programmes and organizations, NGO networks and various EFA and literacy meetings. These are depicted in Table 5.

Table 5: International cooperation

Actors at international level	Working individually to:	Working together in various forums to:
International Ad hoc Working Group	▶ gather information on developments in ESD and emerging priorities ▶ promoting DESD	▶ advise UNESCO on developments and emerging priorities in ESD ▶ assist UNESCO in forming partnerships and developing projects in support of DESD
Intergovernmental agencies (United Nations and others)	▶ contribute to Inter-Agency Task Force ▶ integrate ESD planning into relevant work plans and initiatives ▶ participate in international and regional forums	▶ keep ESD high on the CSD agenda ▶ mobilize political will and strengthen mutual commitment, through CSD, or an Inter-Agency Task Force

UNESCO[2] (DESD Lead Agency)	▶ promotion and capacity-building for ESD and DESD within and across UNESCO sectors ▶ advocacy and communication with international community ▶ building partnerships and collective momentum	▶ integrate ESD into EFA agendas (Monitoring Report, High-Level and Working Groups) ▶ foster global exchange of practice, policy and progress ▶ organize international, regional and subregional capacity-building workshops, and conferences to advance DESD and ESD
Civil society and NGO networks	▶ promote interregional exchange and learning ▶ inform members of ESD developments	
Bilateral and multilateral development agencies	▶ integrate ESD into programmes and budgets ▶ promote research in ESD	

Keeping with the principles of sustainability, stakeholders of all varieties will be invited to participate in a transparent process to formulate each nation's response. Stakeholders of all kinds have the right to take part in the Decade from the initial stages of visioning to implementation. The organizers of the Decade, whether appointed by a government or hired by a national committee, have the responsibility to ensure that stakeholders from majority and minority groups alike are invited to join the public participation processes. The organizers also have the responsibility to make the planning process inclusive, democratic, and transparent, not secretive. It is the organizers responsibility to report back to stakeholders through regular reports. The reports should reflect stakeholders' inputs and opinions, acknowledging that they were heard and their efforts validated. Through ongoing stakeholder participation, energy and enthusiasm for ESD will continue through the Decade and beyond 2014.

B. UNESCO's leadership role

UNESCO's role as lead of the DESD will be fully in line with UNESCO's functions as laboratory of ideas, standard-setter, clearing house, capacity-builder and promoter of international cooperation. UNESCO will be proactive, and all of the parts of the Organization will work together in an intersectoral manner, to demonstrate the strong leadership and coordination role at international level that UNESCO can and will play to ensure efficiency and success to the Decade. The Organization will use its DESD coordination role to:

- catalyse new partnerships with the private sector, with youth, and with media groups;
- encourage monitoring and evaluation;
- encourage a research agenda and serve as forum for relevant research on ESD;

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[2]   See following section for more details on UNESCO's role.

- serve as forum for bringing together important stakeholders in the Decade such as: representatives of key multinationals, faith-based institutions, youth associations, indigenous people, etc.;
- share good ESD practices;
- link Member States that have put in place ESD curricula, policies, research, etc., with those Member States that are requesting help;
- convene flexible working groups on particular topics; and
- fulfil its strategic role with regard to ESD.

IV. Key milestones

The Decade is a commitment that will be implemented by Member States according to their priorities and approaches. It also represents a common understanding, as outlined in the relevant GA resolutions, to work towards common goals and objectives. Thus, it is important that some common milestones be identified that can be addressed by all actors. These include:

- clearly identifiable plans and/or activities in place in Member States;
- identified focal points in Member States with reporting responsibilities;
- regional plans or strategies. These may also be present at subregional levels;
- indicators of progress and mechanisms for monitoring their achievement;
- identified sources for technical assistance and examples of good practice;
- information sharing on relevant research, development and innovation;
- modalities for fostering partnerships;
- provision of guidance in key areas;
- mid-Decade and end-of-Decade reports to the GA.

UNESCO, in its international coordination role, will work with all partners to develop means and timelines (where appropriate) for the above.

V. Implementing the United Nations Decade of Education for Sustainable Development

This section focuses on how nations, groups and individuals can undertake their appropriate roles in being actors in the Decade by contributing to the milestones listed above. It addresses the Decade's implementation strategies, examples of applying them, and infrastructure and resources for the Decade.

