



United Nations Decade of Education for Sustainable Development 2005-2014

*Draft International
Implementation Scheme*

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**UN Decade of Education for
Sustainable Development 2005-2014**

International Implementation Scheme

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The International Implementation Scheme is the result of extensive consultations with UN agencies, national governments, civil society organisations and NGOs, experts and specialists.

The final draft of the International Implementation Scheme was shared with a High Level Panel that advises UNESCO on strategy and substance with regard to the UN Decade of Education for Sustainable Development. We are most appreciative for the finishing touches that were contributed by this panel, composed of:

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While this document reflects the agreement of many partners and stakeholders, it is awaiting formal recognition by the Executive Board of UNESCO in April 2005.

CONTENTS

ABBREVIATIONS	4
EXECUTIVE SUMMARY	5
1 INTRODUCTION	8
1.1 A growing concern	9
1.2 Links with other international initiatives	11
SECTION I: EDUCATION FOR SUSTAINABLE DEVELOPMENT	13
2 LINKING EDUCATION AND SUSTAINABLE DEVELOPMENT	13
2.1 Key areas of sustainable development	14
2.2 Education for sustainable development: promoting values	16
2.3 Key characteristics of Education for sustainable development	18
3 PERSPECTIVES	19
3.1 Socio-cultural perspectives	19
3.2 Environmental perspectives	20
3.3 Economic perspectives	21
3.4 Learning spaces	21
4 OBJECTIVES OF THE DECADE	26
SECTION II: STAKEHOLDERS AND STRATEGIES	27
5 THE STAKEHOLDERS OF ESD	27
6 SEVEN STRATEGIES	28
6.1 Advocacy and vision building	29
6.2 Consultation and ownership	29
6.3 Partnership and networks	30
6.4 Capacity building and training	30
6.5 Research and innovation	31
6.6 Use of Information and communication technologies (ICTs)	32
6.7 Monitoring and Evaluation	32
SECTION III: IMPLEMENTATION AND EVALUATION	33
7 THE ROLE OF STAKEHOLDERS FROM LOCAL TO GLOBAL	33
7.1 Local (sub-national) level	33
7.2 National level	34
7.3 Regional level	37
7.4 International level	38
8 OUTCOMES	41
9 MONITORING AND EVALUATION	42
SECTION IV: PROGRAMMING THE DECADE	45
10 RESOURCES	45
11 TIMELINE	45
REFERENCES	50
APPENDIX: PRINCIPLES OF NATIONAL DESD IMPLEMENTATION	51

Abbreviations

AIDS	Acquired Immuno-Deficiency Syndrome
ASEAN	Association of South East Asian Nations
AU	African Union
BLP	Best Practices and Local Leadership Programme
CCNGO	Collective Consultation of Non-governmental Organizations
CS	Civil Society
CSD	Commission for Sustainable Development
CSO	Civil Society Organization
DESD	Decade of Education for Sustainable Development
EFA	Education for All
ESD	Education for Sustainable Development
EU	European Union
GHESP	Global Higher Education for Sustainability Partnership
HIV	Human Immunodeficiency Virus
ICT	Information and Communication Technologies
MDG	Millennium Development Goal
NGO	Non-governmental Organization
OAS	Organization of American States
PRSP	Poverty Reduction Strategy Paper
SADCC	Southern Africa Development Coordination Conference
SD	Sustainable Development
TNC	Trans-National Corporation
UN	United Nations
UNDG	United Nations Development Group
UNECE	United Nations Economic Commission for Europe
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNGEI	United Nations Girls' Education Initiative
UNLD	United Nations Literacy Decade
UNICEF	United Nations Children's Fund
UNU	United Nations University
WSSD	World Summit on Sustainable Development

Executive Summary

The Decade of Education for Sustainable Development (DESD) is a far-reaching and complex undertaking. Its conceptual basis, socio-economic implications, and environmental and cultural connections make it an enterprise, which potentially touches on every aspect of life. **The overall goal of the DESD is to integrate the values inherent in sustainable development into all aspects of learning to encourage changes in behavior that allow for a more sustainable and just society for all.**

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. This **translates into five objectives**, to:

1. Give an enhanced profile to the central role of education and learning in the common pursuit of sustainable development;
2. Facilitate links and networking, exchange and interaction among stakeholders in ESD;
3. Provide a space and opportunity for refining and promoting the vision of, and transition to sustainable development – through all forms of learning and public awareness;
4. Foster increased quality of teaching and learning in education for sustainable development;
5. Develop strategies at every level to strengthen capacity in ESD.

The concept of sustainable development continues to evolve. In pursuing education for sustainable development, therefore, there must be some clarity in what sustainable development means and what it is aiming at. **This plan presents three key areas of sustainable development – society, environment and economy with culture as an underlying dimension.**

- **Society:** an understanding of social institutions and their role in change and development, as well as the democratic and participatory systems which give opportunity for the expression of opinion, the selection of governments, the forging of consensus and the resolution of differences.
- **Environment:** an awareness of the resources and fragility of the physical environment and the affects on it of human activity and decisions, with a commitment to factoring environmental concerns into social and economic policy development.
- **Economy:** a sensitivity to the limits and potential of economic growth and their impact on society and on the environment, with a commitment to assess personal and societal levels of consumption out of concern for the environment and for social justice.

The values, diversity, knowledge, languages and worldviews associated with culture strongly influence the way issues of education for sustainable development are dealt with in specific national contexts. In this sense, culture is just not a collection of particular manifestations (song, dance, dress, ...), but a way of being, relating, behaving, believing and acting through which people live out in their lives and that is in a constant process of change.

ESD is fundamentally about values, with respect at the centre: respect for others, including those of present and future generations, for difference and diversity, for the environment, for the resources of the planet we inhabit. Education enables us to understand ourselves and others and our links with the wider natural and social environment, and this understanding serves as a durable basis for building respect. Along with a sense of justice, responsibility, exploration and dialogue, ESD aims to move us to adopting behaviours and practices that enable all to live a full life without being deprived of basics.

ESD mirrors the concern for education of high quality, demonstrating characteristics: such as:

- Interdisciplinary and holistic: learning for sustainable development embedded in the whole curriculum, not as a separate subject;
- Values-driven: sharing the values and principles underpinning sustainable development;
- Critical thinking and problem solving: leading to confidence in addressing the dilemmas and challenges of sustainable development;
- Multi-method: word, art, drama, debate, experience, ... different pedagogies for modelling processes;
- Participatory decision-making: learners participate in decisions on how they are to learn;
- Applicability: learning experiences are integrated in day to day personal and professional life;
- Locally relevant: addressing local as well as global issues, and using the language(s) which learners most commonly use.

ESD will be shaped by a range of perspectives from all fields of human development and including all the acute challenges the world faces. ESD cannot afford to ignore their implications for a more just and more sustainable process of change. The plan notes the important perspectives provided by: human rights, peace and human security, gender equality, cultural diversity and intercultural understanding, health, HIV/AIDS, governance, natural resources, climate change, rural development, sustainable urbanisation, disaster prevention and mitigation, poverty reduction, corporate responsibility and accountability, and the market economy.

ESD is for everyone, at whatever stage of life they are. **It takes place, therefore, within a perspective of lifelong learning, engaging all possible learning spaces, formal, non-formal and informal, from early childhood to adult life.** ESD calls for a re-orientation of educational approaches – curriculum and content, pedagogy and examinations. Spaces for learning include non-formal learning, community-based organisations and local civil society, the workplace, formal education, technical and vocational training, teacher training, higher education educational inspectorates, policy-making bodies, ...and beyond.

It is true to say that everyone is a stakeholder in education for sustainable development. All of us will feel the impact of its relative success or failure, and all of us affect the impact of ESD by our behaviour, which may be supportive or undermining. Complementary roles and responsibilities devolve to a number of bodies and groups at different levels: local (sub-national), national, regional and international. At each level, stakeholders may be part of government (or intergovernmental at regional and international levels), civil society and non-governmental organisations, or in the private sector. The media and advertising agencies will support broad public awareness. In addition, indigenous peoples have a particular role, having an intimate knowledge of the sustained use of their environments, and being particularly vulnerable to unsustainable development.

Seven interlinked strategies are proposed for the Decade: advocacy and vision building; consultation and ownership; partnership and networks; capacity building and training; research and innovation; information and communication technologies; monitoring and evaluation. Together they form a coherent approach to the incremental increase over the Decade of the promotion and implementation of ESD. They will ensure that change in public attitudes and educational approaches keep pace with the evolving challenges of sustainable development.

DESD implementation will depend on the strength of stakeholder commitment and cooperation at local (sub-national), national, regional and international levels. Networks and alliances will be the crucial element, forging a common agenda in relevant forums. A small

but dynamic and high-quality ESD Hub at national level will bring energy to promotion and implementation, receiving input regularly from a multi-stakeholder ESD Consultative Group. At the regional and international levels, an ESD Caucus and DESD Inter-Agency Committee respectively will push the ESD agenda forward through focused meetings and events responding to particular concerns. A high-profile international group of ESD Champions, well known and committed personalities, will serve to spearhead the movement.

The outcomes of the DESD will be seen in the lives of thousands of communities and millions of individuals as new attitudes and values inspire decisions and actions making sustainable development a more attainable ideal. For the DESD process as such, **eleven expected outcomes are derived from the DESD objectives and relate to changes in public awareness, in the education system and in the integration of ESD into all development planning. These outcomes form the basis for indicators used in monitoring and evaluation**; however, stakeholder groups at each level will decide specific indicators and the kinds of data needed to verify them. Qualitative indicators must figure equally with quantitative indicators to capture the multiple connections and societal depth of ESD and its impact.

In assessing the need for resources, full account must be taken of existing programmes and available personnel. The need for additional resources should be driven by the need to facilitate action and interaction around specific ESD challenges and issues.

The proposed timeline shows DESD forums, events and activities over the first five years, emphasising the necessary linkages between, on the one hand, local national regional international levels, and, on the other hand, DESD and other initiatives such as the Commission for Sustainable Development (CSD) and Education for All (EFA). Key events towards the end of the Decade are also indicated.

DESD International Implementation Scheme

In December 2002, the UN General Assembly adopted resolution 57/254 to put in place a UN Decade of Education for Sustainable Development, lasting from 2005 to 2014. UNESCO was tasked with leading the Decade and developing a draft International Implementation Scheme (IIS) for the Decade. This document fulfils this request and is the result of extensive consultations with UN agencies, national governments, civil society organisations and NGOs, experts and specialists.

Starting with an initial consultation with UN partners in September 2003, UNESCO shared a framework for the Scheme worldwide. More than two thousand contributions were received, many of these representing the consolidation of opinions of hundreds. The draft Scheme was 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 then presented at the 59th session of the UN General Assembly (New York, 18-19th October 2004).

The International Implementation Scheme sets out a broad framework for all partners to contribute to the Decade. It is not prescriptive, but provides overall guidance and shows why, how, when and where the enormous range of partners can develop their contributions based on their particular contexts. It briefly presents the Education for Sustainable Development challenge and outlines the kind of education that, collectively, partners consider essential in order to facilitate sustainable development.

1 Introduction

There can be few more pressing and critical goals for the future of humankind than to ensure steady improvement in the quality of life for this and future generations in a way that respects our common heritage – the planet on which we live. As people we seek positive change for ourselves, our children and grandchildren; we must do it in ways that respect the right of all to do so. To do this we must learn constantly – about ourselves, our potential, our limitations, our relationships, our society, our environment, our world. Education for sustainable development is a life-wide and lifelong endeavour which challenges individuals, institutions and societies to view tomorrow as a day that belongs to all of us, or it will not belong to anyone.

The UN Conference on Environment and Development in 1992, the Earth Summit, gave high priority in its *Agenda 21* to the role of education in pursuing the kind of development that would respect and nurture the natural environment. It focused on the process of orienting and re-orienting education in order to foster values and attitudes of respect for the environment and envisaged ways and means of doing so. By the time of the Johannesburg Summit in 2002 the vision broadened to encompass social justice and the fight against poverty as key principles of development that is sustainable. The human and social aspects of sustainable development meant that solidarity, equity, partnership and cooperation were as crucial as scientific approaches to environmental protection. Besides re-affirming the educational objectives of the Millennium Development Goals and the Education for All Dakar Framework for Action, the Summit proposed the Decade of Education for Sustainable Development as a way of signalling that education and learning lie at the heart of approaches to sustainable development.

The international community adopted the Millennium Development Goals in 2000 as an overarching framework for development and for cooperation. Sustainable development is a dynamic and evolving concept with many dimensions and interpretations and reflects locally relevant and culturally appropriate visions for a world in which development “meets the needs of the present without comprising the ability of future generations to meet their own needs”.¹ The Millennium

¹ World Commission on Sustainable Development (1987) *Our Common Future*, Oxford University Press, p. 43.

Development Goals provide targets for international actions to bring such visions into reality by: overcoming poverty; improving child, maternal and sexual health; expanding educational provision and redressing gender inequalities in education; and developing national strategies for sustainable development.

At the World Education Forum in Dakar, Senegal in April 2000, the world community reaffirmed the vision of the World Declaration on Education for All adopted in 1990 in Jomtien, Thailand, and expressed its commitment toward the achievement of education for all goals and targets for every citizen and for every society. Consistent with the Universal Declaration of Human Rights and the World Declaration on Education for All, the World Education Forum recognized that education is a fundamental human right and it is the key to sustainable development, peace and stability, socio-economic growth, and nation building.

In its 57th meeting in December 2002, the United Nations General Assembly proclaimed the Decade of Education for Sustainable Development for the period 2005 – 2014, ‘emphasizing that education is an indispensable element for achieving sustainable development.’² It also designated UNESCO as the lead agency to promote and implement the Decade.

