

United Kingdom National Commission for UNESCO

ESD in the UK in 2008: A Survey of Action The UN Decade of Education for Sustainable Development, 2005-2014

Report by Education for Sustainable Development Indicators Advisory Group

(ESD Working Group, Education Committee)

May 2008



The UK National Commission for UNESCO is the focal point in the UK for UNESCO (United Nations Educational, Scientific and Cultural Organization)-related policies and activities.

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This report is a product of the Education for Sustainable Development (ESD) Indicators Advisory Group of the UK National Commission for UNESCO's Education Committee. The Working Group, which is a sub-committee of the Education Committee of the UK National Commission for UNESCO exists to discuss progress on the Decade of ESD in the UK, to share examples of good practice, to provide reports to appropriate UK policy-making bodies, to receive reports on the Decade from UNESCO and to provide input into UNESCO strategies on the Decade. The group is composed of representatives from the main policy-making and co-ordinating bodies responsible for implementing programmes on ESD in the UK.

The UK National Commission for UNESCO's ESD Indicators Sub-Group was appointed to provide advice and support to this report and includes representatives from appropriate policy-making bodies and experts on indicators for ESD.

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UK National Commission for UNESCO Secretariat
Suite 98, 3 Whitehall Court
London SW1A 2EL
United Kingdom
+44 (0) 20 7766 3453

Email: adesouza@unesco.org.uk

www.unesco.org.uk

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ACRONYMS

DESD Decade of Education for Sustainable Development

ESD Education for Sustainable Development

FE Further Education

HE Higher Education

HEI Higher Education Institution

ITE Initial Teacher Education

GC Global Citizenship

GO Government Office

NDPB Non-Departmental Public Body

NGO Non-Governmental Organisation

SD Sustainable Development

SDAP Sustainable Development Action Plan

UNECE United Nations Economic Commission for Europe

UNESCO United Nations Educational, Scientific and Cultural Organization

ACKNOWLEDGEMENTS

This report is the first of its kind to monitor the UK's activities in Education for Sustainable Development (ESD), and comes at an important time – we are near the half-way mark in achieving the goals of the United Nations Decade of Education for Sustainable Development (DESD), 2005-2014. It is fitting that the UK National Commission for UNESCO should have been commissioned to produce this report because it is the main UK organisation responsible for the implementation and reporting on progress made in the UK during the DESD.

Firstly, we would like to thank the Sustainable Development Team of the Department for Children, Schools and Families (DCSF), which funded the preparation of the report. In particular we would like to thank Janice Lawson, Mark Donnelly, and Jake Reynolds for their support and encouragement.

The research for the report was undertaken by the Indicators Advisory Working Group (IAWG), a group made up of specialists within the UK on education for sustainable development. They were specially brought together to provide quality input into the research for the report. Among those who provided guidance, advice, material, comments on drafts and general support were: Adam Cade, Ruth Conway, Claire Fowler, Mary Kelly, Stephen Martin, Alex McMinn, William Scott, Joanna Simpson, Stephen Sterling, Daniella Tilbury, Paul Vare, and Ros Wade. Valuable contributions were also made by members of the broader Education for Sustainable Development Working Group, who read the drafts and provided comments.

Special thanks go to Sam Mejias for working tirelessly with various professionals and being able to juggle their comments in writing and producing such a comprehensive and excellent report. In addition we would also like to thank Alba de Souza from the UK National Commission for UNESCO Secretariat for her support, advice and encouragement towards the preparation of the report.

Thanks also go to officials from regional government offices in England for their willingness to provide information about their regions. Among these are: Beverley Anderson, Mary Burton, Emma Bulmer, Tom Freeman and Lorraine Horsley.

Finally, as Chair of the UK National Commission for UNESCO's, ESD Working Group, I would like to state that the mere process of gathering the data and material for this report demonstrates the wealth, range and quality of activity on education for sustainable development in the UK. We see this document as the first stage in an ongoing monitoring of progress on the Decade and look forward to building on the findings of the report and look forward to furthering progress on education for sustainable development in the years to come.

Dr. Douglas Bourn

Chair of the UK National Commission for UNESCO, Education for Sustainable Development Group Director of Development Education Research Centre, Institute of Education

REPORT REMIT

This report provides an overview of current ESD efforts in the UK, and is meant to be a starting point for more in-depth research, particularly regarding quality and long-term outcomes of DESD goals. It provides a baseline for beginning to measure progress in the UK on ESD and the DESD, and offers headline data on key themes that were considered by stakeholders to be important areas for monitoring ESD in the UK. These key areas may represent possible indicators for future monitoring and evaluation of ESD in accordance with the DESD. The report will be of interest to international ESD and DESD stakeholders, UK ESD stakeholders, educators, policymakers, and civil society practitioners, and anyone with an interest in the critical promotion of sustainable development and ESD.

UK National Commission for UNESCO commissioned this report to be completed during a five-month period in 2007/8. Because the report is DCSF funded, its focus is mainly on England. Northern Ireland, Scotland and Wales are all included in the survey in examinations and comparisons of national ESD responses, and also in other comparative contexts. The research presented is the result of a desk study, and the majority of information was found and downloaded from the Internet. An ESD working group and separate ESD indicators group were also consulted during the study, and email correspondence with regional government offices in England provided additional information. Various stakeholders also contributed information via e-mail. A first draft was submitted to the ESD indicators working group on 28 March 2008, and over 20 individuals submitted detailed corrections, omissions and general feedback during April and May 2008. The final draft was submitted DCSF on 30 May 2008.

The scope of the report is:

- To present a broad analysis that identifies baseline data and areas for further research;
- To suggest possible UK ESD indicators based on key themes discussed for future evaluation reports.

EXECUTIVE SUMMARY

Education for Sustainable Development (ESD) is present and growing across the UK and the three devolved administrations of Northern Ireland, Scotland and Wales. In many ways, the timing for ESD and the Decade of Education for Sustainable Development (DESD) could not be better. The beginning of the 21st century has seen the international community, the European region, and the UK reach consensus on the need for collective, long-term approaches to solving the problems of environmental degradation and unequal global development by embracing a holistic vision for sustainable development. In the past few years in particular, discourses surrounding climate change, fair trade, energy management and carbon footprints have made their way into the UK public sphere, becoming more frequently expressed in media, politics, and other forms of popular culture and daily life. The price of gas is a driver of the debate on global energy management. It is even possible to ride a train in Britain and purchase a cup of coffee that markets itself with "sustainable development" on its side.

Yet the relatively low awareness among citizens in the UK of sustainable development is a reminder that a long and challenging journey has only just begun. Sustainable development involves a fundamental change in how people live their lives; a change in direction towards ways of thinking and acting that recognise the needs of future generations as well as those of the present age. By embracing a holistic vision for sustainable development that extends to every aspect of learning, ESD has the potential to facilitate this change of course.

In the UK, stakeholders at all levels: for example, teachers, policy makers, trades unionists, professors, children, and civil society organisations, have been working for over ten years to promote an educational dimension to sustainable development. Government-led initiatives in the form of dedicated ESD bodies, explicit ESD policies and comprehensive education and learning strategies across all age groups have given the field legitimacy. In particular, the nation-wide push for sustainable development in all sectors is a platform on which educational strategies can and should be built.

Key highlights of the report:

- The UK and the three devolved administrations have distinct ESD policies in their formal education approaches. The devolved administration in Wales has placed ESD at the heart of its SD frameworks and strategies, and Scotland and Northern Ireland have established dedicated bodies to promote ESD across sectors.
- In England, there is significant activity in support of ESD within the learning sectors in government (formal, further, higher education, training and development, youth work) and within other related sectors (e.g. DEFRA and DFID).
- Scotland's is the only administration with an explicit DESD strategy and DESD steering group, and has demonstrated commitment to ESD since the Decade's launch in a number of areas, including ESD research and networks.
- Wales has developed an innovative approach to ESD that is linked to its global citizenship efforts – Education for Sustainable Development and Global Citizenship (ESDGC). It has a dedicated national body to ESDGC and a national champion working with stakeholders on promoting it and the Welsh Assembly has produced an updated strategy for Action.

- Some of England's regions are actively promoting ESD, and there is a growing body of evidence at the regional and local levels revealing sustained and in-depth stakeholder participation in ESD.
- Sustainable development is firmly embedded in current UK policies, although tensions and contradictions persist in some policy areas. The overall UK-wide shared framework for sustainable development has created opportunities to promote ESD in a number of different capacities and sectors to help stakeholders in the UK work towards achieving sustainability.
- There is a wealth of activity on SD and ESD in the UK at present, some of which has been building since the turn of the century, and some either directly in response to the DESD or in alignment with the larger national and global ESD movement.

The survey identified the following themes and areas of interest:

ESD Policy

- Clear policies on ESD exist in the UK and the three devolved administrations, although each
 has forged its own distinct approach. There is no shared understanding of ESD among the UK
 government and the three devolved administrations, and there is no UK-wide DESD strategy
 although there is a shared definition of the dimensions of sustainable development.
- ESD is not a universally recognised or used term within SD policy and practice, even among stakeholders who are actively promoting what could be called ESD (e.g. environmental education programmes).
- Although there is a significant support structure for SD in the UK, via government policies and the existence of an SD watchdog (the Sustainable Development Commission), few connections between SD goals and the need for ESD within SD frameworks are articulated in the majority of the approaches and strategies examined. Only in the education sector (formal/higher/further), where departments are charged with incorporating SD into their education policy, do policies and practices specifically promote ESD.

Action on ESD

- There is a significant amount of ESD activity in the UK, some of which originated before the DESD, and some of which was motivated by the launch of the DESD. Leadership on the DESD has come from a number of areas, including government, but also in the regions, in civil society, in further education, and in higher education, especially through leading research within the ESD academic field. Actions in the UK across sectors reflect and incorporate the seven key DESD implementation strategies identified by UNESCO.
- There are a substantial variety of educational and learning opportunities for sustainable development.
- Awareness of the Decade itself is not widely manifested, even amongst those interested and involved in ESD in comparison to those countries such as Germany that have mounted visible campaigns promoting the Decade.