A. Seven strategies for moving forward

The global consultation to prepare the International Implementation Scheme led to identifying the following seven strategies as essential for moving forward with creating regional, national, and sub-national implementation strategies and plans. All seven should be thoughtfully incorporated into the initial process to create an implementation plan, and again all seven should be part of any

implementation plan. Through incorporating these strategies, such as public consultation, organizers will discover that many educational programmes related to education reform, corporate training, and public information campaigns already exist. The DESD is in part about integrating and coordinating the activities from these various existing efforts in the three spheres of sustainable development and the four thrusts into the overall ESD plan.

Moving forward will require 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. As most countries' DESD action plans will involve voluntary participation, the need for coordination and follow-through will be crucial. UNESCO has produced a more detailed list of suggestions titled "Guidance for the Preparation of National Launches and Activities of the United Nations Decade of Education for Sustainable Development" that can be found on the UNESCO website (www.unesco.org/education/desd) to assist in the early stages of planning national or local implementation strategies.

While the range of activities will vary widely, stakeholders can apply the following seven strategies both in their own institutional frameworks and in the networks and alliances in which they function:

- 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.

1. Vision-building and advocacy

In order to create ESD programmes, people must envision what it means to live within environmental limits, to interact in peaceable, equitable, and just ways, and work sustainably. Building visions of a more sustainable world enables ESD to take root in local communities. ESD efforts can capitalize on the vision-building that has already been undertaken in developing local Agenda 21s in many countries and communities. Most importantly, awareness should result in an understanding that the actions of an individual or a group can affect the lives of others and the social, economic, and environmental situations locally and abroad.

Beyond envisioning a sustainable future, the success of the DESD requires widespread advocacy to promote ESD. Advocacy should take place at all levels and involve all stakeholders. Governments and civil society should maintain a permanent dialogue in which issues are aired and where common agendas are forged through ongoing conversation, debate, and mutual learning. Because of its broad and deep impact, the media has a very important role to play in advocating for a more sustainable future. Media can share information and knowledge thus raising public awareness. The media can also change

attitudes, mobilize support, and in the end alter policies. The media holds a pivotal advocacy position for ESD.

2. Consultation and ownership

An international decade provides the opportunity to develop worldwide momentum in ESD; however, such momentum will be built and maintained to the extent to which stakeholders at every level create and own the vision for ESD. Ownership by stakeholders depends on consultation and wide participation in visioning, policy formulation, planning, and implementing. Governments have a particular responsibility to initiate public participation processes and establish forums for hearing a wide variety of opinions from all stakeholders. Public participation not only improves the quality of governmental decisions, but also effectively resolves conflict among competing interests, builds trust in institutions, and educates and informs the public. Consultation should include:

- transparent and widely advertised processes of public participation and decision-making.
- processes to solicit input from civil society and private sector stakeholders and to incorporate their responses and desires into national plans and initiatives;
- orderly debate and committee work;
- ongoing contact with stakeholders involved in the visioning and other processes and providing progress reports regularly;
- timely publication of government reports, policy proposals and budgetary provisions;
- Public awareness campaigns that invite feedback and comment;
- Commissioned relevant research and its transparent use in evidence-based policy-making.

These processes apply at national and sub-national levels. Similar consultation mechanisms are used both at regional and international levels.

3. Partnership and networks

Education for sustainable development is fundamentally cross-sectoral and engages a wide variety of institutions. The effectiveness of the DESD will depend on the strength and inclusiveness of the partnerships, networks, and alliances that develop among stakeholders at all levels. From the outset, DESD partners must look outward, seeking to make connections with initiatives, programmes, groups, and networks to promote, plan, and implement ESD. Particular attention must be paid to connecting national governments with their populations because of their central coordinating role and ability to allocate resources. Civil society networks with their grass-roots connections can enable ESD messages to fan out to local levels and to inform formal mechanisms. The Decade will be more successful if partners build on existing networks and projects, building synergy and cooperation.