Following the UN General Assembly, a conference of Ministers of the Environment organised by the United Nations Economic Commission for Europe held in Kiev, Ukraine, in May 2003, also stressed the necessity to improve educational systems and the design of learning programmes for sustainable development to increase general understanding of how to promote and implement sustainable development.

The current plan fulfils the UN General Assembly request for an implementation scheme and is the result of extensive consultations with UN agencies, national governments, civil society organisations and NGOs, experts and specialists. It builds on the ‘Draft Framework for the DESD Implementation Scheme’³ which gave input into the consultation process.

1.1 A growing concern

The sustainable development movement began with and grew out of concerns expressed in the 1970s and 1980s that production and consumption patterns as evidenced in the industrialised societies could not be sustained in terms of the planet’s resources. Nor could a model of development be urged on nations which implied the kind of consumption which industrialised countries manifested. Although increased awareness has had an impact on production systems, changing lifestyles, particularly in the industrialised countries, have led to further unsustainable patterns. While pollution from production has generally fallen across the industrialised world, the environmental burden from consumption has grown remorselessly. Increasingly it has become clear that many social, economic and environmental issues are connected, such as poverty, unequal distribution of resources, population growth, migration, malnutrition, health and HIV/AIDS, climate change, energy supply, ecosystems, biological diversity, water, food security, and environmental toxins.

Unsustainable processes of development maintain pressure on natural resources while unsustainable patterns of production and consumption, especially in developed countries, threaten the fragility of the natural environment and intensify poverty elsewhere. However, by

² UN General Assembly Resolution A/RES/57/254 of 21 February 2003

³ As the Lead Agency for the promotion of the Decade, UNESCO developed the Framework, which contains elements for developing a draft International Implementation Scheme. The Framework outlines the context for DESD, discusses the thrusts of ESD and processes involved in developing the draft International Implementation Scheme, identifies key players/stakeholders, expected outputs, and UNESCO strategies for developing the Scheme. The Framework was shared with UN agencies and partners at local, national, regional and international levels to inform them of preparatory work that UNESCO was undertaking and to gain feedback, insights and suggestions (http://portal.unesco.org/education/en/file_download.php/9a1f87e671e925e0df28d8d5bc71b85fJF+DESD+Framework3.doc)

focusing largely on poverty there is the implicit assumption that poverty is the problem, and that by moving from poverty to wealth, sustainable development will be achieved. However, we must exercise extreme caution in seeing poverty as a cause of unsustainable development, since it is the rich who have much higher levels of unsustainable production and consumption. They are able to make choices which the poor, trapped in a cycle of deprivation and vulnerability, are unable to make. While the rich are able to adopt patterns of sustainable development, they frequently are reluctant to do so – the poor have few if any options but to make use of their immediate environment. Poverty is linked to environmental degradation as the poor have no choice but to seek and avail themselves of scarce natural resources such as fuelwood and water. Problems of over-consumption and over-development are key factors in addressing environmental conservation and protection, as well as sustainable production and consumption.

Economic growth as a component of development

Economic growth is a major component of development – indeed it has until recently been seen by some as both the means and the goal of development. As the economy grows, pressures on the Earth's natural systems and resources intensify. For instance, from 1950 to 1997:

- the use of lumber tripled,
- the use of paper increased six fold,
- the fish catch increased nearly fivefold,
- grain consumption nearly tripled,
- fossil fuel burning nearly quadrupled, and
- air and water pollutants multiplied several fold.

The unfortunate reality is that the economy continues to expand, but the ecosystem on which it depends does not, creating an increasingly stressed relationship.

Source: Brown 1998: 91.

With regard to the use of resources, sustainable development calls for a twofold response in both industrialised and developing countries: responsible patterns of production and consumption, and pro-active stewardship of resources of all kinds. As the Brundtland Commission put it: 'sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their needs.'

Sustainable development is closely linked to processes of globalisation. The problems and challenges which the promotion of sustainable development addresses are global in scope – indeed they relate to the very survival of the planet as the host of human society. In some areas of the world, the effects of globalisation pose a threat to the survival of local communities, particularly of minorities and indigenous peoples, and to the forests and other habitats on which such communities depend. Changing patterns of world trade and production trigger new challenges of migration, settlement, infrastructure, pollution and resource depletion. On the other hand, the faster and denser connections which characterise globalisation – electronic communication, data capacity, storage and processing, air travel, media networks and many more – can be harnessed in order to enable more effective and concerted action to tackle them.

A view of sustainability

Sustainability relates to ways of thinking about the world, and forms of social and personal practice that lead to:

- ethical, empowered and personally fulfilled individuals;
- communities built on collaborative engagement, tolerance and equity;
- social systems and institutions that are participatory, transparent and just; and
- environmental practices that value and sustain biodiversity and life-supporting ecological processes.

Source: Hill et al. 2003.

1.2 Links with other international initiatives

The DESD starts at a time when a number of other, related international initiatives are in place. 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 of them aim to achieve comparable impacts: an improvement in the quality of life, particularly for the most deprived and marginalised, and fulfilment of human rights including gender equality, poverty reduction, democracy and active citizenship. There is also a common consensus around the central importance of basic education and the need to extend it and enhance its quality.

- The eight goals and eighteen targets of the Millennium Development Goals constitute an over-arching framework for international development cooperation, agreed at the level of the United Nations. With commitments from both developing and industrialised countries, the emphasis is placed on tackling the challenges of poverty in its many manifestations and with its many nefarious consequences. Provision of primary education and gender equality in education are the two areas where the MDGs overlap with the EFA agenda – other aspects of education, such as literacy, quality, or non-formal education, are implied as conditions for the realisation 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 realisation 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 existing and significant international initiatives? It is clear that 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. 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 must also address pedagogical processes, the validation of knowledge, and the functioning of education institutions.

To summarise:

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

- if EFA focuses on ways of providing quality educational opportunities to everyone, and;
- if the UNLD concentrates on promoting the key learning tool for all forms of structured learning;
- then the DESD promotes a set of underlying values, relational processes and behavioural outcomes which should characterise learning in all circumstances.

Clearly there will need to be constant monitoring of the links between these initiatives in order to ensure that the maximum synergy, cooperation and therefore impact are attained. The primary context of the implementation of these initiatives is the national level – it is clear that coordination among all the relevant processes will make for effective impact: EFA forums, planning for poverty reduction (eg PRSPs), literacy networks, and ESD groupings. At regional and international levels, cooperation should include the integration of ESD issues into the agendas of the Commission for Sustainable Development (CSD), MDG, EFA and UNLD meetings and events.⁴

⁴ A separate brochure is available from UNESCO spelling out the detailed linkages between these various initiatives.

SECTION I: EDUCATION FOR SUSTAINABLE DEVELOPMENT

The United Nations Conference on the Human Environment in Stockholm in 1972, helped to focus attention on environmental concerns and in the years following the conference, the global community acknowledged that more exploration was needed of the inter-relationships between the environment and socio-economic issues of poverty and underdevelopment. Thus the concept of *sustainable development* emerged in the 1980s in response to a growing realisation of the need to balance economic and social progress with concern for the environment and the stewardship of natural resources.

The concept gained worldwide momentum with the publication of *Our Common Future* by the World Commission on Environment and Development in 1987. The Commission defined sustainable development in the publication as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs.”⁵ This definition considers that while development may be essential to satisfy human needs and improve quality of life, it should occur in such a way that the capacity of the natural environment to meet present and future needs is not compromised.

The publication *Caring for the Earth: A Strategy for Sustainable Living* by the World Conservation Union (IUCN), the United Nations Environment Programme and the World Wide Fund For Nature (WWF) in 1991, contains a definition of sustainable development that complements the one from *Our Common Future*. It defined sustainable development as “improving the quality of human life while living within the carrying capacity of supporting ecosystems.”⁶

The Brundtland Commission definition emphasizes meeting human needs in a manner that respects intergenerational responsibility and the IUCN definition emphasizes improving the quality of human life while protecting the Earth’s capacity for regeneration. The two definitions together give a good understanding of the meaning of sustainable development as benefiting both people and ecosystems.

Chapter 36 of Agenda 21 emphasized that education is critical for promoting sustainable development and improving capacity of the people to address environment and development issues. Ever since sustainable development has been a common concern in all UN conferences and there has been a common consensus that education is a driving force for the change needed. It has also been pointed out that peace, health and democracy are mutually reinforcing prerequisites for sustainable development.

The 2002 Johannesburg Summit broadened the vision of sustainable development and re-affirmed the educational objectives of the Millennium Development Goals and the Education for All Dakar Framework for Action, the Summit proposed the Decade of Education for Sustainable Development and the United Nations General Assembly in its 57th Session in December 2002, proclaimed the Decade of Education for Sustainable Development for the period 2005 – 2014.

2 Linking education and sustainable development

By learning throughout our lives we equip ourselves to choose most advantageously as the future unfolds. Scott and Gough 2003: 147

The nations of the world, through the United Nations General Assembly, unanimously adopted the resolution to establish a Decade of Education for Sustainable Development for the period

⁵ World Commission on Environment and Development, *Our Common Future*, 1987, p 43.

⁶ IUCN / UNEP / WWF, *Caring for the Earth: A Strategy for Sustainable Living*, 1991, p 10.

2005 – 2014 in order to underline the importance of concerted action to ensure that patterns of sustainable development offer a high quality of life to all, both to present and future generations. They did so also because they saw education as a key – a *sine qua non* – to sustainable development. On what was this conviction based? Why is sustainable development so inextricably bound up with educational processes? It is worth asking the question so that the grounds for pursuing ESD may be clear and may raise the motivation and commitment of all to the goals of the Decade.

Various constituencies put differing interpretations on the Brundtland definition: ‘sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their needs.’ However, all such interpretations turn around the roles and relationships of the actors involved and the measures adopted for achieving sustainability. Some put the accent on a market-type framework which could involve the trading of environmental credits – this system is part of the Kyoto arrangements but is yet to be implemented. Others emphasised the need for a community-based approach in which the viability and sustainability of communities are the touchstone against which to assess progress. Still others put the emphasis on the monitoring and further development of international treaties and agreements in a global perspective.

What is clear from all these interpretations is that concepts of sustainable development are closely linked to different models of social and economic development. Crucial issues revolve around the question of who has legitimate access to, control over and use of natural resources. Thus the human element is central – the rights and responsibilities, the roles and relationships of individuals, institutions, countries, regions and socio-political blocs are at the heart of determining the way forward towards sustainable development. To put it another way, it is as much the social and economic relationships between people and institutions as the relationship between society and natural resources which will facilitate, or hamper, progress towards sustainable development.

2.1 Key areas of sustainable development

Before elaborating the particular role of education with regard to sustainable development, it is important to understand what the key areas of this concept are, as described by international discourse. Three interlinked areas are most commonly identified within sustainable development. These are: society, environment, and economy, where political aspects are subsumed under the heading of society. These three elements, reaffirmed at the Johannesburg Summit as the 3 pillars of sustainable development, give shape and content to sustainable learning:

- **Society:** an understanding of social institutions and their role in change and development, as well as the democratic and participatory systems which give opportunity for the expression of opinion, the selection of governments, the forging of consensus and the resolution of differences.
- **Environment:** an awareness of the resources and fragility of the physical environment and the affects on it of human activity and decisions, with a commitment to factoring environmental concerns into social and economic policy development.
- **Economy:** a sensitivity to the limits and potential of economic growth and their impact on society and on the environment, with a commitment to assess personal and societal levels of consumption out of concern for the environment and for social justice.

These three elements assume an ongoing and long-term process of change – sustainable development is a dynamic concept, with the recognition that human society is in constant movement. Sustainable development is not about maintenance of the status quo, but rather about the direction and implications of change. The emphasis on linking poverty with issues of sustainable development points to the concern of the international community that ending deprivation and powerlessness is as much at the heart of our concern for the future of the world

as is environmental protection. Balancing this equation is the central challenge of sustainable development.

The basis and foundation for inter linkages of these three areas and sustainable development is provided through the dimension of Culture. Culture – ways of being, relating, behaving, believing and acting that differ according to context, history and tradition, and within which human beings live out their lives. This is to recognise that practices, identity and values – the software of human development – play a big role in setting directions and building common commitments. In terms of the process and goals of education for sustainable development an emphasis on cultural aspects will underline the importance of:

- Recognising diversity: the rich tapestry of human experience in the many physical and socio-cultural contexts of the world;
- Growing in respect and tolerance of difference: where contact with otherness is enriching, challenging and stimulating;
- Acknowledging values in open debate and with a commitment to keep the dialogue going;
- Modelling values of respect and dignity which underpin sustainable development, in personal and institutional life;
- Building human capacity in all aspects of sustainable development;
- Using local indigenous knowledge of flora and fauna and sustainable agricultural practices, water use, etc;
- Fostering support of practices and traditions which build sustainability – including aspects such as preventing excessive rural exodus;
- Recognising and working with culturally specific views of nature, society and the world, rather than ignoring them or destroying them, consciously or inadvertently, in the name of development;
- Employing local patterns of communication, including the use and development of local languages, as vectors of interaction and cultural identity.

Cultural issues are also linked to economic development through the income, which cultural manifestations can generate, through art, music and dance, as well as from tourism. Where such cultural industries develop there must be full awareness of the danger of commodifying culture and rendering it merely an object of interest for outsiders. Cultures must be respected as the living and dynamic contexts within which human beings everywhere find their values and identity.

The three areas – society, environment and economy – are interconnected, through the dimension of culture, a characteristic of sustainable development which we must always bear in mind. No aspect of life is left untouched by the pursuit of sustainable development, just as development which is increasingly sustainable will have an impact in every part of life. Complexity and interconnectedness mean that ESD must convey messages that are subtle yet clear, holistic yet tangible, multi-dimensional yet direct.