Outlook for ESD in the UK

- There is cause for cautious optimism, and ESD is showing signs of becoming embedded in formal school education, civil society, higher and further education, and regionally. Support structures exist for further promoting ESD within the UK and for building on current achievements. On the whole, the UK is demonstrating a wide range of action around sustainable development and this can only serve to create more opportunities for learning about SD, and for understanding that SD can itself be conceptualised as a learning process. The six years left of the Decade present an opportunity to take concerted action to increase national focus on ESD and on the Decade itself.
- Whilst there is a wealth of activity, much of the support and action for ESD is not framed in terms of working within the framework of either ESD or the Decade.
- Whilst there has been substantial progress, there is a need to recognise that there are still major challenges ahead. Despite the perceived urgency of the impact of climate change, sustainable development is still perceived to be a relatively low priority. An example of the challenges can be illustrated by a 26 May 2008 news article in Times Online, entitled *London schools must learn greener lessons, says Ofsted*¹. The article reports on an Ofsted study less than a week after its publication (on 21 May 2008), the timing itself a clear sign of the emerging status of sustainable development in UK media. The report identifies the main thrust of the Oftsed report that sustainability issues are still peripheral in English schools but the title clearly frames sustainable development in terms of being "greener;" which speaks to the challenges of promoting holistic sustainable development. Finally, less than 12 hours after article was posted online, eight comments were posted by readers. The perspectives offered by the comments, the majority of which de-emphasised the importance of sustainability or environmental issues compared to basic literacy and numeracy, are another clear indication of the scale of the challenge to promote sustainable development across the UK.

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¹ Woolcock, Nicola. *London schools must learn greener lessons, says Ofsted.* Times Online, London, May 26, 2008.

1. CONTEXT

1.1. Sustainable Development

Sustainable development (SD) is the idea that the planet's natural and physical resources must be protected for present and future generations by changing the way we develop economically, socially and environmentally. The increasing scientific evidence of climate change, and of the role of human industrialization in its acceleration has created a need to think about the ways in which people, communities, and nations engage in development processes. We must find new ways of development that meet the needs of people in both developed and developing countries, but in a way that does not continue to deplete the earth's finite natural resources. Recognising that learning plays a vital role in the journey towards sustainable development, the United Nations has acted to further the agenda of education for sustainable development.

1.2. The UK Decade of Education for Sustainable Development

In December 2002, the United Nations General Assembly adopted resolution 57/254 to establish the Decade of Education for Sustainable Development (2005-2014), designating UNESCO as the lead agency for promoting the Decade. The United Nations Decade of Education for Sustainable Development (DESD) began on 1 January 2005 and aims to integrate the principles, values, and practices of sustainable development into all aspects of education and learning, and to encourage changes in behaviour that allow for a more sustainable and just society for all (UNESCO, 2006; UNESCO, 2007). The overriding goal of the DESD is to provide every person access to education and learning that instills values for positive societal change and a more sustainable future (UNESCO, 2005). According to the UNESCO International Implementation Scheme, the objectives of the DESD are:

- 1. To give an enhanced profile to the central role of education and learning in the common pursuit of sustainable development;
- 2. To facilitate links and networking, exchange and interaction among stakeholders in ESD;
- 3. To 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. To foster increased quality of teaching and learning in education for sustainable development;
- 5. To develop strategies at every level to strengthen capacity in ESD (UNESCO, 2006).

The key areas for ESD implementation in the context of the DESD are represented by seven interlinked strategies, applicable at all levels (national, regional, local), that map out the challenges faced in implementing the work of the Decade. They are:

- 1. Advocacy and Vision Building
- 2. Consultation and Ownership
- 3. Partnership and Networks
- 4. Capacity Building and Training
- 5. Research and Innovation
- 6. Use of Information and Communication Technologies (ICTs)
- 7. Monitoring and Evaluation (UNESCO, 2006)

UNESCO sees these strategies as essential for promoting and incorporating ESD on steady course as the Decade continues. They are largely general and non-prescriptive approaches and do not attempt

to spell out full implementation strategies in each area, which reflects the need for countries, regions and localities to develop their own approaches.

1.3. What is Education for Sustainable Development?

The concept of 'sustainable development' was brought into the mainstream in 1987 with the publication of Our Common Future, also known as the Brundtland Report, by the World Commission on Environment and Development. The Commission's definition of the term is well known and often cited:

Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs (World Commission on Environment and Development, 1987, p. 43)

This understanding of sustainable development emerged from the realisation that economic and social development are critically linked to our environment and the manner in which we preserve and preside over the world's natural resources. In 1992 at the United Nations Conference on Environment and Development in Rio de Janeiro, 179 governments voted to adopt Agenda 21, which created a blueprint for taking action on sustainable development at the national, regional, and local level. Chapter 36 of Agenda 21 affirmed the importance of education for achieving the goals of sustainable development and called for a re-orienting of education towards sustainable development (United Nations, 1992).

Education for sustainable development (ESD) draws upon objectives familiar to the fields of environmental and development education, but integrates those concepts in a way that furthers a more holistic agenda. Because of the complex inter-relationships and overlapping priorities between these previously separate educational domains, ESD has multi-layered and contested meanings. As such, UNESCO identifies three interlinked areas of society that give "shape and content to sustainable learning:" policy and politics; economy and environment; and culture (UNESCO, 2006, p. 14).

Going back further to the origins of ESD, Agenda 21, the UN's blueprint for sustainable development announced at the Earth Summit in Rio in June of 1992, specifically identified the main elements of ESD to be pursued:

- Improve access to education;
- Reorient existing education to include sustainable development;
- Increase public awareness of what sustainable development is;
- Promote training across all sectors of society (UN 1992, p. 320)

In place of an ESD definition, UNESCO outlines key characteristics of ESD:

- 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;
- ESD mirrors the concern for education of high quality, in that it is:
 - Interdisciplinary and holistic;
 - ii. Values-driven;
 - iii. Fostering critical thinking and problem solving;
 - iv. Multi-method

- v. Participatory;
- vi. Applicable to daily life, whether personal or professional;
- vii. Locally relevant in terms of context;
- ESD will be shaped by a range of perspectives from all fields of human development and include all the acute challenges the world faces;
- ESD takes place within a perspective of lifelong learning, engaging all possible learning spaces, formal, non-formal and informal, from early childhood to adult life (UNESCO, 2006, pp. 3-4)

These characteristics make clear the challenge of ESD to promote values for sustainable development across the spectrum of learning opportunities, whilst also becoming integrated across perspectives and subjects.

In the UK, the Department for Education and Skills (DfES) defined sustainable development in the context of its 2006 Sustainable Schools strategy this way:

Sustainable development means more than recycling bottles or giving money to charity. It means finding solutions that improve people's quality of life without damaging the environment, and without storing up problems for the future, or transferring them to other parts of the world. It is an innovation agenda, not a slow-down agenda, inviting us to rethink how we organize our lives and work so that we don't destroy our most precious resource – the planet. Education is recognized by governments the world over as a key part of the solution. (DFES 2006, p. 3)

Stephen Sterling (1999) provides a useful definition of ESD that reflects the above aspects:

Education for sustainability is a process that develops people's awareness, competence, attitudes and values, enabling them to be effectively involved in sustainable development at local, national and international levels, and helping them to work towards a more equitable and sustainable future (Huckle and Sterling, 1999, p. 1).

Thus, education for sustainable development should encourage individuals to understand and embrace the underlying values of sustainable development, and empower them to make decisions that contribute to more sustainable lifestyles. Over the course of the Decade, it is hoped by stakeholders that these changes will become more discernible at all levels of social and economic activity, and across diverse national and international contexts.

1.4. The DESD in the UK

The UK government has promoted sustainable development and ESD on the national, regional and local levels since the adoption of Agenda 21 at the UN Earth Summit Conference in 1992. With the implementation of the DESD in 2005, international momentum has complemented a growing awareness of sustainable development in UK society. This is evidenced not only by the aggregated efforts on ESD to be discussed in this report, but also through anecdotal evidence of changes in society towards a deeper understanding of sustainable development and the types of learning experiences that can promote sustainable behaviours.

With support from key stakeholders, the UK government has responded quickly to the implementation of the DESD. In 2005, The UK National Commission published *Education for Sustainable Development: Mapping of Related Stakeholders*, a report that outlined the major international and UK stakeholders for ESD and the DESD and identified a number of current government and civil society bodies, programmes and initiatives.

Also in 2005 to mark the commencement of the DESD, two launch conferences were held: the first was in Stirling, in the spring, and then the UK National Commission for UNESCO hosted the UK Launch Conference for the Decade at the Institute of Education, University of London. Entitled "From Local to Global: The Long Term Vision for the Decade," the aims of the conference were to:

- Provide ESD practitioners, policy makers, civil society, and the general public with an opportunity to discuss UNESCO's ESD strategy;
- Identify the UK's contribution to the international strategy of DESD and how it, in turn, can facilitate sustainable development practices in the UK;
- Showcase relevant practices and policies of ESD practitioners, Government Departments, the Devolved Administrations, NGOs, civil society and the private sector (UK National Commission for UNESCO, 2005).

The conference brought together major ESD stakeholders in the UK to discuss the goals, strategies, and challenges faced in implementing DESD goals. Although there is currently no UK-specific framework for implementation of the DESD, the UNESCO goals described above, along with existing pre-Decade action on ESD in the UK, can inform the strategies and intended outcomes of current UK activities on the Decade.

Since the launch of the Decade, UK National Commission for UNESCO, the national coordinating body for the DESD, has created a dedicated DESD website and produced a number of resources on ESD and the UK's participation in the DESD, including an April 2007 monitoring report. Shortly after the launch of the Decade, its education committee formed an ESD working group, which has met regularly and has supported the development of monitoring reports.

In 2007, The UK National Commission for UNESCO received funding from the Department for Children, Schools and Families (DCSF) to begin measuring progress towards fulfilling the aims of the Decade. This report is the first effort in what is envisioned as a multi-step process towards understanding and evaluating the UK's actions in ESD.

1.5. UK National Commission Report Objectives and Main Themes

The guiding framework for this report is to examine initial inputs and outputs of ESD before and during the launch of the Decade. Based on the existence of a range of activities (inputs, e.g. policies), it is possible to examine what is happening in response (outputs, e.g. networks, learning opportunities, and actions towards sustainability), which can lead to an understanding of whether people and communities seem to be doing appropriate things to become more sustainable (outcomes, or changes in the way that we do things). However this report only focuses on what is happening in terms of activities and does not attempt to address outcomes to date of impact of learning on sustainable development.

The next section outlines the objectives of the report's survey on ESD action, and is followed by a section discussing the report's thematic structure and its potential for developing impact assessment tools such as ESD indicators.

1.6. Surveying Actions on ESD

The main objectives of compiling an initial report detailing the action taken toward achieving the DESD goals in the UK are to:

- 1. Provide an overview of ESD activity in the UK since the launch of the Decade;
- 2. Assemble a meaningful set of baseline data that can be used to develop indicators in a number of areas.