The diversity of perspectives represented by partners means that there will be multiple entry points for participation in the Decade; where one comes in

from an environmental perspective, another may be concerned with sustainable economic growth and yet another with sociocultural perspectives. The added value of the Decade is that it recognizes that these perspectives are linked and it provides a place where these interests can collectively shape the common endeavour of ESD.

A key aspect of partnerships and networking will be the regular and systematic exchange of experience and information with regard to ESD. This will be an essential feature of the coordination of the Decade at each level, and particularly at regional and international levels. Knowing what others are doing around the world is a significant source of learning and innovation, and frequently an encouragement and motivational force to persevere in the long-term.

4. Capacity-building and training

DESD will require a variety of capacities. The partners and networks involved in the effort have the necessary skills and knowledge to make the Decade a success; it is a matter of sharing them effectively. Partners from a variety of fields that contribute to ESD (e.g., environmental education, population education and consumer education) have expertise in all the capacity-building skills (e.g. strategic planning, networking, materials development and evaluation) that ESD players need, and the Decade provides an opportunity for developing mechanisms for learning from one another.

One major group that is worthy of special mention in terms of capacity-building and training are teacher educators along with pre-service and in-service teachers. Through many contact hours in the classroom, the world's 60 million teachers mould the knowledge base and worldviews of millions of children. If pre-service and in-service teachers learn to weave ESD issues into the curriculum and to use pedagogical techniques associated with quality ESD, then the next generation will be capable of shaping a more sustainable world.

5. Research, development and innovation

Research and Development. By applying what we already know from educational research and best practices to inform ESD, the educational community can make rapid progress in the initial stages of the Decade and ensure greater quality.

Knowledge societies around the world can provide the content for ESD. Traditionally there is a lag of about 10 or more years for new discoveries to be incorporated into school curricula and other educational programmes. The DESD gives the educational community the incentive to incorporate the most recent information and research into programmes.

DESD efforts need to be informed by research and development. Many research and development agendas will be necessary to address the needs of basic education, higher education, training, public awareness, media, etc. Research and development efforts to support the DESD have many purposes, such as to:

- gather baseline information and creating longitudinal studies to evaluate the affect of new ESD programmes;

- gather data to share with politicians and ministry officials to show that ESD programmes are effective and worthy of funding;

- document successes to replicate them and document failures, so as not to repeat them;

- use data rather than assertions to help construct arguments that ESD is good education;

- identify appropriate ESD pedagogy;

- advance the conceptual and theoretical development of ESD;

- identify linkages between ESD with other aspects of learning (e.g. literacy, numeracy, natural science, social science) and with modes of development intervention (e.g. sectoral projects, community mobilization);

- increase research on quality teaching and learning approaches for ESD to help learning become more transformative in nature.

Innovation.   Ultimately, the DESD aims for ESD to be implemented in thousands of local situations. This will involve the integration of ESD into a multitude of different learning situations. No standardized programme can or should be proposed. A number of processes already exist to help communities create locally relevant and culturally appropriate ESD programmes, such as:

- processes used to identify community sustainability goals such as those used by the International Council for Local Environmental Initiatives (ICLEI) to help communities around the world create local Agenda 21s;

- processes to reorient education to address sustainability in locally relevant and culturally appropriate fashion, such as those used in the Education for Sustainable Development Toolkit (www.esdtoolkit.org);

- possible pedagogical methods such as those featured in Teaching and Learning for a Sustainable Future on the UNESCO website (www.unesco.org/education/tlsf);

- ways of fostering links between the learning situation (school, adult programme, etc.) and the community, such as monitoring environmental change – for example, those used in the United Nations Decade of Water;

- processes of public participation for integrating indigenous, traditional, and local knowledge and culture into ESD programmes;

- building upon the learning from years of environmental, health, peace, economic, human rights, and development education networks around the world that for many years have used innovation to deliver valuable services in difficult situations.

Other processes and cultural variations of those listed above, can be developed as needed. All will require innovation to capture the unique conditions and infuse them into ESD programmes.