The ultimate goal is to achieve peaceful coexistence among peoples, with less suffering, less hunger, less poverty in a world where people will be able to practice their rights as human beings and citizens in a dignified way. At the same time, the natural environment will play its regenerating role by avoiding biodiversity loss and waste accumulation in the biosphere and the geosphere. Richness in diversity in all sectors of the natural, cultural and social environment is a basic component for a stable ecosystem and for the safety and resilience of every community. These inter-relationships underline the complexities, which are part of the natural environment and of human learning systems, requiring constant maintenance of a holistic approach. The

Earth Charter presents a global vision, which integrates these concerns and emphasises how critical the current moment in history is for its realisation.⁷

The Earth Charter

The *Earth Charter* is the product of a decade long worldwide, cross-cultural, civil society dialogue on common goals and shared values, offering an inclusive understanding of sustainable development.

- It provides an excellent example of an inclusive vision of the fundamental principles for building a just, sustainable, and peaceful world.
- Its principles build upon international, environmental conservation, and sustainable development law and the various UN meetings that took place in the 1990s. It endeavors to consolidate and extend a number international law principles reflecting the emerging consensus in global civil society.
- It was endorsed by the 2003 UNESCO General Conference as an important ethical framework for sustainable development and a valuable teaching tool.
- It sets forth a concise formulation of the meaning of sustainable living and development.

2.2 Education for sustainable development: promoting values

Can education be considered an integral part of a strategy of sustainable development, and, if so, why is this the case? Sustainable development is essentially about relationships between people, and between people and their environment. In other words, it is a socio-cultural and economic concern. The human element is now widely recognised as the key variable in sustainable development, both in terms of reasons for unsustainable development and in terms of the hopes for sustainable development. Human relationships based on naked self-interest (greed, envy or lust for power, for example) maintain inequitable distribution of wealth, generate conflict and lead to scant regard for the future availability of natural resources. On the other hand, relationships characterised by justice, peace, and negotiated, mutual interests lead to greater equity, respect and understanding. It is these qualities that will underpin strategies of sustainable development.

The underlying values which education for sustainable development must promote include at least the following:

- Respect for the dignity and human rights of all people throughout the world and a commitment to social and economic justice for all;
- Respect for the human rights of future generations and a commitment to intergenerational responsibility;
- Respect and care for the greater community of life in all its diversity which involves the protection and restoration of the Earth's ecosystems;
- Respect for cultural diversity and a commitment to build locally and globally a culture of tolerance, non-violence and peace.

Education alone is unlikely to inculcate values of this kind – if that were the case, the world would already be much farther down the road towards the practices of sustainable development. Nevertheless, education constitutes the central pillar of strategies to promote such values. Alongside positive spiritual motivations, education is our best chance of promoting and rooting the values and behaviours which sustainable development implies. As others have noted, 'transformative education is needed: education that helps bring about the fundamental changes

⁷ www.earthcharter.org/

demanded by the challenges of sustainability. Accelerating progress towards sustainability depends on rekindling more caring relationships between humans and the natural world and facilitating the creative exploration of more environmentally and socially responsible forms of development.' Education enables us as individuals and communities to understand ourselves and others and our links with the wider natural and social environment. This understanding serves as a durable basis for respecting the world around us and the people who inhabit it.

Key roles for education

- Education must inspire the belief that each of us has both the power and the responsibility to effect positive change on a global scale.
- Education is the primary agent of transformation towards sustainable development, increasing people's capacities to transform their visions for society into reality.
- Education fosters the values, behaviour and lifestyles required for a sustainable future.
- Education for sustainable development is a process of learning how to make decisions that consider the long-term future of the equity, economy and ecology of all communities.
- Education builds the capacity for such futures-oriented thinking.

The quest for sustainable development is multi-faceted – it cannot depend on education alone. Many other social parameters affect sustainable development, such as governance, gender relations, forms of economic organisation and of citizen participation. Indeed, it may be preferable to speak of *learning* for sustainable development, since learning is not restricted to education as such. Learning includes what happens in education systems, but extends into daily life – important learning takes place in the home, in social settings, in community institutions and in the workplace. Although labelled as a Decade of *Education* for Sustainable Development, it must encompass and promote all forms of learning.

It is the satisfaction of seeing people learn that motivates many educators. Research has shown that most educators work to help individuals to grow and develop intellectually, emotionally, spiritually or practically and thus, at best, to flourish in whatever socio-environmental or socio-cultural contexts they find themselves in. Many have a passionate view on why and how different aspects of education can and must play a vital role in this process. The development of strong positive values in learners – about themselves, learning, the world around them and their place in it – are a key part of what educators seek to foster in learners: developing as a whole person, becoming active and responsible citizens, discovering a love of lifelong learning, realising their strengths and potential. This personal learning is the most likely to foster the values which underpin sustainable development, since it is more a matter of confidently adopting a vision rather than assimilating a particular body of knowledge. Learning within ESD cannot however remain merely personal – it must lead to active participation in seeking and implementing new patterns of social organisation and change, working to find structures and mechanisms more likely to reflect the vision of sustainable development.

Since 1945 and with the strong encouragement of the United Nations, the human family has increasingly engaged in a worldwide cross-cultural dialogue on common goals and shared values. The drafting of the Universal Declaration of Human Rights is a prime example. The many international declarations and treaties on environmental conservation and sustainable development provide additional examples. Out of this global dialogue is emerging a consensus on a certain core of shared values. It is this set of shared values for building a just, sustainable, and peaceful world that ESD seeks to promote. An ongoing cross-cultural dialogue regarding shared values is also a central concern of ESD.

ESD mirrors the concern for education of quality, which is defined partly on the basis of learning outcomes – what education enables learners to be and to do, including a focus on useable

lifeskills. ESD promotes those same outcomes, such as the skills to go on learning, to think critically, to work together, and to search out and apply knowledge. Learners are then better equipped to make decisions leading to sustainable development. Also, and therefore, the vision and values of sustainable development must be a component of quality education.

2.3 Key characteristics of Education for sustainable development

Education for sustainable development must share the characteristics of any high-quality learning experience, with the additional criterion that the process of learning/teaching must model the values of sustainable development itself. These characteristics echo the areas of concern in the implementation of EFA Goal 6 which aims to offer to all an education of quality leading to excellence and measurable learning outcomes.

Education for sustainable development should not be equated with environmental education. The latter is a well-established discipline, which focuses on humankind's relationship with the natural environment and on ways to conserve and preserve it and properly steward its resources. Sustainable development therefore encompasses environmental education, setting it in the broader context of socio-cultural factors and the socio-political issues of equity, poverty, democracy and quality of life. The development perspective – that of social change and evolving circumstances – is also a central to any treatment of sustainable development. The set of learning goals of sustainable development are thus wide-ranging. Sustainable development must be integrated into other disciplines and cannot, because of its scope, be taught as a discreet subject.

Education for sustainable development will aim to demonstrate the following features:

- Interdisciplinary and holistic: learning for sustainable development embedded in the whole curriculum, not as a separate subject;
- Values-driven: it is critical that the assumed norms – the shared values and principles underpinning sustainable development – are made explicit so that that can be examined, debated, tested and applied;
- Critical thinking and problem solving: leading to confidence in addressing the dilemmas and challenges of sustainable development;
- Multi-method: word, art, drama, debate, experience, ... different pedagogies which model the processes. Teaching that is geared simply to passing on knowledge should be recast into an approach in which teachers and learners work together to acquire knowledge and play a role in shaping the environment of their educational institutions;
- Participatory decision-making: learners participate in decisions on how they are to learn;
- Applicability: the learning experiences offered are integrated in day to day personal and professional life.
- Locally relevant: addressing local as well as global issues, and using the language(s) which learners most commonly use. Concepts of sustainable development must be carefully expressed in other languages – languages and cultures say things differently, and each language has creative ways of expressing new concepts.

The role of science and technology deserves highlighting as science provides people with ways to understand the world and their role in it. ESD needs to provide a scientific understanding of sustainability together with an understanding of the values, principles, and lifestyles that will lead to the transition to sustainable development. Science should be regarded broadly to include social sciences as well as natural sciences and traditional approaches to learning and understanding as well as formal science. Technology provides people with the tools to change their situation as results of learning and expression. Technology should also be regarded broadly to include traditional use of materials and application of knowledge as well as manufactured items. Technology must be applied consistently with the goals of sustainability;

misapplication of science and technology can undermine efforts to simultaneously protect the environment and provide for people's economic and personal needs. Education that provides access to science and technology is an area where common cause should be made by advocating strongly for local input into how science and technology should be used.

3 Perspectives

Sustainable development is a complex undertaking, with connections to every part of life. In planning and implementing the DESD it is important to maintain these connections so that the learning process gives people the chance to apply sustainable development principles across their lives, and to understand the multiple impacts of their actions and behaviour. The following fifteen strategic perspectives, and the connections between them, must inform education and learning for sustainable development. Many of these perspectives are identified in Agenda 21 and/or the Johannesburg Plan of Implementation as important concerns and challenges that must be addressed in the effort to achieve sustainability. They will also serve to identify stakeholders and partners in the implementation of the Decade.

3.1 Socio-cultural perspectives

Human rights: a respect for human rights is a *sine qua non* of sustainable development. This approach should inform policy formulation at all levels, leading to the adoption of a rights-based approach to development. ESD must equip people to assert their right to live in a sustainable environment. This may involve lobbying and advocacy, for example to limit or forestall destruction of forest habitats by road-builders or the extractive industries.

Peace and human security: enabling people to live in an environment of peace and security is fundamental to human dignity and development. Too often fragile processes of sustainable development are undermined by insecurities and conflicts. These result in significant human tragedies, overwhelming health systems, destroying homes, schools and often whole communities, and leading to increasing numbers of displaced people and refugees. Education for sustainable development therefore seeks to build skills and values for peace in the minds of humankind, as enshrined in the UNESCO charter.

Gender equality: pursuit of gender equality is central to sustainable development where each member of society respects others and plays a role in which they can fulfil their potential. Gender parity in education is part of this and is the first of the Dakar EFA goals to be met – with a target date of 2005 (cf UNESCO 2003). The broader goal of gender equality is a societal goal to which education, along with all other social institutions, must contribute. Women and girls suffer discrimination in many societies, both developing and industrialised. Such discrimination is often structurally embedded, where individual relationships between men and women follow the pattern of prevailing social norms or traditions. In many societies women bear the major burden of responsibility for food production and child-rearing, they are excluded from family and community decisions which affect them, and they have little or no access to the means of income generation. Even in parts of the world where women have comparable, if not equal, access to work and income, they bear in addition much of the burden of household responsibilities. Being a woman combines with other factors, such as poverty, remoteness, ethnic minority status, to increase marginalisation and reduce the chances of sustainable development. These situations can be so entrenched that measures to offer greater opportunities to women take effect only slowly. In many regions gender roles keep girls away from school and prevent women from seeking learning opportunities as adults. Gender issues must therefore be mainstreamed throughout educational planning – from infrastructure planning to material development to pedagogical processes. In terms of ESD specifically, the full and equal engagement of women is crucial, first, to ensuring balanced and relevant ESD messages and, second, to give the best chance for changed behaviours for sustainable development in the next generation.

Cultural diversity and intercultural understanding: Many opportunities for education and sustainable human development are undermined by the lack of tolerance and intercultural understanding, upon which peace is founded. This perspective must inform not only the content of educational programmes, but also characterise teacher/learner and learner/learner relationships. Learning situations of all kinds are ideal opportunities for practising and deepening respect for and understanding of diversity. Local knowledge is a repository of diversity and a key resource in understanding the environment and in using it to the best advantage for current and future generations. Bringing such knowledge into the learning context enables learners to draw scientific principles and social insights from their immediate environment, increasing the connection between school and community, between exogenous and endogenous knowledge. Local knowledge is closely associated with ways of articulating it in the local language – the use of local languages in education, together with others, is a factor not only in the healthy cognitive development of children, but also in the appreciation, validation and use of what can be learnt directly from daily life and the local community.

For instance, Small Island Developing States are long-standing crossroads of human cultural interaction. Their histories testify to the rich and important economic, social and cultural exchanges that small islands have given the world. Many island peoples and communities have an in-depth appreciation of the cultural and biophysical dimensions of development.

Health: issues of development, environment and health are closely entwined – ill health hampers economic and social development, triggering a vicious cycle that contributes to unsustainable resource use and environmental degradation. A healthy population and safe environments are important pre-conditions for sustainable development. Hunger, malnutrition, malaria, water-borne diseases, drug and alcohol abuse, violence and injury, unplanned pregnancy, HIV/AIDS and other sexually transmitted infections are just some of the problems that have enormous implications for health. The school environment itself must be safe and healthy. Schools should act not only as centres for academic learning, but also as supportive venues for the provision of essential health education and services, in collaboration with parents and the community.

HIV/AIDS: the ravages of HIV and the AIDS pandemic in Africa and rising incidence in Asia and Europe undermine sustainable development and educational processes. It is urgent to look at alternative approaches to education in situations where orphans, missing teachers, the burden of care and overwhelmed social services make traditional educational approaches dysfunctional or irrelevant. Sustainable development itself takes on a different complexion in such circumstances and will require specially tailored measures and support. Nevertheless, education remains one of the best hopes to stimulate the behaviour changes and the cooperation needed to stem the pandemic.

Governance: at local, national and international levels, sustainable development will best be promoted where governance structures enable transparency, full expression of opinion, free debate and broad input into policy formulation. Such a framework will give the best opportunity for ESD to bear fruit in terms of the full participation of citizens in setting parameters for sustainable development and good governance. ESD will thus consciously model and explain this framework.

3.2 Environmental perspectives

Natural resources (water, energy, agriculture, biodiversity): Building on more than 30 years of experience in environmental education, ESD must continue to highlight the importance of addressing these issues as part of the broader agenda of sustainable development. In particular, the links with societal and economic considerations will enable learners to adopt new behaviours in the protection of the world's natural resources, which are essential for human development and indeed survival. Humanity is dependent on the goods and services provided by ecosystems. Thus, the protection and restoration of the Earth's ecosystems is an important challenge.