The UK National Commission for UNESCO hopes that recommendations based upon this report can help educators and policy makers to capitalise on early opportunities and successfully navigate challenges that will arise during the DESD. The report itself represents a contribution to the DESD in terms of its function as a monitoring tool and launching point for continued action around the Decade's aims.

The report will examine the 'state of the art' of ESD in the UK in order to provide an overview of current policies, practices, and strategies for promoting ESD within formal education structures and across a number of sectors, including:

- UK government and the three devolved administrations
- Regional and local authorities
- Formal education
- Higher education
- Further education
- Civil Society and NGOs (including voluntary and community organizations)
- Trade Unions and Professional Bodies

These sectors represent key DESD and ESD stakeholders but cannot represent the whole picture.

1.7. Themes and Measuring Progress

Because there is no existing DESD framework, or the presence of previous research or UK-specific ESD indicator frameworks, the report does not attempt to measure impact of the DESD thus far or progress made on ESD. However, by cataloguing the range of efforts and actors in the UK, it is possible to make some initial observations about the general status of ESD in the UK. Identifying and measuring the impact of DESD on stakeholders at the grassroots level is an important goal that future reports should attempt to address.

Based on feedback from both the ESD working group and the ESD indicators advisory group, the report identifies five themes for ESD in the UK. These are:

- The strategies for and forms of ESD (conceptions of and approaches to ESD across sectors)
- Leadership and policy on ESD in the UK (government and stakeholder policy and practice on ESD)
- The existence of networks and partnership initiatives for ESD
- The prevalence of learning opportunities for ESD and SD
- . The existence of ESD research and practice

These are not exhaustive themes, but can establish a baseline of activity in the UK that can be measured against in future reports. This overview of ESD-related projects and initiatives in the UK will highlight areas of strength and weakness of ESD activity, identify the major drivers and barriers to achieving continued and sustained progress throughout DESD, and suggest meaningful, UK-specific indicators for deeper and more sustained ESD evaluations in the future.

A detailed discussion of international, regional and national indicators, along with this survey's suggested indicators, can be found in the appendices. Baseline data on the five themes is also indexed in the appendices.

2. MAIN EDUCATION FOR SUSTAINABLE DEVELOPMENT THEMES

2.1. Strategies and Types of ESD in the UK

This section examines the range of ESD activities and SD learning activities within the UK at present and in the context of the DESD. It presents an overview of strategies and efforts on ESD since the Decade's launch, although it is important to note that the survey is not restricted to DESD-specific activities or those arising in response to the DESD. Rather, it seeks to capture the range of ESD efforts that have occurred as part of a larger national effort to promote SD, in addition to DESD-specific activity.

2.1.1. Conceptions of ESD and Pedagogies

Before examining the many ways in which UK stakeholders are advancing ESD, it is important to ask the simple question: how can we learn to become more sustainable? There are numerous ways to become more sustainable in one's own life (for example, by using reusable instead of disposable bags at the supermarket, or by turning lights off in unoccupied rooms) and in one's community (e.g. by volunteering to pick up waste with a local environmental group). Yet how we acquire these skills, attitudes, and behaviours is the subject of considerable debate.

What exactly constitutes ESD? Is it a set of prescribed behaviours and skills that are to be learned and practiced? Must it be holistic in nature (i.e., embracing the environmental, social and economic)? Do environmental education or development education efforts on their own constitute legitimate forms of ESD? Is the most effective forum for ESD inside or outside of formal and traditional learning spaces?

These questions remain controversial and complex, and they illuminate the challenges of promoting ESD on a national and global scale. One example of the complexity of ESD debates is a recent article in the Journal of Education for Sustainable Development by two UK ESD stakeholders who consulted on this report, which presents a way of looking at ESD that separates (and then brings back together) the field into ESD 1 and ESD 2 (Vare and Scott, 2007). ESD 1 meets the criteria of both the DESD and UK expert-knowledge-driven approach: the teaching of new "skilled behaviours and ways of thinking" for short-term learning about ESD, which might be termed learning for sustainable development. ESD 2, on the other hand, conceptualizes the field in terms of the building of capacity "to think critically about what experts say and to test sustainable development ideas," which might be termed learning as sustainable development. According to the authors, ESD 1 most closely resembles the types of practical learning that is being promoted by the majority of ESD approaches (including the DESD), while ESD 2 is open-ended, difficult to measure, and promotes learning as an outcome rather than as a means to generate outcomes. The separation of ESD into two discrete strains highlights one of the ways in which it is possible to conceptualize ESD strategies and types, although the authors state clearly that the separation serves to illustrate how much both aspects are needed.

The sections that follow will explore different types of educational and learning efforts about and for sustainable development in the UK. According to the classification by Vare and Scott discussed above, most of these strategies can be classified as ESD 1. Whilst they many not all necessarily adopt a holistic approach to ESD, they all contain elements of learning for and about sustainable development.

2.1.2. Government Approaches to ESD in Formal Education

An examination of the formal education policies of England, Northern Ireland, Scotland and Wales regarding sustainable development highlights the contrasting conceptions and attendant responses of ESD by the devolved administrations.

England

In formal education at primary and secondary levels, the major government initiative on ESD in England is the Sustainable Schools project, initiated in 2006 by DCSF (then known as the Department for Education and Skills, DfES). DCSF's 2006 report Sustainable Schools for Pupils, Communities and the Environment offers a framework for understanding ESD in the context of the Sustainable Schools project, although the programme is not referred to specifically as ESD and is optional for schools. DCSF funds Government Offices in England's nine regions annually to support the implementation of the Sustainable Schools strategy, and the government offices work with local authorities in their regions to implement the programme in local schools. The government offices have also created Sustainable Schools networks.

Regarding ESD in the formal curriculum, in 2007, the Qualifications and Curriculum Authority (QCA) for England's schools updated its curricular guidelines, adding 'global citizenship and sustainable development' as one of its cross-curricular dimensions, but this change gives schools the options to include the subjects and is not statutory. The QCA has however integrated SD issues into its recently updated (2007) KS3 curriculum, and also in 2007 published The global dimension in action: a curriculum planning guide for schools, which focuses on teaching the global dimension but makes explicit mention of sustainable development as a conceptual aspect of the global dimension.

Outside direct education efforts, DCSF's Building Schools for the Future (BSF) programme, launched in 2004, is the country's largest education investment project in over 50 years. Focused, in the main, on secondary schools, the programme will refurbish or rebuild all schools to become sustainable buildings by 2020. BSF is also linked to learning, and pupils are invited to be involved in the process of designing a building for the future. Additionally, the National College for School Leadership (NCSL), a Non-Departmental Public Body (NDPB) of DCSF, created the BSF leadership programme to provide support to school leaders during the process. BSF's managing organisation, Partnerships for Schools (PfS), also offers resources on how to make the renewal process beneficial for the school community.

Northern Ireland

In Northern Ireland, ESD was prominently included in its first-ever Sustainable Development Action Plan (SDAP) in 2006, and the devolved administration has formally incorporated SD into the Northern Ireland school curriculum from 2007 as one of its thematic units. ESD is promoted as a part of the statutory Environment and Society area of learning, which includes the subject strands of Geography and History in KS3 and 4.

To achieve ESD targets, Northern Ireland's SDAP specifically promoted the use of a 'good practice' guide created in 2005 through another ESD process undertaken by the Interboard Education for Sustainable Development Group, which is comprised of a number of regional Library Boards. Northern Ireland has invested in initial teacher education for SD, and in 2007 initiated a consultation process on Sustainable Schools for Northern Ireland. Northern Ireland has also set a target to attain Eco-School accreditation for a quarter of all schools.

Scotland

In Scotland, ESD and learning for sustainability are core foundations of its SD framework (Scotland uses the term "SDE" or Sustainable Development Education in place of ESD). Its strategies for action include integrating ESD into the formal school curriculum as a central outcome for student learning (through its "Ambitious Excellent Schools" and "Curriculum for Excellence" programmes) and working with the Scottish Funding Council to identify best practices in higher education. It published an SDAP for education in 2006. SD is one of the Scottish Government website's featured topics, and there is a dedicated DESD page that lists the government's actions on ESD and the DESD.

Scotland has taken action to produce a DESD-specific strategy. Learning and Teaching Scotland (LTS) is the lead organization for curriculum development in Scotland, and has through its Sustainable Development Education Liaison Group (SDELG) and their work on the DESD strategy established a "first wave" of actions being taken during the first five years of the DESD (Greig, 2007). These include curriculum review, support for expanded Eco-schools participation, school estate modernisation, and the creation of supporting materials for teachers. Actions also included rollout of a Schools Global Footprint project into Scotland's schools.

The work of the SDELG warrants further mention, as the body has acted as a facilitator of ESD curricular development, research, and networking for ESD stakeholders. In a recent conference on SD in Scotland, SDELG identified areas of progress made thus far in its ESD efforts, including an 80% school sign-up to eco-schools (Lavery, 2007).

Wales

In 2006, Wales published its first ESD action plan, which implemented a multi-sectoral action plan for an innovative integrated approach to both ESD and a separate subject, Education for Global Citizenship, entitled Education for Sustainable Development and Global Citizenship (ESDGC). It committed to action in five categories: schools; youth; further education and work based learning; higher education; and adult and continuing education. Within those areas it identified the several areas for action over the three-year period of 2006-2009, including the appointment of an ESDGC champion, commissioning of a baseline survey of ESDGC in schools and other learning contexts, and the development of common ESDGC standards.

In formal education, Wales' most recently updated curriculum has ESDGC as a major focus, and Welsh schools participate in Eco Schools programmes along with a number of other whole-school approaches. In 2008 Wales published an updated ESDGC action strategy, which identified "a great deal of energy and enthusiasm in all sectors for developing ESDGC" (DELLS, 2008, p. 11) and identified examples of good practice in schools. In each category, the report recommended that a baseline evaluation be undertaken in order to facilitate evaluation of progress and sharing of good practices. It further recommended that stakeholders in Wales take advantage of the DESD to share progress, to share its unique ESDGC model, and to learn from other stakeholders.