6. Use of Information and Communication Technologies

Information and communication technologies (ICTs) are the lifeblood of any large international initiative such as a United Nations Decade. DESD will make optimum utilization of ICTs as means of linking distant partners, storing data,

and sharing information rapidly. Also, ICTs will facilitate administering large logistical enterprises. Beyond these uses, ICTs have particular links and implications with ESD:

- ICTs are central to basic knowledge economies where wealth is generated by the transfer and use of information in ways that use fewer natural resources – such as paper, ink, and energy for transporting copies – than earlier methods. In itself, this is a factor in the more sustainable use of the environment, and therefore a key lesson in ESD.

- ICTs offer new learning modes and spaces. Distance learning has long been dependent on radio, TV and postal systems. The Internet offers new options and interactivity. This represents an opportunity for the widespread dissemination of ESD in ways that offer options of individual pace, assignments and assistance from an instructor.

- Where ICTs are accessible to learners, they can serve to provide spaces for global dialogue. The Small Islands Voice (www.smallislandsvoice.org), for example, links the general public and youth of island communities of the Caribbean, Indian Ocean and the Pacific, sharing experiences and concerns and building consensus and mutual support for sustainable development.

- Foster life-long learning skills in that students search for and find information, sort it for relevance, ask questions and synthesize, thus learning to be independent learners.

However, ICTs are far from being universally available – cost, infrastructure, energy supply, and Internet connections – both by telephone and wireless – are all factors, which mean that the digital divide is by no means bridged. While innovative ways will be sought to make ICTs increasingly accessible during the Decade, in many places older technologies will continue to reach many people. In addition, the importance of local knowledge in sustainable development implies that local and creative use of information technology systems will be part of a dynamic ESD – the active generation, use and sharing of knowledge, rather than merely a passive acceptance of other people's knowledge found on the Web and other ICTs.

7. Monitoring and evaluation

Monitoring and evaluation will become key strategies to ascertain the changes and impact of the Decade. An initiative as long and as complex as a Decade must benefit from adequate processes of monitoring and evaluation from the start. Without that, it will be impossible to know if the Decade is making a difference and what that difference is. A key aspect of monitoring and evaluation will be the identification of suitable and relevant indicators at every level – local, national, regional and international – and for each initiative and programme.

As the Decade puts major emphasis on cooperation through the integration of ESD concerns into existing networks and alliances, each grouping should set up its own objectives, outcomes and indicators within the Decade framework. Thus monitoring and evaluation will take place at many levels, national, regional, local, institutional, etc. and will be an integral part of new initiatives and directions, which the Decade may stimulate. Both qualitative and

quantitative evaluation methods will be necessary to track the DESD as well as longitudinal and community-wide studies.

Monitoring and evaluation can be expensive. Each ESD effort must balance the responsibility of collecting enough information to show that progress is being made and that ESD is effective at reaching goals against the cost. The education community cannot afford to put ESD programmes in place without evaluating them, however, it must minimize the expenditures that it does make.

As part of this process, UNESCO will work closely with other international monitoring initiatives, including the *EFA Global Monitoring Report*, the United Nations Literacy Decade monitoring initiatives and the ongoing monitoring of the Millennium Development Goals. The results of monitoring and evaluation will be used for the assessment and reorientation of programmes during the course of the Decade, in order to ensure ongoing relevance and effectiveness.

B. Putting the seven strategies into practice

Table 6 was created to assist nations to incorporate the seven strategies described above into the process to create an implementation plan for ESD by giving examples.

Table 6: Incorporating the seven strategies

Strategy	Examples
Vision-Building and Advocacy	• Lobby to embed ESD in government policies and development plans. • Establish a need for ESD by promoting the benefits of ESD.
Consultation and Ownership	• 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.
Partnership and Networks	• 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	• 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	• 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 & Communication Technologies	• 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	• 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.

C. Infrastructure to support the DESD

Key elements of an appropriate infrastructure will need to be defined either initially or in conjunction with partners depending upon the national context. In many countries, the United Nations Regional community has already paved the way with ESD strategies. An example of possible elements of DESD infrastructure at the national level is given below in Table 7.