This is particularly true for Small Island Developing States, which differ from one another in terms of size, shape, wealth and both natural and economic resources, but experience similar constraints to sustainable development arising from small land size, geographical dispersion, vulnerability to natural hazards and disasters, limited terrestrial natural resources, heavy dependence on imports, limited commodities, isolation from markets and many other characteristics and processes.⁸

Climate change: Global warming is a "modern" problem -- complicated, involving the entire world, tangled up with difficult issues such as poverty, economic development, and population growth. ESD must bring to the awareness of learners the crucial need for international agreements and enforceable quantified targets to limit damage to the atmosphere and check harmful climate change. In 1992, most countries joined the United Nations Framework Convention on Climate Change to begin to consider what can be done to reduce global warming and to cope with whatever temperature increases are inevitable. In 1997, governments agreed to an addition to this treaty, the Kyoto Protocol, which has more powerful, legally binding measures and is expected to take effect soon⁹. ESD is a key means to build a global lobby for effective action.

Rural development: In spite of rapid urbanization, three billion or 60 per cent of the people in developing countries, and half of the people of the world, still live in rural areas. Three quarters of the world's poor, those earning less than a dollar a day, the majority of these female, live in rural areas. Non-attendance in school, early dropout of students, adult illiteracy and gender inequality in education are disproportionately high in rural areas, as is poverty. Urban-rural disparities in educational investment and in the quality of teaching and learning are widespread and need to be redressed. Educational activities have to be linked to the specific needs of the rural community for skills and capacities to seize economic opportunities, improve livelihood and enhance the quality of life. A multi-sectoral educational approach involving all ages and formal, non-formal and informal education is necessary.

Sustainable urbanisation: At the same time, cities have moved to the forefront of global socio-economic change, with half of the world's population now living in urban areas and the other half increasingly dependent upon cities for their economic, social and political progress. Factors such as globalisation and democratisation have increased the importance of cities for sustainable development. Accordingly it is generally accepted that cities not only pose potential threats to sustainable development but also hold promising opportunities for social and economic advancement and for environmental improvements at local, national, and global levels.

Disaster prevention and mitigation: sustainable development is undermined where communities suffer disasters or are threatened by them. Past experience and projects have revealed the enormously positive effects of education for disaster risk reduction. Children who know how to react in case of an earthquake, community leaders who have learned to warn their people on time, and whole social layers who have been taught how to prepare themselves for natural hazards have contributed to better mitigation strategies. Education and knowledge have provided society with vulnerability reduction and life improving self-help strategies.

3.3 Economic perspectives

Poverty reduction: this is the overarching concept which guides international commitments to development in the framework of the Millennium Development Goals. The principal instrument of planning and implementation in this regard are the Poverty Reduction Strategy Papers (PRSPs),

⁸ General Assembly Document A/CONF. 167/9 (New York: UN), available online at <http://www.un.org/documents/ga/conf167/aconf167-9.htm>

⁹ With the upcoming ratification of the Russian Federation, the protocol will enter into force in early 2005.

produced by a growing number of developing countries. From the point of view of sustainable development, poverty reduction is the central concern of the economic element, but must be understood in relation to the other three elements: social, environmental and cultural. In other words, economic considerations, while key to sustainable development, are a contributing factor rather than an overarching goal.

Corporate responsibility and accountability: the growth in the economic power and political influence of large corporations underlines their potential contribution to and effect on sustainable development. Issues of multilateral trade have immense implications for sustainable development, and ESD must build a balanced awareness of these economic and financial forces and enable learners to take action to increase public accountability and responsible commercial practices. The Global Compact, an international initiative of the UN Secretary General offers an existing framework for advancing responsible corporate citizenship, bringing companies together with UN agencies, labour and civil society to support principles in the areas of human rights, labour and the environment.¹⁰

Market economy: The global market economy as it currently exists does not protect the environment and does not benefit roughly half of the world's people. One basic challenge is to create global governance systems that harmonize the market more effectively with environmental protection and the goal of equity. Furthermore, there is a need for advancing a revolution in technology that dramatically increases energy efficiency, the use of renewable energy sources, recycling and waste reduction. Education itself is part of a larger economic system and is influenced by patterns of supply and demand, by levels of taxation and other economic forces. It also functions in a particular regulatory environment. In order for ESD to find its place in educational offerings which respond to market forces, it will be important to influence regulations and the functioning of the market.

3.4 *Learning spaces*

ESD is for everyone, at whatever stage of life they find themselves. It takes place therefore within a perspective of lifelong learning, engaging all possible learning spaces, formal, non-formal and informal, from early childhood to adult life. The different parts of education systems including faith based institutions and learning opportunities outside of these systems have different functions with regard to ESD, but the aim is the same – to enable the learner to adopt practices and behaviours which foster sustainable development individually and collectively.

ESD requires a re-examination of educational policy, in view of a re-orientation of education from nursery school to university and continuing adult learning, in order to focus clearly on the development of the knowledge, skills, perspectives and values related to sustainability. This implies a review of existing curricula in terms of their objectives and content to develop transdisciplinary understandings of social, economic, environmental and cultural sustainability. It also requires a review of recommended and mandated approaches to teaching, learning and assessment so that lifelong learning skills are fostered. These include skills for creative and critical thinking, oral and written communication, collaboration and cooperation, conflict management, decision-making, problem-solving and planning, using appropriate ICTs, and practical citizenship. Education systems will need re-shaping so that this kind of learning is validated through the examination system and that teacher education prepares teachers for active/interactive learning processes, rather than a one-way transfer of knowledge.

Learning of this kind can be undermined when it is unequally available to the whole population. Education systems which maintain a parallel private system available to the wealthier sections of the population are unlikely to convey the values of equity, dignity and respect which underpin sustainable development. This is particularly the case where the public system is held to be inferior. Similarly, public systems which rely on a parallel tutoring system, in which parents pay

¹⁰ www.unglobalcompact.org

for additional tuition from the same teachers in the afternoon or evening, create inequities and send the message that educational success can be bought. Notions of active learning, analytical thinking and critical appreciation of knowledge are thus sidelined.

The specific content of curricula will be derived to a large extent from the local context, addressing issues of relevance and urgency. In terms of a common scientific basis for understanding certain domains of sustainable development, the recently developed *Encyclopaedia of Life Support Systems* will provide an extensive and authoritative body of knowledge to be exploited across different contexts.¹¹

It is common to focus on the formal educational system as the locus of learning. However, at least as much learning takes place outside the school system, in the course of daily life and interactions, in the family, in the workplace, in front of the computer or television, through observing, copying, experimenting, reflecting, articulating, listening, learning from mistakes. The practices and behaviours of sustainable development, however they are initially learnt, will be cemented into individual and collective behaviour through thousands of daily decisions and actions. Planning for ESD must take account of this, recognising that sustainable development is a much modelled as taught. A re-orientation of the education system towards the principles and values of sustainable development must also result in modelling not only inside the classroom but also, and more durably, in modelling by unselfconscious and widespread patterns of living and relating.

A lifelong learning perspective sees formal, non-formal and informal learning as a continuous and iterative process, moving away from the notion that school is where you learn, as a child, with the implication that learning then ceases. Rapid social change calls for formal training and re-training at any point in life. Thus it is crucial that the Decade of ESD should be fully connected to other educational movements, such as Education for All (EFA) and the UN Literacy Decade (UNLD). These connections are close and multi-faceted and are important enough that they merit their own treatment¹². Nevertheless, these initiatives must be borne in mind as the wider international educational context in which the Decade of ESD takes place.

Non-formal learning includes adult and community learning, distance learning as well as specific initiatives such as the possibility of a virtual learning campus on sustainable development, and youth-to-youth education initiatives. Non-formal learning offers ways of bringing organized educational opportunities to a diverse range of learners, from rural women to out-of-school adolescents to redundant workers and the retired. In view of the multiple connections of sustainable development with other aspects of learning, ESD can find its place as part of continuing education from sociology to carpentry.

Whether organised by the state, by non-governmental organisations, communities or learners themselves, non-formal education programmes are often those most closely linked with direct application and functional outcomes. Frequently centred around adult literacy, learning addresses issues of local relevance, thus providing an orientation into which the concerns of sustainable development easily fit. Indeed, much of what is labelled adult literacy already addresses such concerns – there is need to make sustainable development a more deliberate framework for such efforts and a more consistent thread in adult learning. Cooperation with UNLD initiatives in strengthening and broadening literacy work will enhance DESD's effectiveness in non-formal learning situations.

Reaching the millions of subsistence farmers will require innovative strategies adapted to local contexts and socio-cultural patterns of work. For example, in Africa where women are the principal farmers of food crops, there are many female cooperative work associations which

¹¹ www.eolss.net/eolss_category.aspx

¹² Linkages between the Global Initiatives in Education and Guidelines for Integrating ESD into National Education Systems

perform economic, financial and social functions. Such groupings are prime places for identifying and discussing issues of sustainable development and deciding how to implement more sustainable patterns of agricultural production and natural resource consumption in a rural African environment.

Community-based organisations and local civil society: schools do not exist as islands in the community, but are often important places for broader dialogue and interaction, linking, through parental connections, with other community-based organisations and civil society groups. These may be involved in a whole range of development-related activities, but without a conscious component of education for sustainable development. These groups are important places for discovering what issues of sustainable development are relevant locally and so should be sensitised to using their knowledge to build public awareness, introduce local knowledge into the school setting and orient their own members to more sustainable practices.

The **workplace** is another domain of learning with regard to sustainable development. Every workplace should consider how daily working practices and relationships are related to sustainable development and an explicit commitment to positive practices should be included in the procedures and manuals of the institution. These alone will be insufficient unless accompanied by a consultative process – which is also a learning process – through which employees contribute to the development of such policies. In the case of extractive and energy industries and those engaged with other natural resources (water, agriculture, biodiversity), constant idea generation and innovation must be encouraged from the whole workforce, with each employee committed to demonstrating sustainable development principles such as gender equality and environmental protection inside and outside the workplace.

In the **formal education** sector, the pressures of time, and other targets and initiatives, limit the take-up of ESD initiatives which are often seen as separate and additional to the standard curriculum. Education for sustainable development should not be seen as ‘one more subject’ to be added to an overcrowded curriculum but as a holistic or ‘whole school approach’ where sustainable development is seen as a context for delivering existing aims of education and not as a competing priority. Weaving ESD as a thread through the learner’s passage through the educational system – from pre-school to higher education institution – will maximise its impact.

Schools and colleges are not only places of learning about sustainable development, but places where children can actively implement good practices of sustainable development, for example in energy conservation, recycling, productive use of school grounds or compound, use of natural materials and resources.

Technical and vocational training institutes: much vocational training concerns the use and transformation of natural materials: rock into bricks and buildings, minerals into gates and fencing, fibres into clothing, and manufacturing processes. The DESD should work with vocational training institutes networks to establish a common framework for making sustainable development a foundational theme of such training.

Teacher training institutions: teachers are often overloaded with the demands of changing and expanding curricula. Sustainable development must not be added as yet another subject or item on the timetable, but as an organising principle and cross-cutting theme. If sustainable development education is to have a sustainable future, teachers must not only be convinced of the need for ESD but also be equipped with strategies for integrating it into their classroom practice. The DESD should work with ministries of education to include sustainable development as a cross-cutting theme in teacher training institutions.

Higher education has a particular role to play. Universities must function as places of research and learning for sustainable development, and as initiators and poles of activity in their communities and nationally. Educational theory and innovative practices frequently emerge from research programmes and academic investigation. Sustainable development needs to become a central preoccupation in determining areas of educational research and development. This

sensitisation is urgent because of the significant time lag between starting research programmes and putting useable results into practice.

The Global Higher Education for Sustainability Partnership (GHESP) initiated development of the Toolkit/Resource Centre project for Higher Education for Sustainable Development with the support of the United Nations University to change strategies for reorienting higher education toward sustainable development. It will provide high quality and regionally relevant resources and tools to individuals around the world who are striving to make education for sustainability a central focus of higher education curricula, research, physical operations, student life and outreach to local, regional, and global communities.¹³ Cooperation and the twinning of universities across different regions of the world enables student exchange on innovative projects, for example in environmental engineering, so that students begin to apply new knowledge and skills to problems of sustainable development. The Global Higher Education for Sustainability Partnership (GHESP) provides a forum for cooperation and exchange of experience.¹⁴

Higher education should also provide leadership by practicing what they teach through sustainable purchasing, investments and facilities that are integrated with teaching and learning. All college and university students should understand the importance of diversity and inclusion, be able to identify values, assumptions and ethical systems in order to make their own decisions, and understand geo-spatial and temporal frames of reference and the context of information. Higher education should emphasize experiential, inquiry-based, problem-solving, interdisciplinary systems approaches and critical thinking. Curricula need to be developed, including content, materials and tools such as case studies and identification of best practices.

Educational advisors and inspectorates: as bodies charged with validating, certifying and evaluating educational performance and standards, educational inspectorates influence the priorities of learning institutions, learners and parents alike. The more education is viewed through the lens of sustainable development, the greater support and input they will give to including such themes as valuable outcomes of the system. Promoting this will involve sensitising governments to the need to address educational inspectorates in their own right.

Legislative and policy-making bodies: all of the above must be facilitated by supportive and action-oriented educational policies. Sustainable development is a national priority in many countries, and indeed an international priority as part of the Millennium Development Goals. It now needs to become an organising principle in terms of educational legislation and policy also. This will require inter-ministerial consultation and cooperation, which UNESCO is well placed to stimulate and facilitate. Ongoing policy consultations in the EFA framework offer existing forums where ESD can be included.