2.1.3. ESD in NGOs and Civil Society

The NGO sector in UK boasts the widest variety of ESD types within formal and informal education, by nature of the diverse and interlinking remits of many civil society and charity organisations. Approaches to ESD in the sector span across individual educational disciplines – environmental, development, global citizenship, or economic aspects of sustainable development. This survey analysed the work of over a hundred NGOs and civil society organizations operating in various capacities in the UK to promote sustainable development. Some of the surveyed organisations have

an explicit education focus, while many others use learning as a part of their action strategies. The majority of NGOs can be grouped into the following activity categories:

- Direct educational action in either formal or non-formal programmes or partnerships (e.g. Forum for the Future, WWF, Field Studies Council; Groundwork; RSPB; Wildlife Trusts);
- Educational, faith-based or charity organisations with an SD element to their work (e.g. National Children's Bureau; Christian Aid; Care);
- Networks, professional associations, or membership organisations; (DEA; National Association for Environmental Education; Council for Environmental Education (soon to be rebadged as SEEd))
- Campaigns (e.g. Campaign to Protect Rural England, Greenpeace, Friends of the Earth);
- Awards Initiatives (e.g. Ashden Awards, Eco-Schools);
- Web-based educational or community resources (e.g. Working with Kids, Espresso Education, DEA's Global Dimension website);
- Research studies on sustainability or ESD (e.g. Centre for Research, Education and Training in Energy, UK Centre for Economic and Environmental Development; CREE);
- Funding bodies supporting work in SD (e.g. The Big Lottery Fund);
- Organisations or Museums with environmental or sustainability elements that feature opportunities for learning (e.g. Natural History Museum; National Trust).

Many of the NGOs surveyed fall under more than one of the categories listed above. In most cases, the websites of the surveyed NGOs feature either a direct learning resource (downloadable reports, lessons, or strategy documents) or a learning element within the site itself. The majority of NGOs identified in the survey that use the term "sustainability" have tended to have an explicitly environmental focus.

It is also clear that climate change is giving some momentum and urgency to ESD and there are a wealth of initiatives and organisations involved in this area mot specially the Climate Outreach Information Network (COIN) www.coinet.org.uk and ClimateXChange (part of the Oxford University Environmental Change Institute) www.climatex.org and the transitions town movement, www.transitiontowns.org.

2.1.4. ESD in Higher Education

Higher Education Institutions (HEIs) in the UK occupy a traditionally proactive role for emerging (and often overlapping) educational fields such as development education, environmental education, human rights and citizenship education, and education for sustainable development. In the UK and in England particularly, there are several important forms of ESD taking place within HEIs. The following categories sum up the predominant approaches to ESD found within HEIs:

- Academic courses, modules, or educational degrees focusing explicitly on ESD, Sustainable Development Education (SDE), Education for Sustainability (EfS), environmental, and development education;ⁱⁱ
- Courses, modules or degrees focusing on sustainable development in a multi-sectoral capacity (e.g. Engineering or Business);
- Whole-university approaches that embed sustainability or sustainability education into existing higher education courses or throughout universities; iii
- Funding Council SD policy or reviews (e.g. HEFCE's 2005 SD Policy and Strategy and HEFCE's 2008 strategic review of SD in HE);

- HE umbrella body initiatives (e.g. Higher Education Academy's ESD project);
- University-based research centres with ESD-related initiatives;
- Environmental or sustainability award or scoring schemes for universities.
- Individual university initiatives on SD-related subjects.

A range of data on ESD in the higher education sector can be found in the appendices.

2.1.5. ESD in Further Education

The further education sector (also described as the learning and skills sector), is comprised of further education (FE) and tertiary colleges, sixth-form colleges, specialist and vocational colleges, private training providers, voluntary and community activity and adult education institutes. The sector is a key area for ESD, and the report's survey found a significant level of activity in the sector by both government and civil society to promote sustainable development. Like the higher education sector, FE colleges have begun integrating SD into their work in a number of ways that include estate management practices, curriculum development, and whole institution SD strategies. ESD activity in the FE sector is supported largely through government and civil society initiatives.

A key driver within the FE sector is the skills agenda and whilst there is increasing recognition of the importance of sustainable development skills, there is a need to make a distinction between skills currently in demand to respond to challenges of areas such as climate change and embedding sustainability across all areas of training. This relates to the need to differentiate between occupational skills where there are clearly task specific sustainability skills and the wider interdisciplinary of much of the ESD agenda.

Government action in FE

The UK Government's main body for FE, the Learning and Skills Council (LSC), has created policies for ESD in further education, first articulating its vision for SD in the sector in its 2005 strategy From here to sustainability, but also through a series of initiatives including an on-line resource for providers and investment in the FE estate through its Capital policy. From here to sustainability identified three strands for action within the sector: embedding SD in the curriculum; sustainable estate management; and promoting sustainable communities and businesses.

In addition to the work of the LSC, the Quality Improvement Agency for lifelong learning (QIA), an NDPB, has initiated a Post-16 citizenship education programme and developed a resource pack that integrates considerations of SD into the programme.

Civil society action in FE

Several key civil society organisations have been involved in promoting ESD in FE. Three examples are briefly described below:

• The National Institute of Adult and Continuing Education (NIACE) has conducted work around ESD, and on its website specifically situates its efforts in the context of the DESD by recognising the opportunity for the sector as a whole to collectively take action on ESD. In addition to partnering with the Workers' Education Association (WEA) and DEA to host an ESD conference in November 2005, it also has started an ESD e-group that provides practitioner resources.

- WEA is the UK's largest voluntary sector provider of adult learning, and has partnered with NIACE on ESD. It also provides adult courses; in 2008, it offered a Green and Social Issues course and a course called How to Lead a Greener Life.
- The Centre for Excellence in Leadership (CEL), an NGO with a remit to promote leadership improvement in the further education sector, identifies sustainability as one of its strategic projects. It published an organisation-wide sustainable development strategy, Towards leadership for sustainability, in November 2007. In 2008, CEL also initiated a series of four free London-based forums around leadership for sustainability: a champions' forum; a principals/CEOs forum; a partner organisation forum; and a collective forum on leadership for sustainability.

2.1.6. ESD in Initial Teacher Education

In England, government efforts to promote ESD in Initial Teacher Education (ITE) (also known as ITT or Initial Teacher Training) have been largely undertaken by the Training and Development Agency for Schools (TDA), the responsible government department for teacher training. In 2006, the TDA published its SDAP, which situated its efforts as part of the DESD and outlined its action for incorporating ESD into ITT. It reported on the development of subject-specific induction packs and ESD programmes for incoming trainers, and announced that it was supporting ITT providers to mainstream ESD. The report also set SD action targets for training the wider school workforce, for the department's own operations, and for its departmental practices as an employer. Also in 2006, the TDA published its Environmental statement: April 2006 to March 2007, which reaffirmed the department's commitment to promoting sustainable practices in all of its activities and integrating ESD into all its programmes.

Civil society stakeholders, including NGOs and professional bodies, have contributed to the promotion of ESD within teacher training programmes.

- The TDA funded Citized, an organisation that collaborates with all ITE providers within HE
 institutions in England. Citized works in primarily in formal and further education, and has
 produced a number of resources for advancing its work, including an international journal of
 citizenship and teacher education, research reports, workshops, seminars and online
 resources.
- With support from ESCalate, a subject centre of the Higher Education Academy (HEA) and the TDA, London South Bank University's Centre for Cross-Curricular Initiatives (CCCI) (along with project partners the World Wildlife Fund and London and the South East Region Global Dimension), launched an ITE ESD/GC network in July 2007. CCCI has overall management responsibility, and other NGOs and institutions have joined as steering group members. The project's agenda is to establish a UK-wide ITE network for ESD and GC. Its first annual conference will be held in July 2008.

2.1.7. Other Types of ESD

Around the UK, businesses, trade unions and professional bodies are promoting sustainable development through a variety of means to change their practices towards sustainability. Faith communities and the voluntary and community sector are both working in ESD through non-formal education approaches. In addition, there is government and civil society support for ESD in youth work. As this report focuses largely on formal, higher and further education, there are a range of actions by these key stakeholders that were not included in the survey. Key approaches within these sectors are described in this section.

Business and Private Sector

Although a frequent response by businesses to SD is in terms of corporate responsibility, many businesses consider SD in terms of its potential to create economies of efficiency and to maximize profit potential. The use of sustainability in marketing and providing services (e.g. fair trade, sustainable development, energy efficiency, carbon reduction, decreased consumption) appears to be increasing in the UK. Tesco's, Marks and Spencer, Kenco, and the Body Shop are just a few of the many major companies in the UK that actively promote environmental awareness through some (but not all) of their business practices.

There are also active bodies promoting SD for and within the corporate sector, such as:

- The World Business Council for Sustainable Development (WBCSD) an international consortium of transnational organisations that promotes business and government cooperation "to balance economic and environmental interests." The UK is represented by the Business Council for Sustainable Development UK (BCSD-UK), whose remit is to promote SD within business in the UK. BCSD-UK conducts projects and organises events across a range of areas, and in 2006 hosted two "Sustainable Development Business Summits" in Glasgow and Birmingham. The UK council has approximately 30 members, ranging from regional bodies, to SD-focused organisations, to large corporations.
- SustainAbility, a self-described "values-driven strategy consultancy and think-tank," works with
 businesses and advocacy organisations to consult on opportunities and risks posed by
 sustainable development. Some of their clients have included Volvo (strategic review of
 environmental strategy in China), Starbucks (developing stakeholder workshops), and DuPont
 (stakeholder engagement on reducing environmental footprint).
- The NGO, Forum for the Future, works to introduce sustainability to businesses using the "Natural Step" framework.
- The Sustainable Development Commission (SDC) offers help for businesses on its website, including resources, information and links to learn more about SD and "to start [the] journey to sustainability."
- DEFRA initiated Envirowise, a free resource for UK businesses to receive advice on better practices for reducing environmental impact and increasing profit. This programme was still in operation as of 3 August 2007.

Trade Unions and Professional Bodies

Trade unions and professional bodies are particularly important in terms of their ESD activities, as they are umbrellas for the range of organisations and activities in their respective sectors. The survey found that some professional bodies have developed guidelines for sustainable development in their sector. Another recent study on SD in higher education noted that an increasing number of professional bodies are developing requirements and guidelines for education and training related to sustainable development (Sterling and Scott, 2007, p. 6).

Trade unions are also taking action on SD. These activities range from independent or advisory committees for SD, online resources for trade unions, partnerships promoting more sustainable forms of travel, and conferences to provide information to trade union officials.