Table 7: Possible elements of DESD infrastructure

Infrastructure elements	Examples
Leadership	• Chair or Co-Chairs elected by the committee members or appointed by government. • Transparent decision-making processes. • Articulate leader with ESD experience.
Governance structures	• Bylaws and charters that are open to the public. • Democratic processes of governance. • Representation of the breadth of ESD.
Administrative support	• Office and equipment to support the staff. • Responsive to public needs. • Adequate staffing.
Human resources	• Balanced representation of environment, society, and economy. • Capable of influencing leaders, media, private sector, etc. • Sufficient staff to coordinate volunteers
Financial resources	• To hire paid staff. • For travel to engage partners and present a case for DESD. • To monitor progress and publish reports.
Material resources	• Access to Internet, DESD publications, etc. • Information on national and local sustainability issues.

	• Office equipped to accept paid staff and volunteers.
Operating procedures	• Clear mandate regarding the scope of the work. • Clear understanding of roles, rights and responsibilities. • Due process for partner disagreements.
Accountability	• Ensuring delivery of funded projects. • Solid fiscal accounting practices. • To partners and stakeholders.
Evaluation, tracking and reporting	• System for recording DESD activities. • Monitoring and evaluating the impact of DESD activities. • Liaison with national and international monitoring units.
Vision-building	• Input from a wide range of civil society. • Access to accurate sustainability issue research and information in all three spheres. • Address all four thrusts of ESD.
Engagement and retention	• Actively seek members from all sectors of civil society. • Celebrate and thank members for successes. • Manage volunteers to consider their available time in assigning realistic workloads.

D. Resources for the DESD

Implementing the DESD will require leadership, planning and resources – both human and financial. So far, much of the financing of the DESD is coming through reallocating resources from existing initiatives and few new resources have been allocated. While the initial work of the Decade has begun in this manner, this cannot sustain the momentum of DESD, which has wide- and far-reaching implications. The IIS urges governments and other potential funding sources to assess the existing resources and needs related to ESD in their jurisdictions and to reallocate existing resources and find ways to create new resources.

Even with linking existing programmes to ESD, a need for new resources exists. Additional human resources and funding will be necessary to augment current resources. For example, engaging the world's nearly 60 million teachers and countless non-formal educators in professional development to learn pedagogy and best practices associated with ESD is expensive, but necessary. Governments are faced with setting funding priorities and balancing competing demands. In the case of the DESD, the short-term demands for funding the start-up of the Decade will be offset by the long-term gains in creating a more sustainable future.

Annex I – Background of Education for Sustainable Development

For those less familiar with the evolution of the DESD and its origins, this section provides, very briefly, that background. It summarizes the origin of ESD, demonstrates the critical links between quality education and ESD, outlines the four major educational thrusts of ESD, and lists ESD's key characteristics.

A. Origins of Education for Sustainable Development

Education for sustainable development has its roots in the history of two distinct areas of interest of the United Nations – education and sustainable development.

In 1948, the Declaration of Human Rights stated, "Everyone has the right to education". This right to an education was reinforced by the Convention on the Right of the Child (CRC) in 1989, which declares that primary education should be compulsory and available free to all. The CRC further states that children may not be excluded from any right, including education, based on race, sex, disability, economic status.

In 1990, the Jomtien Declaration on Education for All (EFA) declared, "Basic education should be provided to all children, youth and adults. To this end, basic education services of quality should be expanded and consistent measures must be taken to reduce disparities". (World Declaration Education for All, 1990, Article II – Shaping the Vision). The Declaration also points out gender disparity and how to address it. "The most urgent priority is to ensure access to, and improve the quality of, education for girls and women, and to remove every obstacle that hampers their active participation. All gender stereotyping in education should be eliminated." (World Declaration Education for All, 1990, Article III – Universalizing access and promoting equity).

Furthermore, international development targets (IDT) have been developed related to quality education. The Dakar Framework for Action lists six important educational goals. The sixth is "Improving all aspects of the quality of education so that recognized and measurable learning outcomes are achieved, especially, in literacy, numeracy and essential life skills". The Millennium Development Goals (MDGs) also address education. MDG 2 is to "Achieve universal primary education". The corresponding IDT states "Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling". MDG 3 is to "Promote gender equality and empower women". The corresponding IDT states, "Eliminate gender disparity in primary and secondary education, preferably by 2005, and in all levels of education no later than 2015" (United Nations Millennium Project, 2005). Furthermore, the UNGA declared 2003 to 2012 to be the United Nations Decade of Literacy (UNLD). Obviously, the importance of education for all has been addressed by the United Nations repeatedly over its entire history.