Journalists and media organizations have an important role to play in reporting on issues, and in helping raise public awareness of the various dimensions and requirements of sustainable development. Their involvement can contribute to reinforce access to information, communication and knowledge, as well as access to the know-how and capacities necessary for effective use of ICTs in the framework of development programmes. This can include, for instance, the production of radio and television programmes with local content and on themes such as gender equality and universal basic education.

Beyond education, fostering the values, relationships and practices of sustainable development must take place beyond the educational system, in social, economic and environmental organisations, for profit and non-profit, so that sustainable development becomes a basis for daily working patterns and organisational behaviour. Otherwise much of the benefit of ESD, achieved through the educational system, will be lost once people enter the world of work.

¹³ www.ias.unu.edu/research/details.cfm/ArticleID/465/search/yes & www.ulsf.org/toolkit/designframework.html

¹⁴ www.ulsf.org/toolkit/ghespmou.htm

4 Objectives of the Decade

The Decade of Education for Sustainable Development pursues a global vision:

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

This vision sets ‘a sustainable future’ at the heart of our common human endeavour, but the vision will find expression in varied socio-cultural contexts – where ‘positive societal transformation’ will be articulated in different ways. An international decade such as the DESD serves as a framework within which diverse and multiple actors pursue a shared agenda based on their commitment to the central vision. The actors become stakeholders when they accept, adopt or buy into a part or the whole of the decade’s vision or if they are affected by it. It is the role of UNESCO, as the designated international lead agency, to provide a clear presentation of the framework from the start and to mobilise and “shepherd” action among stakeholders over the ten years. The vision articulated above and the underlying reasons why education and learning are central to sustainable development are the motivating forces of the Decade, but what are its objectives? What is it about the Decade which will foster ESD and, beyond that, sustainable development itself?

Its objectives may be articulated at each level, from community to the global context, but at each level the Decade should offer a framework for enhanced action and a link to other contexts and other levels. The following objectives focus on the global level, but are intended to be generic enough that they may serve as relevant input into the formulation of objectives at other levels – a process that will be a necessary part of the implementation of the Decade (see Section II below).

The proposed DESD objectives are to:

1. give an enhanced profile to the central role of education and learning in the common pursuit of sustainable development;
2. facilitate links and networking, exchange and interaction among stakeholders in ESD;
3. provide a space and opportunity for refining and promoting the vision of, and transition to sustainable development – through all forms of learning and public awareness;
4. foster increased quality of teaching and learning in education for sustainable development;
5. develop strategies at every level to strengthen capacity in ESD.

The Decade focuses on ESD in all parts of the world, developing and industrialised countries, in equal measure. The messages of sustainable development, as a global concern, are equally applicable and equally urgent in industrialised as in developing countries. The impact of over-consumption and wasteful lifestyle patterns wherever they occur make a strong argument for increased attention to ESD.

The Decade offers a platform for existing international agreements, such as those on biological diversity, combating desertification, climate change and wetlands conservation, and will provide a framework for strengthening the public awareness and educational activities of the various secretariats.

The Decade provides an opportunity for developing countries to define for themselves the kind of path they wish to follow. From the perspective of sustainable development it is clear that models derived from the industrialised countries are neither appropriate nor desirable, given the pressing need for those countries themselves to adopt more sustainable lifestyles. Building on strong commitment to values of community and solidarity, the developing countries have a chance to develop – and to model – viable, alternative approaches to sustainable development.

SECTION II: STAKEHOLDERS AND STRATEGIES

5 The Stakeholders of ESD

It would be true but unhelpful to say that everyone is a stakeholder in education for sustainable development. All of us will feel the impact of its relative success or failure, and all of us affect the impact of ESD by our behaviour which may be supportive or undermining. This generalisation does not however help to identify targeted strategies of cooperation, communication or action. Particular roles and responsibilities devolve to a number of bodies and groups at different levels: local (sub-national), national, regional and international. At each level, stakeholders may be part of government (or intergovernmental at regional and international levels), civil society and non-governmental organisations, or in the private sector. The functions and roles of these categories, at each level, are complementary:

Table 1: Complementary functions of stakeholders

Governmental and intergovernmental bodies	<ul style="list-style-type: none"> ▶ policy-making and framework-setting ▶ promoting public consultation and input ▶ national (and international) public campaigns ▶ embedding and operationalising ESD in educational systems
Civil society and non-governmental organisations	<ul style="list-style-type: none"> ▶ public awareness-raising, advocacy, campaigns and lobbying ▶ consultancy and input into policy formulation ▶ delivering ESD, primarily in non-formal settings ▶ participatory learning and action ▶ mediation between government and people
Private sector	<ul style="list-style-type: none"> ▶ entrepreneurial initiatives and training ▶ management models and approaches ▶ implementation and evaluation ▶ development and sharing of practices of sustainable production and consumption

Some functions are common to all stakeholders, including the development of ESD expertise and capacity, the production of educational and informational materials, the identification and mobilisation of resources, the modelling of sustainable development practices in institutional life, the exchange of information, and the promotion of cross-sectoral cooperation.

Special mention must be made of **indigenous peoples**, because of their particular and long-term links to specific geo-physical environments and because of threats to their living and future. They are stakeholders both in the active and passive sense, but more especially represent a fund of knowledge in balancing the use and preservation of natural environments. Without idealising or romanticising this relationship of human being to nature, the intimate knowledge and sustained use of their environments gives indigenous peoples a role in informing the wider debate and offering detailed insights into practices of the 'management' of human survival and development in finely tuned and diverse environments.

Media and advertising agencies are key stakeholders in promoting the broad public awareness and ownership without which ESD will remain the concern of a few enthusiasts and

be confined within the walls of educational institutions. Only a groundswell of public opinion will result in an understanding of and commitment to the principles of sustainable development and therefore an engagement with educational and informational initiatives.

The following table presents an indicative – not exhaustive – listing of key stakeholders in ESD. In each context it will be necessary to identify others and to ensure that alliances and networks are inclusive and open to newcomers. Principles of partnership and networking are presented as a strategy in the next section.

Table 2: An indicative list of potential partners in ESD

	Governmental	Civil society and NGOs	Private
Sub-national	<ul style="list-style-type: none"> ▶ Provincial/state/district departments of education and development sectors ▶ Municipal authorities ▶ Schools, adult learning programmes ▶ Universities and colleges 	<ul style="list-style-type: none"> ▶ Community-based organisations ▶ Local sections of NGOs ▶ Youth associations ▶ Faith-based groups ▶ Village development committees ▶ Adult learning groups 	<ul style="list-style-type: none"> ▶ Local business ▶ Clans and families ▶ Individuals
National	<ul style="list-style-type: none"> ▶ National government departments of education and development sectors ▶ Universities and research institutes ▶ EFA networks ▶ Media (governmental) 	<ul style="list-style-type: none"> ▶ National NGOs and NGO coalitions ▶ Branches of international NGOs ▶ Faith-based organisations ▶ Teachers' associations and trade unions 	<ul style="list-style-type: none"> ▶ Private sector businesses ▶ Business associations ▶ Media (private)
Regional	<ul style="list-style-type: none"> ▶ Regional inter-governmental groupings ▶ Regional EFA networks 	<ul style="list-style-type: none"> ▶ Regional CS and NGO groupings and networks ▶ Faith-based organisations 	<ul style="list-style-type: none"> ▶ Regional business associations
International	<ul style="list-style-type: none"> ▶ UN agencies ▶ CSD ▶ EFA High-Level and Working Groups and E-9 grouping ▶ UNDG member agencies ▶ Millennium Project Task Forces ▶ Official/semi-official watchdog bodies 	<ul style="list-style-type: none"> ▶ Sustainable development education networks ▶ NGO UNESCO Liaison Committee ▶ CCNGO/EFA ▶ Global Campaign for Education ▶ International environmental NGOs ▶ Faith-based organisations 	<ul style="list-style-type: none"> ▶ International associations of businesses (eg in the extractive sector) ▶ TNCs (eg media corporations)

6 Seven Strategies

An initiative as broad and as far-reaching as the DESD requires strategies that can be applied at all levels and in all contexts, and that will serve to implement the vision of ESD over the ten-year period. Stakeholders will apply the following *seven* strategies both in their own institutional frameworks and in the networks and alliances in which they function. The *seven* strategies are:

- Advocacy and vision building

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

Initiatives and actions linked to each strategy are proposed in Table 10 below (Timeline).

6.1 Advocacy and vision building

Progress towards sustainable development requires that the growing global awareness of social, environmental, cultural and economic issues is transformed into understanding of root causes; it also means that local, national and global visions of what it means to live and work sustainably are developed. Building vision enables ESD to take root in local realities and to build at the same time a global commitment and unity across diverse contexts. Future ESD vision building is related to the vision building that has gone on in developing local Agenda 21s in many countries. Most importantly, awareness should result in a sense of social responsibility and a consciousness of how one's actions affect the lives of others. Thus, implementing ESD requires widespread advocacy and a responsible media committed to encouraging informed and active citizens.

Advocacy will 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 vigorous debate and mutual learning. At local level schools and CSOs may be involved, as part of ESD, in lobbying local government on behalf of particular issues of sustainable development. Thus advocacy itself becomes an educational process, as learners think critically about their own circumstances and future.

As part of the ongoing advocacy for ESD and its outcomes in sustainable development, it will be advantageous to adopt a theme for each year of the Decade. Possibilities include: sustainable consumption, cultural diversity, health and quality of life, water and energy, biosphere reserves as places of learning, world heritage sites as places of learning, ESD in the knowledge society, citizen participation and good governance, poverty reduction and sustainable development, intergenerational justice and ethics.

6.2 Consultation and ownership

An international decade provides the opportunity to develop worldwide momentum in the ESD; however, it will only do so to the extent to which stakeholders at every level own the vision. In turn, ownership depends on consultation and participation in policy formulation and the planning of initiatives and activities. Governments have a particular responsibility to initiate consultative processes and establish fora for debate. Consultation will include:

- Transparent and timely publication of government policy proposals and budgetary provisions;
- Processes to solicit input from civil society and the private sector stakeholders into national plans and initiatives;
- Parliamentary debate and committee work;
- Public awareness campaigns which invite feedback and comment;
- Commissioning of research and its transparent use in evidence-based policy-making.

While these processes most clearly apply at national level, similar consultation mechanisms can be envisaged both at sub-national and at regional/international levels, where other stakeholders are involved.

6.3 Partnership and networks

Education for sustainable development is fundamentally cross-sectoral and engages a wide variety of institutions. The effectiveness of the Decade will depend on the strength and inclusiveness of the partnerships, networks and alliances which it is able to develop, among stakeholders at all levels. Indeed, something as broad-based and as long-term as an international decade can derive its energy and effectiveness *only* from partnerships and cooperative relationships – it is too great and too complex an undertaking for any one institution – national or international – to promote on its own. From the outset, therefore, the orientation of DESD partners must be outward-looking, seeking to make connections with initiatives, programmes, groupings and networks through whom ESD will be further promoted and implemented. Particular attention must be paid to connecting with both national governments because of their central coordinating role and resources and with civil society networks, because their grassroots connections can enable DESD messages to fan out and down to local levels.

The Decade must identify and build on existing work and projects, building synergy and cooperation between them – partners may be found in unlikely places, as the range of perspectives on ESD implies (see section 3 above). The diversity of perspectives represented by partners means that there will be multiple entry points for participation in the Decade; where one starts from models of grassroots intervention (eg CSOs), another comes in from an environmental perspective (eg some government departments and NGOs), while yet another is concerned about sustainable economic growth (eg other government departments, international development banks). The added value of the Decade is to provide a place where these interests, far from competing, 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 should 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.

6.4 Capacity building and training

In order to strengthen the implementation of ESD throughout the Decade it is essential to ensure that partners and stakeholders acquire and constantly improve their capacity and skills. It will be important to use (or design) capacity-building and training approaches which provide durable skills which can be practically applied. Decade partners may, in certain contexts and groupings, need to give attention first to developing approaches of this kind. The key areas of capacity-building and training include the following:

- Communication and awareness-raising: these skills will provide the foundation for networking and establishing partnerships. Effective communication will serve to share agendas among stakeholders in a manner which identifies shared elements and gives potential partners the confidence to build active cooperation. Awareness-raising among stakeholders and with the wider public must, in today's media-soaked world, be of the highest professional standards;
- Planning, management and evaluation: the complexity of sustainable development and of ESD requires high levels of planning, management and evaluation skills to ensure clarity of purpose, focused partnerships, and assessment of effective progress;
- Training and retraining of educators: within the formal education system and in non-formal settings, the level of knowledge and enthusiasm of the educator will be a key

factor in stimulating the learners' interest and appreciation of issues of sustainable development. The attitudes and methods which the educator employs must reflect the values of sustainable development as well as the highest standards of pedagogical practice;

- Tools for analysis: educators, learners, policy-makers, planners and those involved in networking and partnership building all face the task of integrating the multiple dimensions of sustainable development. For this purpose, a set of analytical skills and procedures must be developed and shared, leading to confidence in understanding and sharing, at various levels, the many connections which sustainable development has with human activity.
- Instructional content and materials: awareness-raising, public campaigns, classroom instruction and non-formal learning require suitable and relevant materials, in written, electronic and audio-visual forms. School systems as well as organisations of civil society must develop the capacity to conceive, design and produce materials which stimulate concern and offer relevant knowledge in each context. Whether at school, district, national or international level, material design workshops will serve to build this capacity and to sharpen the messages of sustainable development.
- Instructional methodologies: methodologies of instruction and facilitation for the purposes of ESD must reflect the sense of common concern and commitment which the pursuit of sustainable development implies. In other words, learner-centred instruction focused on personal engagement with learning and on critical assessment of problems and possibilities must be the goal. Such approaches are much harder work than traditional chalk-and-talk methods, and adequate training and instructor support will be necessary. In many contexts, this implies much higher levels of investment in training, as well as a major leap in instructional quality.