Faith Communities

ESD is being promoted in several ways in faith communities in the UK through the perspective of moral and values education. Some examples are:

- The European Christian Environmental Network (ECEN), which has an education working group that has published reports on environmental education and ESD;
- The Higher Education Academy (HEA) has also made a contribution to ESD among faith communities, with an initiative: Online Philosophy, Theology and Religious Studies Resources for Education for Sustainable Development that provides information and resources on ESD;
- Christian Ecology Link is a multi-denominational UK Christian organisation dedicated to the environment;
- Eco-Congregation is an ecumenical programme that assists churches to link Christianity and the environment, and promotes action within the church and wider community on the environment;
- The Board of Deputies of British Jews in 2007 launched The Big Green Jewish Website, whose slogan is "Connecting Judaism and the environment." The website features resources and a self-test on greening homes.
- Churches Together in Britain and Ireland operate an Environmental Issues Network;
- The Islamic Foundation for Ecology and Environmental Sciences is an organisation dedicated to "articulating the Islamic position" on environmental concerns;
- Soka Gakkai International UK (SGI), a national chapter of an international Buddhist organisation, voiced its support for the DESD in its 2005 Peace Proposal;
- DEA hosted a one-day seminar on 21 June 2006 and published a subsequent report entitled Active faith: Global citizenship and learning for the future. Organisations represented included the Rabbinic Development Foundation, Methodist Relief and Development Fund, Word Jewish Fund, SGI-UK, ECEN, and Christian Aid; and
- The UK National Commission for UNESCO and Earth Charter in cooperation with the Development Education Research Centre of the University of London organised and hosted a one-day seminar of faith communities in September 2007 entitled Active Faith: Earth Charter, which took place at the headquarters of SGI UK.
- Development agencies such as CAFOD, Christian Aid and Teafund who have education programmes associated with strong campaigns for government action on climate change.

Voluntary and Community Sector

In the voluntary and community sector, a major catalyst for action for SD in England is the Every Action Counts initiative, supported by the Department for Environment, Food and Rural Affairs (DEFRA) and implemented by a consortium of organisations in the sector. Community Development Foundation (CDF), an NDPB of the government's Department for Local Communities and Government (DCLG), manages the programme. In addition to its status as the accountable body for Every Action Counts, CDF advises government on community development issues and supports community development projects and networks. As of March 2007, DEFRA reported that 282 Community Champions had been recruited to assist community groups with taking action on the project, and 354 community level organisations had registered as Every Action Counts groups. In addition, the initiative had given 30 training sessions to over 400 community workers, and 15 national organisations had completed sustainable development action plans. One example is the Federation for Community Development Learning (FDCL), who published their SD action plan in 2007 and updated it in February 2008.

DCLG has also published a number of resources on SD, and is responsible for the creation of the Academy for Sustainable Communities (ASC), a national skills initiative body with a remit to raise awareness of and provide resources for the creation of sustainable communities. ASC operate a

number of key initiatives, including the Creating the Future Awards for sustainable communities, and the sustainable communities foundation degree and course module.

Youth Work

- In the youth work sector, a range of government and civil society organisations are taking action to promote ESD and SD. Some examples of key stakeholders and initiatives are provided below:
- In 2005, the DfES set up the Sustainable Development Youth Work Forum (SDYWF), and designated the National Youth Agency (NYA) as secretariat for the forum. The forum brings together 25 national organisations (including DEFRA, DFID and DCSF), and meets twice yearly.
- NYA has also published direct resources for youth work practitioners. In January 2007, it
 published Working with young people to create a climate of change, a resource that aims to
 be a practical tool for practitioners wishing to incorporate SD into their youth work
 programmes.
- NYA also runs a Sustainability and Community Cohesion project from 2005.
- The Development Education Association (DEA) and the Council for Environmental Education (CEE, who are no longer in existence) partnered to offer a range of online resources about sustainable development and youth work on the DEA website. The site offers case studies, activities, and links to other organisations working in SD in the sector, and is currently accessible online.
- The Department for International Development (DfID) funded NYA to implement a two-year Global Youth Work Project between 2004-2006, which was completed at the end of June 2006.
- Student Force for Sustainability is an NGO that works with young people to improve their
 prospects for employability, while also working to improve sustainable practices among
 communities and employers. Although a national organisation, Student Force is based in the
 East Midlands region of England and has strong links to other regional ESD stakeholders,
 including the East Midlands Regional Centre of Expertise for ESD, a United Nations University
 initiative in over 35 regions around the world.
- In Wales, Cyfanfyd, the development education association for Wales, implements the Global Youth Work initiative, which supports the integrations of global citizenship and ESD into youth work provision in Wales.
- People and Planet, the largest student campaign network in the UK, works to promote sustainable development through environment, human rights, and anti-poverty campaigns.

2.1.8. Leadership on DESD in the UK

An important indicator of progress in the DESD is the extent to which key stakeholders have invested in SD and ESD policies and practices. Leadership on SD and ESD in general and the DESD in particular can facilitate increased engagement in ESD and create conditions to support growth of ESD and, it is hoped, SD.

2.1.9. Government Policies and Action on ESD

UK Wide

On a UK-wide level, Securing the Future, published by the government in 2005, has been the key policy driver for SD and ESD. Securing the Future provides a strong SD framework and has driven action within government on SD, creating a groundswell of support at all levels for learning and

developing skills for SD. This is evidence of clear leadership, as the government through its policies is actively promoting an increased understanding of and engagement with SD for all citizens.

The UK-wide SD framework has also prompted action in a number of educational bodies under government supervision, including higher education (through HEFCE), further education (through LSC), and initial teacher education (through the UK Training and Development Agency). As a result, those bodies are leading sources of information and action on ESD within their respective sectors.

The UK government is actively promoting ESD in formal education, further and higher education, youth work, initial teacher education, and the voluntary and community organisations sectors. All government departments have produced sustainable development action plans. Action for sustainable development is taking places across a number of dimensions.

There are also areas for improvement. In Securing the Future, the UK government pledged to implement the DESD, but it has not articulated a UK-wide framework for ESD or the DESD. It is difficult to measure progress in the DESD without a collective framework for action to measure against. This is a key recommendation of the report.

Leadership from England, Northern Ireland, Scotland and Wales

England, Northern Ireland, Scotland and Wales have all demonstrated leadership in different ways through strong policy and action commitments to SD and ESD in formal, higher and further education. Their leadership in the context of DESD goals is also notable for the links to larger global movements that they have promoted.

- England The Sustainable Schools project initiated by DCSF is a noteworthy ESD effort, although England has been less overt in establishing links between its ESD policies and the DESD than have the devolved administrations. There is also no formal ESD curriculum in schools, and there is recent evidence linking its absence to a lack of action on SD. A May 2008 Ofsted report on sustainable schools found that the majority of work around sustainability in schools was uncoordinated, and there was a generally low level of knowledge about sustainability. It noted the absence of ESD 'standards' compared to other national curriculum subjects and based its assessment on those defined by the Sustainable Development Education Panel in 1998.
- Regarding efforts at promoting ESD among school leaders, NCSL has been a key figure in this area. It published its SDAP in 2007, which pledged to integrate SD across its programmes and initiatives for school leaders. NCSL also commissioned the research report Leading Sustainable Schools: what the research tells us, a comprehensive literature review, qualitative and quantitative survey of SD in schools. The report asserted that "the status of the sustainable schools strategy needs to be raised" in schools if it was to have greater impact. From the report, NCSF initiated a new initiative of the same name, a grant scheme launched in 2007 to provide 36 schools with individual grants of £5,000 to support the development of school leader networks and to build leadership capacity for Sustainable Schools. A March 2008 report on the Leading Sustainable Schools Leading Practice regional seminar highlighted current practices among sustainable schools stakeholders in the area. The Specialist Schools and Academies Trust (SSAT) has recently published two booklets: Leading Sustainable Schools, and Raising Standards: making sense of the Sustainable Schools Agenda whose purpose is to help schools develop effective policy and practice in relation to sustainability.

- Northern Ireland Northern Ireland's first SD strategy in 2006 signalled support for both ESD and the DESD and included learning as a key SD strategy, identifying access to knowledge about SD as a core objective for citizens. Its national curriculum has integrated Sustainable Development as both a thematic unit and statutory subject within the curriculum.
- Scotland Scotland's actions are framed by a DESD-specific strategy, Learning for Our Future, which was published in 2005. The Sustainable Development Commission Scotland organised a UN Decade Action Plan Steering Group, which held its first meeting in January 2008. The Sustainable Development Education Liaison Group, organised by Learning and Teaching Scotland, published a 2005 research study on ESD and has organised local authority network seminars to create support and momentum for ESD in Scotland. Additionally, Scotland has the highest percentage of schools in Europe involved in Eco-Schools.
- Wales Wales has adopted an intensive, integrated approach of Education for Sustainable Development and Global Citizenship (ESDGC), which has served as a model for linking environmental and global dimensions of ESD. Wales has also taken steps to integrate ESDGC by designating a Wales ESDGC champion, commissioning a baseline survey of ESDGC in schools and other learning contexts, and developing a common understanding of ESDGC in Wales. Significantly, Wales has also pledged to establish a ten-year strategy for ESDGC linked to both the DESD and the UN Millennium Development Goals (MDGs).

2.1.10. Leadership in Other Sectors

Leadership on DESD has come from a number of areas besides government, including civil society, in higher and further education, through regional innovation, and through leading research within the ESD and SD academic fields.

Higher Education

England's higher education body HEFCE in 2008 published an important baseline survey of England's universities and their engagement with SD, the result of a significant effort that has established a benchmark for measuring progress across HE institutions in England in the future. In addition to the work of HEFCE, the Higher Education Academy's (HEA) Sustainable Development in Higher Education: Current Practice and Future Developments was a direct response to both Securing the Future and the DESD. It summed up the state of play in HE in 2005 as:

substantial work in progress, a range of good practice, but overall a patchy picture with sustainable development being marginal or non- existent in some influential disciplines but increasingly higher profile in others" (Dawe, Jucker and Martin, 2005).

The survey identified a range of innovative and holistic responses to SD in the HE sector, from universities and colleges that offered a range of direct ESD or SD courses, to efforts at integrating sustainability into all subjects across whole institutions.

In addition to sector-wide research on ESD, there is a thriving ESD practitioner and academic community in the UK, featuring a number of key thinkers and theorists who have published a considerable body of work with national and international implications for the scope and practice of ESD. It is clear that many universities and colleges in the UK are centrally involved in promoting SD in a range of ways.