Sustainable development has its roots in United Nations history in the environmental movement. Much of today's work in sustainable development can be traced back for several decades. Many milestones have marked the

journey towards sustainable development including the landmark 1972 United Nations Conference on Human Environment in Stockholm, which led to the establishing of many environmental protection agencies and the United Nations Environment Programme (UNEP). Nations realized that the widespread growth of environmental degradation needed international attention and collaboration rather than national approaches and solutions. While some attention was attached to the social and economic issues inherent in these environmental issues the focus was largely on addressing the ecological impact of ever increasing unrestricted development. Within 10 years of Stockholm the world was realizing that treating environmental concerns in isolation of development needs, such as grinding poverty for a large segment of humanity, was not going to serve either the environment or people. Hence, by the mid 1980's the United Nations launched a search for a larger strategy to address both the needs of society and the environment. In 1987 with *Our Common Future*, the Report of the Brundtland Commission, sustainable development was endorsed as an overarching framework or construct for future development policy at all levels of government.

From the time sustainable development was first endorsed in 1987, the United Nations General Assembly explored the parallel concept of education to support sustainable development. From 1987 to 1992, the concept of sustainable development matured as committees discussed, negotiated, and wrote the 40 chapters of Agenda 21. Thoughts concerning education and sustainability were initially captured in Chapter 36 of Agenda 21, "Promoting Education, Public Awareness, and Training". In addition, education as an enabling or implementation strategy was embedded in each of the 40 chapters of Agenda 21 and each of the negotiated Conventions arising from the Earth Summit. As well, every one of the nine major United Nations Conferences of the 1990s that further addressed and refined sustainability issues, identified education in its broadest terms as crucial in implementing the Conference action strategies.[3]

The Johannesburg World Summit on Sustainable Development (WSSD) in 2002, helped in deepening the commitments towards sustainable development at all levels, from the local to the global. The Summit proposed the Decade of Education for Sustainable Development (DESD), signaling that education and learning lie at the heart of approaches to sustainable development.

The DESD is the next step in the long United Nations history of supporting both education and sustainable development. The DESD ties the ongoing interest in education to the current overarching theme of sustainable development. It is a powerful concept that could ignite the interests of people around the world to use education as a tool to shape a more sustainable future.

The recently published Millennium Ecosystem Assessment states that action taken to date is insufficient at best. More informed and strategic measures are needed to address the goals of poverty and hunger alleviation, improved human health, and environmental protection.

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[3]   The nine post Rio conferences: World Summit for Children, 1990; World Conference on Education for All, 1990; International Conference on Population and Development, 1992; United Nations Global Conference on the Sustainable Development of Small Island Developing States, 1994; World Summit for Social Development, 1995; Fourth World Conference on Women, 1995; Second UN Conference on Human Settlements, 1996; World Food Summit, 1996; and World Education Forum, 2000 (UNESCO 2002).

B. Quality education

EFA and the MDGs introduced the concept of quality education into their goals and international development targets. Providing any education, regardless of quality, is not the goal. A myth exists that access must come before quality. Both can occur simultaneously. A large debate continues about what a quality education is.

> "Quality has become a dynamic concept that has constantly to adapt to a world whose societies are undergoing profound social and economic transformation. Encouragement for future-oriented thinking and anticipation is gaining importance. Old notions of quality are no longer enough … despite the different contexts there are many common elements in the pursuit of a quality education, which should equip all people, women and men, to be fully participating members of their own communities and also citizens of the world" (Ministerial Round Table on Quality Education, UNESCO, 2003, p. 1).

At this point in time, quality education has essential characteristics that can be implemented in many culturally appropriate forms.