6.5 Research and innovation

Research is the basis for understanding what issues must ESD must urgently address, for assembling information for the evaluation of progress and for seeking innovative solutions. Research efforts will focus on:

- Baseline studies to establish markers against which progress over the Decade can be measured;
- Exploration of the specific nature and methods of ESD, including the documentation of a wide ranges of experiences and situations, with the aim of providing evidence for going to scale;
- The conceptual and practical links of ESD with other aspects of learning (literacy, numeracy, natural science, social science, for example) and with modes of development intervention (sectoral projects, community mobilisation, for example);
- Longitudinal studies which demonstrate and analyse the level of impact of ESD on the lives of individuals, communities, and national policy and institutions;
- Institutional arrangements, modes of partnership and approaches to management in ESD with a focus on identifying and disseminating good practice.

In order to identify and further delineate the key research issues, regional conferences of research institutions should be held during the first year of the Decade. This should serve also to set up cooperative research partnerships across countries and regions.

A specific means of fostering the innovation necessary for widespread yet relevant ESD is **scenario development**. Ultimately DESD aims to see ESD implemented in thousands of local situations on the ground. This will not involve ESD as a stand-alone programme, but the integration of ESD into a multitude of different learning situations. No standardised programme

can or should be proposed. However, it would be helpful to sketch out a number of scenarios of what high-quality ESD would look like, for instance in schools of different kinds, in adult learning circles, within a range of development programmes, in different geographical and socio-cultural contexts, in the framework of different subject areas. Each scenario should include, among other things and for the situation it addresses:

- Ways to discover what the key local issues of sustainable development are;
- Possible learning strategies;
- Ways of fostering links between the learning situation (school, adult programme, etc) and the community, for example involving schoolchildren in research projects monitoring environmental change;
- Ways of integrating local knowledge and culture;
- Curriculum development processes enabling content to be decided locally based on the sustainable development principles.

Such scenarios will be a resource for local discussion of how ESD can best be put into effect.

6.6 Use of Information and communication technologies (ICTs)

Information and communication technologies are the lifeblood of any international initiative such as a UN Decade – as a means of linking distant partners, storing data, sharing information and news as quickly as possible, and as a way of administering a large logistical enterprise. Beyond these everyday uses ICTs have particular links and implications with ESD:

- ICTs are the basis of the ‘knowledge economy’ where wealth is generated by the transfer and use of information in ways that use fewer natural resources 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 modes and spaces of learning. Distance learning, long dependent on radio, TV and the postal system, becomes more useable and learner-friendly when accessed interactively over the web. This represents an opportunity for the widespread dissemination of ESD in ways that offer options of individual pace, assignments and help;
- Where ICTs are accessible to learners, they can serve to provide spaces for global dialogue. The *Small Islands Voice*, 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 in sustainable development.¹⁵

However, ICTs are far from being universally available – cost, infrastructure, energy supply and telephone connections are all factors which mean that the digital divide is by no means bridged. While innovative ways must be sought to make ICTs increasingly accessible, in many places older technologies will continue to reach more people (by radio, for example) and be more sustainable. 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 use and sharing of knowledge, rather than merely a passive acceptance of other people’s knowledge found on the web.

6.7 Monitoring and Evaluation

Monitoring and Evaluation will become a key strategy to ascertain the changes, differences and impact of the Decade, see detailed elaboration in Section III sub-section 9.

¹⁵ www.smallislandsvoice.org

SECTION III: IMPLEMENTATION AND EVALUATION

7 The Role of Stakeholders from Local to Global

ESD must integrate all levels of community: local, national, regional and global because sustainable development itself cannot be pursued at only one level. The causes, effects, problems and solutions are woven into and through each level. The impact of sustainable development – and of unsustainable development – is ultimately experienced most keenly at the local level, where livelihoods are enhanced or diminished and resources are regenerated or depleted. However, what happens at local level affects and is affected by what happens at global level – the broader tensions of globalisation, visible and articulated at worldwide level, find echoes in the problems people face and the solutions they can envisage. Education for sustainable development must therefore be rooted in the local – starting from and aiming to address grassroots realities – and provide a global context in which to set these phenomena. Again, the four elements of sustainable development – society, environment, economy and culture – are in focus at local and global levels and at all levels in between.

This section looks at how the DESD agenda and its activities might be structured at local, national, regional and international levels. We emphasise that the effectiveness of the Decade will ultimately be judged by the degree of change in attitude and behaviour in the lives of communities and individuals at the local level. National, regional and international initiatives must keep this perspective in mind; cooperation, structures, plans and activities at these higher levels will be of most value when they are designed to give support to the local, sub-national level. It is not the number and nature of coordinating and facilitating activities which will count in the end, but changing patterns of development and progress towards more sustainable models and improvements in the quality of life. Before addressing the national level, and higher levels, it is important therefore to place them in the context of sub-national, local initiative.

7.1 *Local (sub-national) level*

One indicator of the success of the DESD will be the extent to which ESD becomes part of the development dialogue at community level. Support networks are essential at the local level and might be provided by education systems, NGOs, community associations or specially trained individuals employed by government. These networks serve to build teacher capacity and motivation to participate in adapting curriculum to their local educational context, thus helping them to overcome challenges in local programme implementation such as: learning new content knowledge and innovative pedagogy, coordinating programme logistics, and school administrative and community support.

Local institutions and groups are places where sustainable development practices can be modelled and learnt – for example, energy use, recycling, but also the values and relationships needed for sustainable development, such as understanding how what I do affects others, present and future, and why my actions should respect their needs as well as meeting my own. To make this happen, various institutions, organizations and individuals need first to cooperate and learn about ESD at both basic and adult education levels to in order to identify the real causes of currently unsustainable situations. To resolve the identified problems, individuals and agencies should apply things learned through ESD to local education plans and policies, including local agendas, in concrete terms.

For instance, one way to advance ESD in primary and secondary schools is to encourage links with universities and colleges that are conducting research in sustainable development and are effectively teaching the subject. It is also important to encourage universities and colleges existing in the same sub-national area to form consortia for the purpose of collaborating in research, teaching, and support for local school systems.

Local governments must also be given a key and active role. Local governments, as the closest level of government to the people, tasked with the delivery of public programmes and services, have a key role in improving the quality of people's lives and to achieving the goal of sustainable development. Commitment to the ideals of decentralization and improved local governance reinforces the role of local governments and their partners in attaining the goals of sustainable development. Although technology and financial resources play an important role in development, without sound management and coordination capacity in place, especially at the local level, sustainable development is unlikely to be attainable.

Local organisations, both community-based and in local government, can participate in the DESD in two ways:

- Through integrating ESD into their own regular learning and programme activities. This will include identifying and implementing local relevant learning strategies in appropriate ways, and for a variety of target groups;
- Through cooperating in local groupings and networks, set up on a formal basis or in an ad hoc manner to meet particular needs or respond to special opportunities. This may involve identifying local challenges in sustainable development, integrating local knowledge and skills into ESD, and exchanging experience. The local level is the primary place at which lessons for better practice in sustainable development can be learnt, shared and applied.

Part of the initial efforts of the DESD must be to identify the potential local partners – this can only be done if one or more organisations take the lead to do so. Organisations include: schools, parent/teacher associations, school support groups, adult learning, literacy and NFE circles, cultural associations, youth organisations, cooperatives, faith-based groupings, self-help groups, development committees, local government departments, locally elected bodies and municipal services.

Certain sections of the population may not, however, be represented among such groupings; marginalised groups such as the handicapped, the very poor, nomads and migrants, ethnic and linguistic minorities, the aged and the chronically ill are often neglected and may become invisible. Special efforts, with adequate investment of human and material resources, will be required to ensure that they participate in ESD and that they share in the benefits of sustainable development approaches and achievements.

Table 3: Summary chart of local-level cooperation in ESD

Community-based institutions and organisations such as:	Working individually to:	Cooperating in ad hoc or formal local groupings to:
<ul style="list-style-type: none"> ▶ schools and school support groups, cultural associations, youth organisations, cooperatives, faith-based groupings, self-help groups, development committees, local government 	<ul style="list-style-type: none"> ▶ integrate ESD into regular learning activities and programmes ▶ identify and reach marginalised groups ▶ identify and implement learning strategies 	<ul style="list-style-type: none"> ▶ identify local sustainable development challenges ▶ integrate local knowledge and skills into ESD ▶ exchange ESD experiences and learn lessons for better practice

7.2 National level

According to the UN General Assembly resolution instituting the DESD, governments are invited to “consider the inclusion of measures to implement the Decade in their respective educational strategies and action plans by 2005” taking into account the current scheme of implementation. This stresses the importance of the national level in setting parameters for effective cooperation

and action in ESD and emphasizes the **responsibility of government** to initiate this process, which should include the following elements:

- Consultation and ownership of vision – DESD plans for each country will be evolved through local and national discussions on the DESD – including relevant government ministries, universities and research institutions, civil society organisations and networks, parliament, stakeholders in all parts of the education system;
- Formulation of policy, based on broad input and providing a framework for local action and responsibility;
- Working with institutions of educational research, curriculum reform and development and teacher training to ascertain at which points in the educational system the values of sustainable development may be embedded.

There will be a need for **coherence and coordination** to bring clarity into broad stakeholder engagement, particularly in the development of national strategies and policy papers, in order to avoid overlap and duplication of effort, to present a coherent and focused message to the public and gain collective backing for future action. However, such coordination should not imply control or the mere promulgation of central decisions or plans. ESD must belong to all the local groups mentioned in the previous section – government and other national bodies such as NGO networks or private sector alliances must see their role as strengthening local action.

As the definition of education in this framework goes beyond formal education, efforts must be made to identify or establish an appropriate **ESD Hub** that should be tasked to energise and coordinate the implementation of the DESD in each country. This permanent, small but dynamic unit should not carry out programmes, but rather behave as an ‘exploding star’, radiating out to an ever-increasing number of stakeholders and facilitating connections between them. Multi-stakeholder and multi-sectoral institutional mechanisms and processes exist at the national level (National Council for Sustainable Development – for example in Mongolia) and local levels in many countries. These mechanisms frequently serve as sustainable development coordinators and should give priority to education in their agenda and actively pursue initiatives that are supportive of DESD. Alternatively, the responsibility in government may be lodged with an oversight and coordinating agency (e.g. planning or Office of Prime Minister) rather than with Ministry of Education to ensure that the approach will be holistic and integrated. Specially created coordinating and networking bodies are another option, as for example the Japan Council on the UN DESD.

In addition to a small permanent unit, a **national ESD Consultative Group** should meet once or twice a year to bring all stakeholders together and build momentum in all aspects of planning and implementing DESD strategies. This Consultative Group will be the principal focus of input to policy formulation, design of ESD messages and awareness-raising strategies, sharing of perspectives, informing one another about specific initiatives and experiences. Facilitated by the ESD Hub, and meeting on a regular basis, the national ESD Consultative Group will:

- Debate and recommend ESD policy options which reflect local-level experience and challenges;
- Provide a forum for exchange of experience, positive and negative, in ESD;
- Ensure that the full range of relevant perspectives is integrated into planning and public awareness raising;
- Set national ESD priorities and give input into the formulation of budgets;
- Integrate ESD into national education policies, Education for All and Literacy Decade planning;
- Identify capacity-building needs and the actor best placed to meet them;
- Identify research issues in ESD and plan cooperative research projects;

- Develop relevant monitoring indicators for ESD;
- Coordinate national campaigns, events and conferences in support of ESD;

The larger **policy framework** can make a real difference in mobilising political will, resources and effort. At national level, clear guidance will be necessary to ensure that ESD has a place in relevant policies. This guidance will include:

- Identifying the policy areas where ESD should have an explicit place;
- Working to embed the ESD vision harmoniously in these policy areas;
- Imagining new ways of ensuring the cross-departmental communication and cooperation ESD requires;
- Suggesting ways of articulating sustainable development as an over-arching framework for national policy and how to promote ownership of it;
- Identifying key national research issues to elucidate critical policy questions.

A further role of government is the **mobilisation of financial resources** across ministerial departments; as well as integrating allocations into the normal budgetary process. Countries in receipt of international aid should write ESD components into PRSPs and other financing arrangements. Given that sustainable development is a key goal of international development cooperation, ESD should have a prominent place in long-term development strategies and national development planning.

National **civil society and non-governmental organisations and networks** will play a central role in linking local groups with policy-making fora, undertaking advocacy and lobbying and providing a conduit for bringing small, local and innovative experiences to the attention of government and a larger public. Given the diversity and spread of CSOs and NGOs, it will be helpful to create a national CS network specifically for ESD, in order to ensure a strong and coherent voice throughout the decade. CSOs and NGOs are a potent force in educating communities, directly and indirectly.

The national **media organisations and companies** must be brought into national DESD planning at an early stage, bringing their communication expertise and media skills to the formulation of key sustainable development and ESD messages. Critical issues should be highlighted with which the media can engage in stimulating debate and disseminating information among the wider public.

The **private sector** should also be fully engaged in national processes, since business is central to ESD in two specific ways:

- Changing lifestyles, by promoting sustainable consumption and espousing sustainable production;
- Delivering knowledge, both through its advertisements and its capacity to educate.

Private sector trade associations and chambers of commerce will provide platforms for identifying and debating their particular challenges of sustainable development and for designing ESD initiatives, both in the workplace and in the community. There will be value in creating a task force or similar grouping at the start of the decade to study ways in which the private sector can cooperate in national ESD planning and action. In addition, there is a long history of private sector support for local educational activities – this capacity should be harnessed and focused as part of ESD initiatives.