Further Education

In the FE sector in England, the government's Learning and Skills Council (LSC), and the Quality Improvement Agency (QIA), an NDPB, have shown leadership in a number of ways since the launch of the DESD: through clear policies for integrating SD into the sector^{vii}; through partnership with NGOs such as the Learning and Skills Network and the Environmental Association of Universities and Colleges; and through the publication of research on SD in the sector. In particular, LSC's 2006 Sustainable development in the learning and skills sector: national baseline survey has provided an important overview of the state of the sector in the context of the DESD.

The Learning and Skills Network (LSN), an NGO that along with the QIA emerged from the restructuring of the Learning and Skills Development Agency (LSDA), has also worked with LSC and QIA on SD in the sector. Additionally, several NGOs and professional bodies have provided support for promotion of ESD in the sector, including the Centre for Excellence in Leadership (CEL), Forum for the Future (FFTF) and the National Institute of Adult and Continuing Education (NIACE). FFTF in particular published a series of education and sustainable development "policy road maps" for FE and HE in England and the devolved administrations.

Civil Society

NGOs appear at the forefront of ESD efforts in the UK, and have had an important impact on setting the debate in government and in society about environmental education, development education, and ESD. Environmental NGOs in particular have created advocacy and action campaigns, direct education programmes, informal or nonformal educational projects, online resources, and research reports and publications to promote SD and SD knowledge, skills and awareness.

In a sector where much of the effort on ESD is rooted in either environmental or development education, NGOs such as World Wildlife Fund UK (WWF UK), DEA, and Oxfam in particular have shown leadership on ESD by linking their respective agendas to development and environmental goals. WWF UK in particular has created ESD resources, developed a framework for Sustainability in UK schools, and conducted research on SD and faith groups. DEA has also worked to integrate the global dimension and sustainable development into various sectors, including engaging faith communities and the youth work sector.

Professional Bodies

In the UK, many professional bodies have engaged in activities designed to promote both ESD and SD. As mentioned above, many are also taking the lead to promote education and training policies in their sector for sustainable development. One longstanding example of leadership in the sector is the Professional Practice for Sustainable Development (PP4SD) initiative that was started in 1999 and continues to work towards integrating SD into professional training. In its second phase, the partnership is currently led by the Environment Agency, the Institution of Environmental Sciences, the Society for the Environment, and the Royal Society for the Protection of Birds. Over the nine years it has operated, more than 10 professional institutions have been involved with the project. In 2007, PP4SD held a workshop and two 3-day conferences on SD, and in 2008 it held its annual one-day workshop, Thinking and Acting Sustainably: Profile of a 21st Century Professional.

Private Sector

Increasingly, private companies, particularly those whose practices involve resource management (such as energy corporations), are taking steps to promote sustainable development in different ways. The energy company EDF recently created the EDF Energy 2012 Carbon Challenge, which aims to

help households reduce their annual carbon footprint by 15% by 2012. A component of this initiative is education, and EDF is offering "free ideas and advice" as well as "practical tips" on energy conservation. Another major gas and electric provider, EON, has also initiated its Energy Savings Challenge, which provides online information and guidance so that customers can "See it and save," as their programme slogan promises. The idea behind both initiatives is that customers can change their behaviour on energy consumption and will want to because of the potential financial benefits.

2.2. ESD Partnerships and Networks in the UK

The breadth and depth of networks, partnerships, and key strategic connections in the UK is a key highlight of the report. The survey on ESD activity found considerable evidence pointing to the existence of ESD networks at the international, national, inter-regional, regional, and sub-regional levels. The variety of networks and partnerships was also notable for its cross-sectoral nature, featuring connections between stakeholders such as educators and academics, practitioners, policy makers and government officials, business professionals, and civil society actors.

These connections between stakeholders assume a number of forms. Regional authorities often partner together to create dedicated ESD networks or bodies. Universities and NGOs collaborate with government authorities in their regions to promote ESD events such as workshops or conferences. Some regions have partnered to create innovative approaches to ESD.

NGO networks are also themselves creating or enabling connections and partnerships throughout the UK. Many NGOs and professional bodies actively build campaigns and membership networks as part of their remit. Within the environmental and ESD community, these networks are particularly strong as they can draw on years of campaigning and advocacy already done on behalf of different environmental agendas.

International networks or partnerships facilitating ESD action between UK and non-UK stakeholders are present in a number of areas, although they are less prevalent than networks of UK stakeholders. Besides involvement in the DESD, the clearest example of UK involvement in international networks for ESD is through its participation in the United Nations Economic Commission for Europe (UNECE) process that developed the European region's ESD strategy. DCSF was represented on the group that drafted the strategy, and the department agreed to implement the strategy at the UNECE High-Level Meeting of Education and Environment Ministries in Vilnius, Lithuania in March 2005. In 2006, Learning South West, a regional NGO that works in ESD, produced a report on the UNECE ESD indicator development process and its links to South West England.

2.3. Learning Opportunities for ESD Stakeholders

Another key indicator of ESD activity is the extent to which clear learning opportunities exist for sustainable development across sectors. It is also important to assess the extent to which there are opportunities for learning about ESD itself, and for learning more about the DESD's aims and actions.

2.3.1. Government Resources for Learning about SD and ESD

There are a variety of ways that people can learn about ESD in the UK. In formal education, the four devolved administrations all offer resources for learning about ESD on their education or curriculum department websites. The Sustainable School Teachernet site appears to be the most comprehensive government web resource for teachers and learners in primary and secondary education, featuring research, case studies, curriculum guidance and teacher resources for all eight doorways as well as

separately across all subjects. Wales' is the only dedicated government ESD site not hosted on a larger departmental website. The Northern Ireland and Scotland sites required navigation within departmental or general curriculum websites to find sections on ESD, but those sections clearly identify themselves as providing information and resources on ESD. In the further education, community and voluntary sector, and higher education sector within government, there are a number of resources on ESD, including research reports, resource packs, and educational projects.

Across all government sectors, formal and non-formal learning opportunities for SD are being promoted as part of key sectoral strategies towards SD.

2.3.2. Sectoral Sustainable Development Policies and Learning

One of the more interesting findings concerned the learning opportunities for sustainable development available at the regional and local levels, in the form of web portals, toolkits, surveys and resource databases on how to make regional and local processes more sustainable. These initiatives, often but not always led by regional and local government authorities, have emerged from the policy directives to operate government at all levels and across all sectors within an SD framework, which has in turn affected the provision of and demand for information about how exactly to become more sustainable. This is especially true with regards to the achieving of sustainable communities, with the regional "centres of expertise" taking up the task as a central function of their remit. It is important to note that these learning opportunities about sustainable development do not necessarily, and in most cases do not at all, feature a global or holistic dimension to the provision of information about SD. Instead, they are sector or vocation-specific, and usually promote a relevant dimension of learning for SD.

2.3.3. NGO Resources

Outside of the formal education approaches to ESD implemented by the government (e.g. Sustainable Schools, the inclusion of ESD in the national curriculum), there are many informal and non-formal ways of learning about SD and ESD. NGOs have traditionally been key actors in this area, supporting environmental and development education, two previously 'fringe' subjects in formal education, through the promotion of after-school workshops, optional teacher resources, and experiential learning. The high level of activity in the sector on production and dissemination of ESD resources and learning opportunities suggest that civil society will continue to be a source for diverse opportunities to learn about sustainable development.

2.3.4. Higher Education

Higher education has also traditionally represented an area where specialized subjects like environmental and development education are given increased attention. That assumption generally holds true in the UK, where there are ESD-focused research publications, course programmes, university-wide initiatives, and learning centres. The ideas and debates coming from the higher education sector speak to some of the major tensions and challenges within the ESD field. Recent academic research in the UK on ESD has critically considered the opportunities and challenges of ESD to inform wider national debates on how best to achieve sustainable development in education. In 2007 and 2008, a number of publications on ESD in the UK have contributed to a growing body of ESD literature and represent key learning opportunities for understanding the complexity of ESD aims, strategies, and evaluations.

2.3.5. Further Education

In England, there is a strong network of organisations working for further education, including (but not exclusively) the government's Learning and Skills Council (LSC) and Quality Improvement Agency (QIA) for lifelong learning, the NGO Learning and Skills Network (LSN) and Centre for Excellence in Leadership (CEL), and the professional association National Institute of Adult and Continuing Education (NIACE). These organisations are key stakeholders in promoting ESD and have produced many resources for the learning and skills sector, including continuing professional development (CPD) programmes, course modules, research reports, and online toolkits and resources. Programmes such as the LSC's Centres for Vocational Excellence (CoVE) are actively promoting SD within their remit as part of their work to provide of specialist vocational education of excellence.

2.3.6. Businesses

The survey identified a significant amount of resources and activities to assist businesses seeking to make their practices more sustainable, often with the added aim to increase profit potential. The Business Council for Sustainable Development UK (BCSD-UK), a member of the World Business Council for Sustainable Development (WBCSD), is a membership network of regional development agencies, private companies, and specialist SD organisations. BCSD-UK held two sustainable development business summits, and published sustainable development in business case studies in 2004, 2005 and 2006.

Other learning opportunities within the private sector are available, such as online toolkits and advice offered by Business Link, and online resources like those developed by the Carbon Trust. DEFRA also offers help to businesses through its Envirowise business advice service.

2.3.7. Conferences, Workshops and Seminars

Finally, the national, regional and local conferences and workshops on ESD or sustainability, while anecdotal in terms of the networks they build and the learning they transmit, are a good indication of existing energy and motivation to increase knowledge of ESD at all levels. Since the launch of the Decade, there have been an increasing number of opportunities to learn more about sustainable development.

2.4. Research and Evaluation Practice on ESD

Research and evaluation can provide important insights into the complex aspects of ESD, including theory and practice, programme implementation and assessment, innovation in the field and short and long-term outcomes for ESD in the UK and throughout the world. By surveying the state of research and evaluation on ESD in the UK today, we can begin to better understand its relationship to current practice.

2.4.1. Research on ESD

Government

There has been a strong research current within government on ESD since the late 1990s that continues to provide new and important data on ESD, its applicability to the UK context, and its potential impact and outcomes. In particular, the work of the now-defunct Sustainable Development Education Panel (SDEP) from 1998-2003, and of Ofsted in England to produce ESD research in 2003 laid the important groundwork for government action during the DESD. Ofsted's 2008 evaluation of 41 schools is another important contribution and identified barriers to success. In Scotland, the

Sustainable Development Education Liaison Group (SDELG) commissioned research studies in 2004 (on ESD in England, Wales and NI curriculum compared to Scotland) and 2005 (on ESD in ten countries around the world). The work of the Sustainable Development Commission across the UK government also deserves mention, as the government's SD watchdog has conducted research that links sustainability to the lives and well-being of children (in the form of Every Child's Future Matters), as well as on the question of ESD indicators (an issue of much of the current research in relation to DESD). SDC has also initiated sustainable development assessments of the various government department sustainable development strategies, and published six Sustainable Development in Government (SDiG) reviews.