Quality education:

- supports a rights-based approach to all educational endeavours. Education is a human right, and therefore quality education supports all of the human rights;
- is based on the four pillars of Education for All – learning to know, learning to do, learning to live together and with others, and learning to be (Delors, et al., 1996);
- views the learner as an individual, a family member, community member, and a global citizen and educates to create individual competency in all four roles;
- upholds and conveys the ideals of a sustainable world – a world that is just, equitable, and peaceable, in which individuals care for the environment to contribute to intergenerational equity;
- takes into consideration the social, economic, and environmental contexts of a particular place and shapes the curriculum or programme to reflect these unique conditions. Quality education is locally relevant and culturally appropriate;
- is informed by the past (e.g. indigenous and traditional knowledge), is relevant to the present, and prepares individuals for the future;
- builds knowledge, life skills, perspectives, attitudes and values;
- provides the tools to transform current societies to more sustainable societies;
- is measurable.

C. Education for Sustainable Development

Education is held to be central to sustainability. Indeed, education and sustainability are inextricably linked, but the distinction between education as we know it and education for sustainability is enigmatic for many. ESD carries

with it the inherent idea of implementing programmes that are locally relevant and culturally appropriate. All sustainable development programmes, including ESD, must consider the three spheres of sustainability – environment, society (including culture), and economy. Because ESD addresses the local contexts of these three spheres, it will take many forms around the world.

Education for sustainable development is based on ideals and principles that underlie sustainability, such as intergenerational equity, gender equity, social tolerance, poverty alleviation, environmental preservation and restoration, natural resource conservation, and just and peaceable societies. The Rio Declaration contains 27 principles of sustainability. For example:

- people are entitled to a healthy and productive life in harmony with nature;

- the right to development must be fulfilled so as to equitably meet developmental and environmental needs of present and future generations;

- eradicating poverty and reducing disparities in living standards in different parts of the world are essential to sustainable development (Keating, 1993).

These principles can help governments, communities, and school systems identify knowledge, principles, skills and values on which they will create ESD or reorient existing education to address sustainability.

D. Four major thrusts of Education for Sustainable Development

Chapter 36 of Agenda 21 identified four major thrusts of education to support a sustainable future.

Improving access to quality basic education. The first priority of ESD is improving the access to and quality of basic education. The content and years of basic education differ greatly around the world. In some countries, for instance, primary school is considered basic education. In others eight or 12 years is mandatory. Access to basic education remains a problem for many, especially girls and illiterate adults. Over 100 million primary-school children have never attended school and about 800 million adults are illiterate (*EFA Global Monitoring Report, 2004*). In many countries, the current level of basic education is too low, severely hindering national plans for a sustainable future. It is this ESD thrust of basic quality education that most closely aligns itself to EFA and the MDGs.

This thrust of ESD, however, is not limited to countries with low levels of educational attainment. Each nation has its own issues related to providing quality education to all. Too many children, youth, and adults are currently underserved and have limited education opportunities even in countries that have high levels of literacy and higher education. For example, drop out rates may be high and access to lifelong-learning may be restricted.

Issues surrounding access to basic education are often considered as issues for developing countries; however, there are equally important related issues for the developed countries as well. Access is not necessarily as large an issue but, retention in schools still looms. Too many leave school before being prepared for the 21st century they will be living and competing in. In the

North, a secondary school leaving diploma gives only limited access to the shrinking labour market. Tracking student success by race, ethnicity or preferred learning style shows weaknesses within school systems' capabilities to serve youth from the diverse backgrounds that are now living in major northern cities.

Unfortunately, simply increasing basic literacy, as it is currently taught in most countries, will not advance sustainable societies. Indeed, if communities and nations hope to make progress towards sustainability goals, they must focus on knowledge, skills, values, and perspectives that encourage and support public participation and community decision-making. To achieve this, basic education must be reoriented to address sustainability and expanded to include critical-thinking skills, skills to organize and interpret data and information, and skills to formulate questions. Basic education must also include the ability to analyse issues that confront communities and should enable individuals to make lifestyle choices that do not erode the natural resource base or impinge on the social equity and justice of their neighbours.

Reorienting existing education programmes. More basic education as it is currently taught will not create more sustainable societies. The conundrum remains, that it is educated nations that leave the deepest ecological footprints, using large amounts of resources and energy to support their lifestyles. Creating a more sustainable future will not occur simply by increasing the amount of education; instead, it is an issue of content and relevance. Questioning, rethinking, and revising education from pre-school through university to include more principles, knowledge, skills, perspectives and values related to sustainability in each of the three realms – environment, society, and economy – is important to our current and future societies. This should be done in a holistic and interdisciplinary context, engaging society at large, but carried out by individual nations in a locally relevant and culturally appropriate manner.