The following table summarises the value which each of the above national actors can add to the DESD process:

Table 4: Value added to ESD by national-level actors

Actors at national level	Working to:
Government (education ministry, universities, other relevant ministries and departments)	<ul style="list-style-type: none"> ▶ provide a national policy framework for ESD ▶ budget and mobilise resources ▶ support sub-national departments ▶ foster public awareness of ESD and sustainable development
NGOs, NGO and civil society networks and alliances	<ul style="list-style-type: none"> ▶ link local experience to national policy-making ▶ advocate and lobby on ESD ▶ facilitate exchange and information sharing among their members about ESD practices and experiences
Media groups and agencies	▶ integrate ESD and SD awareness building into media strategies
Private sector companies and trade associations	▶ provide a forum to identify SD challenges they face, identify and address necessary learning needs

7.3 Regional level

Cooperation at regional level can be particularly enriching and stimulating, since experiences, in whatever field, are often similar enough to be comparable, but different enough to provide new perspectives and ideas. Similar patterns of history, tradition, culture and language combine with parallel practices of production and consumption to make the mutual sharing of lessons relevant and meaningful. In the arena of sustainable development, comparable geo-physical and environmental circumstances further strengthen reciprocal understanding and learning. Thus cooperation and interaction at regional level is often richer and more useful in directly applicable terms than at international level (where the functions are different, see next section). Regional cooperation is well-established in many fields, with umbrella bodies which give potential for the integration of ESD concerns. The initiative of the UN Economic Commission for Europe provides an example of how an ESD strategy can be developed and espoused within existing cooperative frameworks (UNECE 2003).

The principal function of regional cooperation will therefore be the sharing and exchange of policies, experiences, challenges and progress with the purpose of providing mutual support among countries of the region and enabling all the relevant actors to have contact with their regional counterparts. The following chart picks up the same range of actors listed at national level and illustrates the role of their regional groupings in ESD:

Table 5: Regional groupings and their functions

Actors at regional level	Working individually to:
Regional intergovernmental organisations	<ul style="list-style-type: none"> ▶ 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	<ul style="list-style-type: none"> ▶ 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

In parallel with the national level, it will be important that organisations and groupings not only cooperate with their counterparts in other countries, but that regional momentum is increased through concerted action among all the different groupings. Thus it is important to create a regional ESD platform – here labelled a ‘regional ESD caucus’ – to provide for maximum learning and support. It should be a flexible arrangement, with meetings tackling the most current and pressing issues. Working together in a regional caucus will have the following aims:

- Share policies, practices, knowledge and progress;
- Identify common challenges;
- Learn from diverse strategies and approaches;
- Forge consensus on regional challenges and action;
- Organise cross-national capacity-building;
- Conduct monitoring and evaluation of regional actions and programmes;
- Identify regional research issues and organise cooperative research programmes.

7.4 International level

At international level the key functions of the DESD will be to facilitate broad and ongoing awareness of the key issues and changing agenda of sustainable development and ESD in the following ways:

- Mobilise political will and strengthen common commitment;
- Provide an international platform to ensure high visibility of the challenges and progress of ESD, and maximum impact of ESD initiatives;
- Forge strategic international partnerships to meet specific ESD challenges during the Decade;
- Mobilise resources additional to those of national budgets;
- Keep education high on the agenda of the Commission for Sustainable Development;
- Integrate ESD into EFA agendas (Monitoring Report, High-Level and Working Groups);
- Foster global exchange of practice, policy and progress;
- Monitor the progress of the Decade.

At the political level, this will take place in a variety of international forums which already exist, and in others which may be created for the purpose. Among the latter is the possibility of an **Inter-Agency Committee on DESD**, which will bring key international agencies together, such as those of the UN system, development banks, the OECD and representatives regional groupings (ASEAN, AU, EU, OAS, SADCC, etc), NGOs and aim, in addition to the strategic goals listed above, to:

- Share programmes and plans in order to encourage mutual reinforcement and avoid duplication or overlap;
- Harmonise approaches to ESD and sustainable development practices within each institution;
- Provide a forum for agencies to integrate the insights and perspectives of other international actors into their ESD agendas;

At the professional and technical levels, the expansion of international exchange and cooperation between educational institutions will also enhance the impact of DESD, through the

development of 'a new global learning space on education and sustainability that promotes cooperation and exchange between institutions at all levels and in all sectors of education around the world'. This suggestion, made in the Ubuntu Declaration as part of the WSSD in 2002, went on to propose specifically:

This space must be developed on the basis of international networks of institutions and the creation of regional centres of excellence, which bring together universities, polytechnics, and institutions of secondary education and primary schools.

Partnerships with the private sector at international level are increasingly in focus under the 'Global Compact' (see Section 4.3). Such partnerships can make a contribution in public awareness raising and workforce training. Dialogue between the private sector, UNESCO and other international agencies can specifically address the setting of standards in production and consumption, as well as indicators of performance in sustainable development which the private sector can use as a quality benchmark.

The following chart gives a summary overview of the role of various kinds of international actors.

Table 6: International cooperation: summary chart

Actors at international level	Roles and functions
Intergovernmental agencies (UN and others)	<ul style="list-style-type: none"> ▶ promote ESD and integrate ESD planning into relevant work plans and initiatives ▶ facilitate and participate in international and regional fora
UNESCO (DESD Lead Agency)	<ul style="list-style-type: none"> ▶ (see below)
Civil society and NGO networks	<ul style="list-style-type: none"> ▶ promote inter-regional exchange and learning ▶ inform members of ESD developments ▶ advocate and lobby with international bodies
Bilateral agencies	<ul style="list-style-type: none"> ▶ integrate ESD into programmes and budgets ▶ promote research in ESD
Private sector	<ul style="list-style-type: none"> ▶ public awareness ▶ standard setting and indicator development

Education is listed as a crosscutting issue in the work of the Commission for Sustainable Development (CSD) and, as such, figures on the proposed agenda of each of the future CSD sessions. It is not, however, one of the main themes to be addressed by the CSD in the next ten years. The multiple connections of education with other aspects of sustainable development and its crucial role in building broad public awareness warrants creation of a Sub-Commission on ESD under CSD. This would provide a high level forum and ensure effective follow-up, enhance international cooperation and examine the progress of the implementation of the Decade in all member states.

Some UN agencies have specific initiatives or programmes which will support and be part of DESD:

- The central importance of girl's education in achieving sustainable development includes its impact on the chances for the survival, education, and well being of the next generation. The UN Girls Education Initiative (**UNGEI**), coordinated by UNICEF, already brings together a wider range of international partners to work for the fulfilment of the EFA goals of gender parity in education (by 2005) and gender equality (by 2015). UNGEI actions, along with

those of the UN Literacy Decade, will contribute crucially to the panoply of efforts of ESD. Conversely, the DESD will give an increasing place to issues of sustainable development in UNGEI discourse and initiatives.

- The United Nations Environment Programme (**UNEP**) will be a key partner in defining and promoting the environmental perspectives of ESD and in coordinating environmental lobbying. It is also well placed to access networks and alliances of environmental organisations at all levels and to strengthen their educational role. Under the banner of 'Environment for Development', UNEP's existing range of environmental education initiatives should form part of the Decade's thrust and, as far as possible, be broadened to include sustainable development perspectives.
- The **UN Habitat** Initiative 'Best Practices and Local Leadership Programme (BLP)' is a global network of institutions dedicated to the identification and exchange of successful solutions for sustainable development. To date, this global network is applying lessons learned from more than 1600 documented policies and practices from 140 countries, providing unique empirical evidence of how cities and communities around the world are contributing to meeting the MDG. Currently UN Habitat has about 300 good and best practices dealing with education. The BLP programme promotes global co-ordination and the matching of supply with demand for information through:
 - Systematic monitoring and evaluation of trends and practices and the exchange of lessons learned;
 - The development of new learning tools and transfer of methodologies; informing policy makers at all levels;
 - Global dissemination through its home page, the Best Practices database, best practice case studies, case books, transfer tools and methods; and encouraging and facilitating transfers of best practices within and across regions.

As the agency designated by the General Assembly to coordinate the Decade, **UNESCO** has a particular responsibility to ensure continued international energy and momentum over the ten years. UNESCO already has responsibility for coordinating the achievement of the EFA goals of the Dakar Framework for Action and the UN Literacy Decade. It is thus well placed to ensure harmonious partnerships and concerted, targeted action through the DESD, in relation to progress on other related international agendas. UNESCO's coordinating role will derive from the strategies, expected outcomes and evaluation indicators of the DESD, as outline in this plan. Working with the agencies of the United Nations, other international bodies and with its member states, UNESCO will develop strategic and goal-oriented partnerships, encouraging inclusive planning, implementation and evaluation. As part of advocacy and awareness-raising efforts, an ongoing partnership with an international media/broadcasting agency will enable regular documentation and dissemination of the principles and practices of the Decade.

The need to ensure adequate and ongoing international consensus and commitment justifies the formation of a multilateral forum focusing on open-ended collaboration. With flexible composition and working arrangements, an **Inter-Agency Committee on DESD** will provide a forum for regular – probably annual – consultation and updating, among all the stakeholder groups. Spelling out the detailed role of the coordinating function of UNESCO should be part of the agenda of the first meeting of the Inter-Agency Committee.

In order to strengthen the international profile of the DESD and to ensure a high level of publicity and visibility for ESD issues, a small group of '**ESD Champions**' should be created, consisting of prominent individuals from different walks of life – perhaps six people from politics, sport, the media, youth, academia and education whose commitment, lifestyle and personal qualities will support the ideals of sustainable development and ESD. Their passion for sustainable development will create a free flow of ideas, cut through national and international bureaucracy and drive the Decade forward with transparency and energy, following a robust timetable.

The following table presents an overview of the proposed groups and bodies at each level, which will generate momentum for the Decade and ensure coherence:

Table 7: Overview of ESD groups and bodies

Level	Grouping	Main purposes
Local (sub-national) level	Stakeholder consultations	identify challenges, integrate local knowledge and skills into ESD, exchange experience
National level	ESD Hub	energise, facilitate connections, coordinate
	ESD Consultative Group	bring stakeholders together for policy input, debate, exchange, planning
Regional level	ESD Caucus	build common understandings, give mutual support, plan joint actions and research
International level	UNESCO	energise, facilitate connections, coordinate, monitor progress
	Inter-Agency Committee on DESD	foster political commitment, identify key global priorities, exchange, consult and update

8 Outcomes

The outcomes of the DESD will be seen in the lives of thousands of communities and millions of individuals as new attitudes and values inspire decisions and actions making sustainable development a more attainable ideal. In support of this concrete goal, the outcomes of the DESD will derive from its objectives and will be realised to the extent to which the kinds of energy and inputs which this draft plan has outlined are available. These outcomes are high-level outcomes which will need to be given more specific shape in each context – national and local. The following chart lists outcomes against objectives as a starting point for this process:

Table 8: Expected outcomes of the DESD

Objective	Expected outcomes
1. Give an enhanced profile to the central role of education and learning in the common pursuit of sustainable development	<ul style="list-style-type: none"> ▶ Integration of educational components into plans for sustainable development ▶ Assessment of the need for and role of ESD in all development planning
2. Facilitate links and networking, exchange and interaction among stakeholders in ESD	<ul style="list-style-type: none"> ▶ Through consultations and fora of all kinds and at all levels – <ul style="list-style-type: none"> › growing consensus on the strategic importance of ESD › growing cooperation and mutual reinforcement among ESD initiatives
3. Provide a space and opportunity for refining and promoting the vision of, and transition to sustainable development – through all forms of learning and public awareness	<ul style="list-style-type: none"> ▶ Broad public awareness of the nature and principles of sustainable development ▶ Regular and substantial media presence for sustainable development issues
4. Foster increased quality of teaching and learning in education for sustainable development	<ul style="list-style-type: none"> ▶ The thread of sustainable development woven into EFA efforts to raise educational quality ▶ ESD-specific approaches increasingly adopted in learning situations of all kinds
5. Develop strategies at every level to strengthen capacity in ESD	<ul style="list-style-type: none"> ▶ ESD as part of educator training ▶ High-quality materials and methodologies in ESD ▶ Adequate management capacity to maintain ESD

Furthermore, echoing the values which ESD should promote, potential behavioural outcomes of this kind of learning would include:

- Respect for other people of current and future generations, recognising their right to a life of quality and to equitable sharing in the world's resources;
- Respect for the natural world, based on an understanding of how it works, of how we can steward its resources and of the devastating effects of not respecting it;
- Knowing how to make choices and decisions, individually and collectively, which take into account the long-term future of social equity, ecological viability and economic progress;
- Committed and aware individuals with a global view, but also with the capacity to envision alternative futures and create change within their societies;
- Capacity to work with others to bring about structural or institutional change within society so that efforts can be embedded within the mainstream. ESD must go beyond self-development to promote structural social change.

9 Monitoring and evaluation

An initiative as long and as complex as a Decade must put in place adequate processes of monitoring and evaluation from the start. Without that, it will be impossible to know if the Decade is making any difference and what that difference is. A key aspect of monitoring and evaluation will be the identification of suitable, relevant and measurable 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 and through the creation of new ones, 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 and will be an integral part of the new thrusts and directions which the Decade may stimulate. 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. For advocacy purposes, as well as to report publicly on DESD progress, a report should be published every two years, aimed at a broad audience.

Qualitative and quantitative evaluation methods will be necessary to track the Decade – aspects such as the adoption of values and changes in behaviour cannot be adequately captured by numbers alone. As far as quantitative approaches are concerned, a wide range of data can be collected. The following table lists the Decade outcomes as identified in the previous section and shows potential indicators and kinds of data which could be used to support their verification. Once again, it must be emphasised that this chart is a starting point and that each initiative at every level will need to its own outcomes and indicators.