Higher Education

UK research on ESD represents some of the most important current thinking about ESD as a concept and as practice. Much of this comes from universities, where research centres on the environment and on sustainability have incubated innovative action on ESD over the past ten years. Many of the leading academics on ESD engage in regular dialogue with key government policy makers, and have in some cases formed collaborations for promoting ESD practice through research. UK research in higher education has also revealed important data about the incorporation of both SD and ESD into the higher education sector, and has been conducted by both independent organisations supporting HEIs (e.g. the Higher Education Academy) and the government's higher education funding body, HEFCE.

Civil Society

NGOs such as Forum for the Future, WWF UK and Development Education Association (DEA) have invested in research on SD and ESD and have published a number of papers that are resources for the field. The Anglo-German foundation is currently undertaking a multi-year research project entitled Creating Sustainable Growth in Europe that is aimed at bridging policy and research debates to encourage the sharing of best practices and fostering of policy learning between the UK and Germany, two active countries in the DESD. Additionally, several institutions devoted to research on SD issues, including the UK Centre for Economic and Environmental Development (UK CEED), The International Institute for Environment and Development (IEED), the Economic and Social Research Council (ESRC), and The Institute of Development Studies (IDS) have made significant contributions to knowledge on SD.

Private Sector

The business and corporate sector in the UK has produced research resources that offer in-depth analyses of SD in businesses in the UK. Independent consultancies like SustainAbility are using SD as a way to add value to businesses, and other organisations such as the International Institute for Environment and Development (IIED) offer website research resources on sustainable markets. The BCSD-UK, in partnership with the Midlands Environmental Business Company (MEBC), has published three annual reports, Portfolios of Sustainable Development in Business Case Studies. Citing "good news and bad news," the most recent report in 2006 profiled responses to SD in multi-sector businesses, concluding that while many businesses continue to demonstrate commitment to promoting SD values, as well as develop innovative and holistic approaches to SD in their work, there are often barriers for achieving sustainability. The report criticises a lack of alignment between government's national strategy, legislation and regulation as one key factor preventing the development of increased SD practises in the business sector.

2.4.2. ESD Evaluation

Surveying evaluation at this early stage in the DESD is useful for identifying the state of play, but is necessarily a limited exercise, as no attempts have yet been made to evaluate ESD in a national context. However, there are several important initiatives that have considered the evaluation of ESD in their sectors. In particular, HEFCE's recently produced strategic review of SD in higher education in England presented a broad analysis of the types of SD research occurring at universities, the estate management practices of universities in the context of SD, and the presence of SD in various learning curricula. This evaluation has created a benchmark for measuring the growth of SD across a number of themes (research, curriculum, and estate management) in the future and is an important resource for further DESD monitoring in this sector. For primary and secondary schools, Ofsted, England's school curriculum and inspection authority, developed the s3 Sustainable Schools Self-Evaluation, which provides a framework for schools to assess their progress towards achieving sustainability. At present, the s3 is a voluntary evaluation but represents an important effort in terms of identifying the outcomes that the government seeks to achieve in the field of ESD. Ofsted also recently published (2008) an evaluation of school visits to 41 schools to measure the presence of sustainability teaching practices in the classroom, which reported a low level of knowledge and awareness of sustainability in most schools.

3. DISCUSSION

3.1. Findings

The purpose of this report was to conduct a survey of action in the UK on ESD to identify action taken thus far in compliance with the goals of the UN Decade on Education for Sustainable Development. Our goal was to identify a baseline of activity for assessing the range of responses to DESD across sectors and levels. Of particular interest were the major support mechanisms put in place by key top-level stakeholders, including the government, civil society organisations, regional authorities and higher education sector. The remit of this report made it difficult to examine grassroots activity indepth, but this area is critically important and should be assessed at the earliest possible opportunity.

The study found that there is considerable support for and action towards reaching the aims of the DESD. This support can contribute to a growing awareness among citizens that achieving sustainability – indeed, sustainable communities, as it is framed in England – is a core goal of UK government and civil society. However, it is important to note that the majority of support and action for ESD is not framed in terms of meeting or working within the framework of either ESD or DESD goals.

Grouped thematically, some important highlights in UK action on ESD are:

3.1.1. ESD Policy in the UK

- Clear policies for ESD exist across all four administrations, but there are significant differences; for example, between the English and the Welsh approaches. It is not possible to qualitatively evaluate the strength of one approach over the other as there are no outcomes to measure. The Welsh approach of prioritising ESDGC (rather than ESD) demonstrates a significant commitment to integrating ESD in a more cross-curricular manner with other areas of educational synergy. The wealth of connections between ESD and GC, in terms of values frameworks and shared global and future-oriented outlook, lend credibility to attempts to link the two areas. England's Sustainable Schools framework, on the other hand, incorporates the global dimension as one of 8 "doorways" through which sustainability in schools can be promoted. Significant differences exist in the conceptualising and packaging of the global element to ESD in both approaches, making it difficult to predict which approach is more effective.
- ESD is not yet a core element of the learning experience in English schools. There is evidence of innovative ESD being practiced, and the Sustainable Schools programme is being actively supported in national, regional and local government processes, but most studies conclude that it is largely a peripheral area. Research on ESD in schools since the launch of the Decade has recommended that governments make ESD statutory within the national curriculum in order to build support for achieving sustainability in schools.
- Northern Ireland and Scotland's SD policies recognise the key role of learning within their overall sustainable development frameworks. The policy frameworks are linked to the vision and timing of DESD, suggesting that they can benefit from maintaining and building on a vision of achieving DESD targets.

- Scotland has published a specific DESD strategy, and is the only devolved administration to do so. The Scottish Administration has also created a UN DESD Steering Group, which has begun measuring Scotland's progress in the DESD.
- There is no shared understanding or definition of ESD amongst England, Northern Ireland, Scotland and Wales. Although the shared SD framework One future – different paths identifies education as a key indicator of progress, the devolved nations have different interpretations of ESD in the context of SD priorities. The term ESD itself is still contested, as is its link to SD.
- There is no UK-wide DESD strategy. Absence of a strategy across the four administrations
 has allowed for innovative individual approaches to the provision of ESD, but it may prevent a
 stronger and more unified link to the efforts of the DESD.

3.1.2. Action on ESD in the UK

- There is a wealth of activity on SD and ESD in the UK at the present moment, some of which has been building since the turn of the century, and some either directly in response to the DESD or in alignment with the larger national and global ESD movement. There are a range of learning opportunities across many sectors, from workshops and conferences to partnership initiatives on ESD, research studies, curriculum resources, direct services and interactive learning websites.
- The UK Government and the devolved administrations have on the whole demonstrated leadership on ESD in a number of areas, but so too have regional stakeholders, national and local civil society and volunteer organisations, as well as the higher and further education communities. Throughout the UK, stakeholders in leadership positions at various levels have identified the importance of ESD. The civil society sector in particular has offered significant support for increasing ESD among its member organisations.
- There are encouraging developments for ESD in England's regions, where the concept of ESD is actively promoted by a number of different stakeholder networks. In some cases, the regions have been leading on ESD for years, and the actions and commitments of NGOs and the voluntary sector to strong regional networks hold the potential to have a substantial impact on local progress. However, regional networks are considerably varied in activity levels and levels of support are inconsistent.^{ix}
- There are numerous examples across sectors and levels of society of the seven interlinked DESD strategies being used to promote ESD. Across the UK, there are notable examples of each strategy incorporated to strengthen delivery and understanding of ESD.
- There is an active academic and practitioner community thinking about, researching and evaluating ESD. The UK is home to some of the leading theorists on ESD. There are also regional actors and practitioners within civil society who are making significant contributions to better understanding ESD implementation and potential outcomes. Government actions in this area hold promise for expanding ESD within HE; a prime example is HEFCE's recently completed strategic review of sustainable development in higher education, which has created a strong baseline for further study.

• There is generally low visibility in the UK for the DESD. The terms "ESD" and "Decade of Education for Sustainable Development" do not often appear outside of the active ESD community. Despite achieving tremendous progress in terms of international and national visibility, education for sustainable development is still a peripheral concept to many. There is often no explicit link between the DESD and national and local SD policies and practices, in part because ESD is not always explicitly linked to SD.

3.1.3. Outlook for ESD in the UK

- The UK's history of engagement in ESD, its activities thus far in promoting the aims of the DESD, and its commitment to embedding sustainability in all aspects of society suggest that ESD can grow in the UK during the DESD. Deeper questions remain about how to embed and practice ESD of real quality, how to promote increased engagement and participation in all sectors, and then, importantly, how to assess the impact of educational efforts for promoting SD over the short and long-term.
- The civil society sector for ESD is still largely comprised of either environmental education or development education organisations. Organisations with an ESD remit are less prevalent than development and environmental education organisations that promote ESD. There is some evidence, notably expanded on in an article on UK ESD by Bourn (2008), that the idea of 'global citizenship' is beginning to create bridges between the development education community and those practicing environmental education. Larger national and international NGOs such as WWF and Oxfam have also demonstrated leadership on linking their respective agendas to developmental and environmental goals.
- The push for sustainable development in all sectors in the UK is creating opportunities for learning and skills development outside formal, higher and further education structures. For many people working within government departments, corporations, and professional bodies, adopting sustainable development has or will become an increasingly mandatory facet of their work. People will need access to information and, to varying degrees, training on SD as it relates to their professional duties. If SD continues to expand throughout all sectors in the UK as expected, there will be substantial demand for education structures that are varied and flexible in order to best serve different members of the community.