Developing public understanding and awareness of sustainability. To make progress towards more sustainable societies requires a population that is aware of the goals of sustainability and has the knowledge and the skills to contribute towards those goals. A knowledgeable citizenry supports a more sustainable society in several ways. First, citizens through their daily behaviours support government policy related to resource management and civic conduct. Second, citizens can support measures related to sustainable development and politicians who introduce and support enlightened legislation. Third, citizens can become knowledgeable consumers who purchase goods with low lifecycle impacts and who use their purchasing power to support corporate social and environmental responsibility and sustainable business practices. An informed citizenry can help communities and governments enact sustainability measures and move towards more sustainable societies.

Developing a knowledgeable citizenry will require a concerted effort with consistent and realistic messages delivered to people of all ages. The use of large-scale media campaigns can address substantial segments of society. Also, social marketing should be explored to deliver some of the more simple behavioural-change measures. More comprehensive educational tools focusing on the skills inherent in critical thinking and rational decision-making are necessary to build a citizenry capable of thinking through some of the more complex sustainability issues that face communities and nations.

Providing training. All sectors – including business, industry, higher education, governments, non-governmental organizations and community organizations – should be encouraged to train their leaders in sustainability issues such as environmental management, equity policies, etc., and to provide training to their workers in sustainable practices. The development of specialized training programmes to ensure that all sectors of the workforce have the knowledge and skills necessary to perform their work in a sustainable manner is a critical component of education for sustainable development. Currently the larger corporations, especially manufacturers, are reaping huge financial benefits from training measures introduced to address energy, water and waste management issues. Addressing other environmental, social and human resources issues are proving to be rewarding. In fact some leading schools of business include sustainable development as an integral part of the curriculum. Nevertheless, 99.7% of the world's businesses are the small- or medium-sized enterprises (SME), which employ almost 75% of the world's workers. New approaches to reach SME need to be developed.

In order to create ESD programmes that contain the four thrusts, all sectors of the education community will have to work together in a cooperative manner. Formal education (i.e., primary, secondary, post secondary and higher education) will need to work closely with traditional partners from the non-formal education sector (e.g. nature centres, non-governmental organizations, public health educators and agricultural extension agents) and with new partners from the informal education sector (i.e. the media including television, radio and print such as newspapers and magazines). Because ESD is a life-long process each of these sectors touch the lives of citizens at different ages.

E. Key characteristics of education for sustainable development

No universal models of ESD exist. While there is overall agreement on principles of sustainability and supporting concepts, there will be nuanced differences according to local contexts, priorities, and approaches. Each country has to define its own sustainability and education priorities and actions. The goals, emphases and processes must, therefore, be locally defined to meet the local environmental, social and economic conditions in culturally appropriate ways. Education for sustainable development is equally relevant and important for both developed and developing countries.

ESD has essential characteristics that can be implemented in many culturally appropriate forms.

Education for sustainable development:
- is based on the principles and values that underlie sustainable development;
- deals with the well being of all three realms of sustainability – environment, society and economy;
- promotes life-long learning;
- is locally relevant and culturally appropriate;
- is based on local needs, perceptions and conditions, but acknowledges that fulfilling local needs often has international effects and consequences;

- engages formal, non-formal and informal education;
- accommodates the evolving nature of the concept of sustainability;
- addresses content, taking into account context, global issues and local priorities;
- builds civil capacity for community-based decision-making, social tolerance, environmental stewardship, adaptable workforce and quality of life;
- is interdisciplinary. No one discipline can claim ESD for its own, but all disciplines can contribute to ESD;
- uses a variety of pedagogical techniques that promote participatory learning and higher-order thinking skills.

These essential characteristics of ESD can be implemented in myriad ways, so that the resulting ESD programme reflects the unique environmental, social and economic conditions of each locality. Furthermore, ESD increases civil capacity by enhancing and improving the workforce, social tolerance, environmental stewardship, participation in community-based decision-making, and quality of life. To increase civil capacity in these five areas, formal, non-formal and informal education must be combined.