Table 9: Monitoring and Evaluation: indicators and data

Expected outcomes	Potential indicators	Data for use in verification
▶ Integration of educational components into plans for sustainable development	Education on regular agenda of CSD, regional, national and local sustainable development fora	Frequency of ESD in proceedings, minutes and other meeting outputs
▶ Assessment of the need for and role of ESD in all development planning	ESD factored into PRSPs, regional plans (eg NEPAD), and national planning cycles	Number of PRSPs with ESD component; number of specific ESD sections in development planning documents
▶ Growing consensus on the strategic importance of ESD	Incorporation of ESD into Education Ministry structures and plans, and into CS and NGO actions	Numbers of countries, CSOs and NGOs including specific ESD provision in their programmes
▶ Growing cooperation and mutual reinforcement among ESD initiatives	Creation of ESD networks and alliances	Numbers and membership of ESD networks and alliances
	Joint programming between government, CS and NGOs at all levels	Numbers of joint initiatives and numbers of bodies participating in them
▶ Broad public awareness of the nature and principles of sustainable development	Popular participation in sustainable development events, campaigns, fora	Level of unsolicited feedback from the public on sustainable development issues
	Participation in local, practical sustainable development initiatives	Numbers of initiatives and levels of participation
▶ Regular and substantial media presence for sustainable development issues	TV, radio and press coverage of sustainable development and ESD	Numbers of reports, editorials and articles on sustainable development

Expected outcomes	Potential indicators	Data for use in verification
▶ The thread of sustainable development woven into EFA efforts to raise educational quality	Use of sustainable development themes in basic education	Numbers of countries with sustainable development in basic education curricula
	Sustainable development a key indicator in EFA monitoring	Regular sustainable development monitoring in national and international EFA reports
▶ ESD-specific approaches increasingly adopted in learning situations of all kinds	Modelling of sustainable development learning processes and in formal and non-formal settings	Number of schools and non-formal programmes modelling sustainable development approaches
▶ ESD as part of educator training	Integration of sustainable development principles into teacher and educator/facilitator training	Numbers of teacher training courses with integrated sustainable development theme; numbers of NFE educators/facilitators using sustainable development approaches
▶ High-quality materials and methodologies in ESD	Relevant, stimulating, practical print, electronic, audio-visual materials available in learning situations and in use	Numbers of materials, distribution and rates of adoption
	Learning/teaching methodologies reflecting sustainable development principles and modelling them	Numbers of schools adopting sustainable development principles; number of in-service teacher/ educator training courses
▶ Adequate management capacity to maintain ESD	ESD integrated into education management training (head teachers, inspectors, administrators, planners, etc)	Numbers of trained managers; numbers of educational institutions where sustainable development approaches are active

In terms of qualitative analysis, ethnographic approaches will enable a close look to be taken at specific communities in terms of changed behaviours, awareness of the values of sustainable development, and adoption of new practices. Longitudinal studies as well as community-wide ethnographic studies and analyses will provide data and will show the multiple connections in people's lives between the changes, values, practices, behaviours and relationships which sustainable development implies. It will be important to identify places for longitudinal studies at the start of the Decade, in both industrialised and developing countries, and in relation to different kinds of ESD initiatives – in formal schooling, public campaigns, non-formal approaches.

At international level, it will be the role of the lead agency, UNESCO, to establish a database of indicators and means of verification, and to work with countries in increasing their capacity to undertake meaningful monitoring and evaluation. As part of this process, UNESCO will work closely with other international monitoring initiatives, including the EFA Global Monitoring Report, the UN Literacy Decade monitoring initiatives and the ongoing monitoring of the Millennium Development Goals.

SECTION IV: PROGRAMMING THE DECADE

10 Resources

The DESD is an initiative of the member states of the United Nations, and as such will be implemented within member states as well as at international level. The aim is to create international momentum which gives rise to increased concern and action at national and local levels where the impact must ultimately be felt. Human and material resources must therefore be available for the appropriate role at each level. In many cases it will be a matter of strengthening or re-orienting existing work using existing resources. At national level, resources will be available through regular budgets or other existing financing mechanisms (such as development assistance), with adjustments of priorities as indicated in this plan. At regional and international levels, existing programmes may be re-oriented towards ESD, particularly within the UN agencies. At all levels, a modest level of extra resources – both human and material – will be required in order to ensure that the extra energy for promoting, facilitating and coordinating the Decade is available.

- At national level, resources are already available through existing programmes and projects, with the need to ensure additional personnel and finances for the ESD Hub and its awareness-raising work.
- At regional level, resources may already be available for exchange through university networks and EFA events, while additional resources will be needed for interaction specifically in an ESD Caucus, and for capacity-building work.
- At international level, UNESCO provides personnel and some financial support for the coordination of the Decade, as well as an inter-sectoral ESD Task Force and the funding of ESD-related programmes. Other UN agencies will integrate ESD into existing budgets and programmes. Further resources at international level will be needed to facilitate targeted interaction between stakeholders in the proposed Inter-Agency Committee on DESD.

11 Timeline

The following charts give an overview of the timing of activities and events of the DESD. The first five years are presented in some detail, since, first, a number of initiatives must be taken at the start of the Decade, to be followed through during the ten-year period, and second, activities and events in the second half of the Decade will depend to a large extent on what occurs (or does not occur) during the first half. Thus the charts show only the major activities/events proposed for the period 2010- 2014.

The timeline is organised around five poles of activity, which seek to carry the Decade forward. They follow closely the strategies for the Decade (see Section 6 above), and acknowledge the fact that the use of ICTs is an integral part of many of the activities shown:

- Advocacy and vision building;
- Partnerships and networks;
- Capacity building and training;
- Research and innovation;
- Monitoring and evaluation.

In order to maintain visibility and momentum throughout the Decade, a specific theme should be selected for each year, around which events at different levels can be organised. Possible themes include:

- Sustainable consumption;
- Cultural diversity;
- Health and quality of life;
- Water and energy;
- Biosphere reserves as places of learning;
- World heritage sites as places of learning;
- ESD in the knowledge society;
- Citizen participation and good governance;
- Poverty reduction and sustainable development projects;
- Intergenerational justice and ethics.

Launch events at national, regional or international levels should demonstrate the objectives of the Decade by being learning events in themselves, such as an international assembly of educators, youth, children and community leaders, or practical learning-by-doing events addressing sustainable development in the local context.

It will be important to establish a regular cycle of local, national, regional and international consultations. The timeline envisages the setting up of these groupings during 2005 and 2006, with a regular cycle in place from 2007. A possible annual sequencing is as follows:

Table 10: A proposed annual cycle of ESD meetings

Month	November	February	June	September
Meeting	Sub-national/ local stakeholder consultations	National ESD Consultative Groups	Regional ESD Caucuses	Inter-Agency Committee on DESD

The timeline proposes an international DESD mid-term review after five years (in 2010) and an international conference just after the end of the Decade (in early 2015), which will have available the data and reports from national and regional conferences, as well as the evaluation report on the DESD as a whole.

Table 11: Timeline for the first half of the Decade

	(2004)	2005		2006		2007		2008		2009	
Advocacy and vision-building	Launch DESD website; Slogan competition (young people)	International and national DESD launches									
		SD theme in Global EFA Week (April)	Development of media networking and plan for media coverage at national level								
	Develop and disseminate a calendar of DESD activities at all levels										
Partnership and networks		Establish national ESD Consultative Groups			National ESD Consultative Group		National ESD Consultative Group		National ESD Consultative Group		National ESD Consultative Group
		Governments host sub-national/local stakeholder consultations									
		Set up national ESD Hubs				Sub-national/local stakeholder consultations		Sub-national/local stakeholder consultations		Sub-national/local stakeholder consultations	
			Establish regional ESD Caucuses			Regional ESD Caucuses		Regional ESD Caucuses		Regional ESD Caucuses	

	(2004)	2005		2006		2007		2008		2009	
	Formation of Inter-Agency Committee on DESD		Inter-Agency Committee on DESD		Inter-Agency Committee on DESD		Inter-Agency Committee on DESD		Inter-Agency Committee on DESD		Inter-Agency Committee on DESD
	EFA HLG 4	CSD 13 EFA Working Group 6	EFA HLG 5	CSD 14 EFA Working Group 7	EFA HLG 6	CSD 15 EFA Working Group 8	EFA HLG 7	CSD 16 EFA Working Group 9	EFA HLG 8	CSD 17 EFA Working Group 10	EFA HLG 9
			International Experts' Consultation (prepare Intergovt Conf 2007)				Intergovernmental Conference (30 years after Tbilisi)				
Capacity-building and training	UNESCO leads regional/sub-regional workshops to build DESD awareness and region and country level commitment to planning of activities for DESD		Series of workshops – regional or national as negotiated between UNESCO and member states – on: communication and awareness-raising; planning management and evaluation; training and retraining of educators; tools for analysis; instructional content and materials; instructional methodologies (see Section 6.4)								
	UNESCO develops and disseminates guidelines and multi-media package to support national planning and launch of DESD programmes and activities										

	(2004)	2005	2006	2007	2008	2009
Research and innovation		Baseline studies as basis for longitudinal impact assessment				
		Regional conferences on ESD research issues		launch of cooperative regional research projects		
		Develop and publish ESD scenarios				
Monitoring and evaluation		Indicator development at national and sub-national levels	Ongoing national monitoring with annual review meeting			
		Establishment of monitoring and data collection mechanisms at national level				
		UNESCO establishes indicators and a database to track DESD progress internationally				

Note: many events, meetings and activities will continue into the second half of the Decade, and others will be identified later. It is assumed here that the regular meetings at all levels would continue on the same basis, such as national consultations and international meetings. Thus the following chart of the second half of the Decade shows only those events, which should be planned from the start.

Special events in the second half of the Decade

	2010	2011	2012	2013	2014	(2015)
	Regional mid-term research conferences				Evaluation of DESD at national level	
		International DESD mid-term review			Evaluation of DESD at regional and international levels	End-of-Decade international conference

References

- Garfinkle, K.P. 2001. Global Educational Agendas, Localized Initiatives: A Comparative Analysis of Watershed Education in the Global Rivers Environmental Education Network in Australia, South Africa and the United States. *Monograph in partial fulfilment of Masters of Education*, School of Education, Stanford University, Stanford, California.
- Hill, Stuart B., Steve Wilson and Kevin Watson. 2003. "Learning Ecology – a new approach to learning and transforming ecological consciousness: experiences from social ecology in Australia." in O'Sullivan, Edmund and Marilyn Taylor. (eds). 2003. *Transforming Practices: learning towards ecological consciousness*. New York: Palgrave Press.
- Scott, William and Stephen Gough. 2003. *Sustainable Development and Learning: framing the issues*. London: RoutledgeFalmer.
- UNECE (United Nations Economic Commission for Europe). 2003. *Draft UNECE Strategy for Education for Sustainable Development*. CEP/AC.13/2004/3.
- UNESCO. 2003. *The Leap to Equality. EFA Global Monitoring Report 2003/4*. Paris: UNESCO.

Appendix: Principles of national DESD implementation

At national level, implementation of the DESD is essentially a collaborative process among all the stakeholders. The following sets of questions provide a framework for starting that process – they are of course indicative given the wide variety of national situations. The questions follow the direction of this plan, and are intended to lead to concrete actions.

Initiating partnership and action

- Establish who the stakeholders are and hold initial consultations.
- Identify the multi-stakeholder body at national level, which will take responsibility for the coordination of DESD promotion and facilitation and ensure its link to EFA process.
- Assess the financial needs of implementing ESD during the decade and identify sources of funding including existing programmes and funds. Set up financial mechanisms to cover support to governmental and non-governmental initiatives, if necessary.
- Hold consultations in development of a DESD plan or strengthening existing education plans to reflect commitment to ESD, including identification of the key national issues in sustainable development and of key messages for public awareness raising, and set national DESD objectives.
- Draw up a communication and advocacy plan with attention to the range and nature of target audiences.
- Undertake a baseline study to establish how far ESD is already integrated into educational initiatives and what these are/where these are.
- Examine the national legal and institutional framework, including an assessment of how local governance structures and processes will facilitate or inhibit broad participation in planning and implementation at that level.
- Develop a framework for cooperation, across government departments, with civil society, private sector and NGOs – at national and local levels.

Implementing ESD

- Develop plans for ongoing work to promote public awareness and participation: messages, media, materials.
- Launch a public awareness campaign and facilitate regular input to the media on DESD issues.
- Initiate scenario development sketching out a number of scenarios of what high-quality ESD would look like, for instance in schools of different kinds, in adult learning circles, within a range of development programmes, in different geographical and socio-cultural contexts, in the framework of different subject areas. Such scenarios will be a resource for local discussion of how ESD can best be put into effect.
- Examine and adapt initial and in-service training for educators, facilitators and teachers to include ESD approaches.
- Examine and adapt curricula in schools and non-formal settings to include ESD approaches.

- Provide a framework for local non-formal groups to combine learning and practical application in sustainable development.
- Initiate planning at city/municipal/district level, with the possibility of specific demonstration projects. These will aim to enable citizens to learn through good practice, and thus to adopt more sustainable lifestyles. These projects would therefore be of limited duration and have specific targets: numbers of participating individuals, commercial firms and households, and target dates. Examples of possible projects include:
 - Cleanup, greening, improving and preserving the environment for wild animals, preservation of old town streets, protection of cultural heritage, etc. carried out by citizens' groups and corporate groups in their own specific localities.
 - Promotion of clean energy, reuse and recycling of products, securing biodiversity, promoting environmental education, etc. carried out by citizens' groups, taking into consideration the importance and impact of their activities on more extensive geographical areas and eventually on the global environment.
 - Environmental management activities such as reducing environmentally unfriendly wastes from individuals, households and corporate groups carried out by these individuals, households and corporate groups themselves.

Evaluating ESD

- In cooperation with stakeholder groups, determine what aspects of the DESD should be monitored, and how the resulting information will be analysed and used.
- Establish measurable indicators and monitoring processes, based on the nationally established DESD objectives.
- Draw up a detailed plan as to what data will be collected nationally and locally, who will be responsible to collect and collate them, when this will happen and who forwards/responds to UN.