3.2. Areas for Further Debate and Research

The report's main recommendations for further research are:

- The quality of ESD must be assessed in light of the DESD goals to ensure that there is "light," and not just "heat." The goal of future ESD reports should be to begin to determine the quality of ESD in the UK. This report has identified a range of policies and practices that promote learning for sustainable development. Future reports must begin to examine the impact of these mechanisms on a short- and long-term basis, and what effects the various interpretations of ESD can have on learning outcomes."
- There is still untapped potential for placing ESD at the core of learning within formal education. Sustainable development

- ESDGC may be an important development in mainstreaming values education in Wales. Wales' decision to link two curriculum areas that have been gaining support in UK educational policy over the last decade appears to be as pragmatic as it is ambitious. There are inherent challenges to reconceptualising educational frameworks in terms of buy-in and implementation, but ESD and GC are becoming more accepted by government policymakers as mainstream educational approaches and could draw more support in formal education if linked. More research is needed to determine the implications of this new type of learning framework.
- The UK (England, Northern Ireland, Scotland and Wales) should consider developing shared ESD standards, which would allow the UK to implement a strategic evaluation framework for the DESD. This report identifies a number of areas in which ESD is embedded, establishing a baseline starting point from which to assess synergies and future activity. In addition, Scotland's DESD strategy provides an example of what a UK-wide DESD action plan might resemble.
- Networks and partnerships in the UK for ESD exist, but could be even stronger. A national network in each devolved administration, or even a shared UK-wide network or ESD warehouse could potentially provide a stronger link between the growing communities of practice in ESD, and build momentum for ESD across the UK as a whole. For example, a UK-wide DESD steering group modelled after Scotland's DESD steering group could have an ESD champion from each administration on its panel, along with other key stakeholders. The German National Commission for UNESCO is another example; in 2004, it instituted the National Committee for the DESD, Germany's central body for implementation of the Decade.
- Networks for ESD at the international level can be leveraged to increase support for and stimulate debate on ESD within and outside the UK. There is some evidence that the UK has engaged with ESD outside its borders, notably through European collaborations in higher education and civil society. The UK government and the devolved administrations have all declared their support for the DESD. However, there is not a specific, direct connection between the UK's ESD goals and those of the DESD, nor is there any forum for exchange of ideas. Additionally, there is little evidence that UK stakeholders have made connections between multiple long-term UN initiatives (ESD, EFA, MDGs) and their implementation in the UK.
- The promotion of the Decade of Education for Sustainable Development in the UK by ESD stakeholders can potentially bring higher visibility to ESD and the range of activities that are already occurring. By taking advantage of the international framework and current momentum for nationalising ESD, the UK can continue to build support for integrated, holistic approaches to ESD in all areas of learning.

4. CONCLUSION

Returning to the Times Online article of 26 May 2008 referenced at the beginning of the report, there are causes for optimism in its depiction of the importance of promoting sustainability in schools. It is a clear symbol of the existence of a dialogue on sustainable development at the present moment in UK society.

As the Decade's mid-point approaches, the UK government, its professionals, its civil society, its families and its children have the opportunity to deepen their understanding of sustainable development. In addition to their existing efforts to promote sustainable development, they can support these goals by actively working with the community of DESD stakeholders in national, regional, and global partnerships. There are important, unanswered questions about what ESD can actually accomplish and what real learning for sustainable development looks like. It is one of the defining questions of our time. The UK is well placed to confidently explore for answers.

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APPENDICES

Appendix 1: Working and Advisory Group Membership

Members on the Education for Sustainable Development Working Group, UK National Commission for UNESCO

Name	Organisation		
Douglas Bourn	Chair ESD WG. Development Education Research Centre, Institute of Education		
Clive Belgeonne	Chair North West Regional Forum		
Alec Boksenberg	Chair of the Board, UK National Commission for UNESCO		
lan Bowbrick	Royal Academy of Engineering		
Adam Cade	Student Force for Sustainability - East Midlands		
Ruth Conway	European Christian Environmental Network		
Ann Finlayson	Sustainable Development Commission		
Merlynne Francique	National Youth Agency		
Craig Johnson	Yorkshire and Humber ESD Regional Forum		
Mary Kelly	Learning and Skills Council		
Stephen Martin	Environmental Association for Universities & Colleges		
John Morgan	University of Nottingham		
William Scott University of Bath			
lain Patton	Environmental Association for Universities & Colleges		
Hetan Shah	Director DEA		
Joanna Simpson	Higher Education Funding Council of England		
Stephen Sterling	University of Plymouth		
Tony Thomas	Field Studies Council Environmental Education		
Paul Vare	South West Learning for Sustainability Coalition		
Ros Wade	Initial Tea Ed - ESD Global Citizenship network - London South Bank University		
Jane Ward	NIACE - Sustainable Development		
Jane Wilkinson	Forum for the Future		
Alba de Souza	Secretariat, UK National Commission for UNESCO		
OBSERVERS			
Claire Fowler	Welsh Assembly Government		
Mark Donnelly			
John Joseph			
Janice Lawson			
Jake Reynolds	Sustainable Development Commission-DfES		

Members on the Indicators Advisory Sub Working Group, UK National Commission for UNESCO

Name	Organisation		
Doug Bourn	Chair ESD WG. Development Education Research Centre, Institute of		
	Education		
Richard Blackwell	Head of Learning and Teaching		
Mark Donnelly	Sustainable Development Team DCSF		
Claire Fowler	Welsh Assembly Government		
Mary Kelly	Senior Policy Manager, Learning and Skills Council		
Janice Lawson	Dept for Children, Skils and Family		
Jake Reynolds	Sustainable Development Commission-DfES		
Bill Scott	University of Bath		
Stephen Sterling	University of Plymouth		
Daniella Tilbury	niella Tilbury University of Gloucestershire		
Paul Vare	I Vare South West Learning for Sustainability Coalition		
Sam Meijas	n Meijas ESD Project-PhD student at IOE		
Alba de Souza	ouza Secretariat UK National Commission for UNESCO		

Appendix 2: Discussion of Indicators and Suggested ESD Indicators

In lieu of developing indicators, the report instead analyzes the ongoing international and national ESD indicator development process in the context of this survey, and poses questions about the potential for the UK government to initiate a comprehensive ESD evaluation process in light of the DESD. This section provides background on the ongoing ESD indicator development process in international, regional and national contexts. It concludes with suggestions on a range of potential indicators for the DESD.

International, Regional and National Indicators for ESD and the DESD

The process of indicator development is an important step in following the seventh DESD strategy of monitoring and evaluation. There is a considerable body of work on ESD indicators at the international, European and UK levels, and these efforts have yielded resources that guided and informed this report's development of UK ESD indicators for the DESD.

What is an Indicator?

Broadly speaking, an indicator is a way of understanding aspects, qualities or characteristics of a particular system (Tilbury and Janousek, 2006). Indicators offer a way to indirectly measure progress using a specific method of measurement or observation; they have been called "proxy measures" which can offset the inability to directly measure a system or phenomena (Reid, Nikel and Scott, 2006). A salient example of ESD indicators is offered here:

ESD indicators do not show progress in ESD directly but rather provide information about a range of ESD attributes that can be considered together to determine overall progress. For example, the direct action of learning cannot be seen. Therefore, indicators are used to measure progress in learning by communicating information about the inputs and outcomes of learning. Thus, ESD indicators provide stakeholders with vital, often difficult to measure, information about the status and quality of policies, activities, processes and their effects. (Tilbury and Janousek, 2006, p. 8)

ESD indicators can be measured either through quantitative means – such as the capture of aggregate numbers on ESD activity (e.g. the number of "sustainable schools" in the UK) – or by qualitative means, which can measure progress through description or content analysis. Within the UK, there have been important debates regarding both the best methods for measuring indicators (qualitative or quantitative) and the types of indicators that can measure the impact of ESD approaches within both academic and government policy circles (Huckle, 2006a; Huckle, 2006b; Reid, Nikel and Scott, 2006; Vare, 2006). The discourse on UK ESD indicators has produced important recommendations and understandings, which have informed the process of the UK National Commission for UNESCO indicator development. A useful way of conceptualizing ESD indicators is offered by Reid, Nikel and Scott (2006):

A set of indicators fit for purpose should be able to show where we start from, where we are going, how we think we are going to get there, and how far we are from where we want to be. The indicators are not an end in themselves though, and should not be the sole basis for judgment. (Reid, Nikel and Scott, 2006, p. 6 Emphasis in original)

UNESCO ESD Indicators and Monitoring/Evaluation Approaches

UNESCO, in both regional and international contexts, has led efforts to develop ESD indicators for its member nations, and in 2007 published a report on the Asia-Pacific region's indicator development process that produced guidelines for development of national ESD indicators (Tilbury et al., 2007a; Tilbury et al., 2007b). The report, along with the shorter *Quick Guide to Developing National ESD Indicators* that was developed from it, have been used to promote indicator development in member states, and have yielded an indicator framework illustrated below that will guide the development of the UK National Commission indicators.

	Indicator Type	Function
Status	Baseline	To identify the status of the overall ESD picture
Facilitative	Context	To Identify the existence of ESD support systems
	Process	To identify the existence of ESD processes and activities
	Learning	To promote learning and reflection on ESD
Effect	Output	To assess outputs such as tools and learning resources, and the immediate results of an activity
	Outcome	To assess outcomes related to changes or Improvements that result from ESD efforts
	Impact	To assess impacts that result from ESD efforts
	Performance	To assess the change in the status of the overall ESD picture in a region or country

The table above groups ESD indicators into three categories – *status*, which refer to variables identify the position of ESD in a given country; *facilitative*, which refer to variables that demonstrate processes that encourage or support ESD; and *effect*, which refer to variables that demonstrate short, medium and long-term DESD achievements (Tilbury et al., 2007a). The overall goal of the ESD targets that these indicators can assist in measuring is to understand the extent to which people and communities are engaging in sustainable development.

In addition to the Asia-Pacific indicator guides, UNESCO has worked on a broader scale to identify DESD evaluation approaches, which are highlighted by the actions of the UNESCO global monitoring and evaluation ESD working group and their recent publication of a qualitative questionnaire for national DESD coordinating bodies, *Global Monitoring and Evaluation of DESD Implementation*. This is not an indicator development process, but it does represent a significant contribution to the measurement of DESD progress across nations. The instrument provides a means for the UK and other countries to report on DESD progress within a regional framework, enabling certain comparisons with other countries and their progress toward DESD objectives. However, the format of the questionnaire is largely close-ended, and therefore cannot provide the qualitative depth that is necessary to make more nuanced conclusions about the state of ESD activity in a given country. UNESCO will use completed national questionnaires to compile a global progress report on DESD implementation that will be presented at the UNESCO Executive Board and General Conference every two years, as well as in the form of a mid-Decade progress report to the UN General Assembly

in 2010. Importantly, this process emerged after development of a monitoring and evaluation framework by the UN Economic Commission for Europe (UNECE), and thus the reporting format has been integrated with UNECE efforts for a common format.

UN Economic Commission for Europe (UNECE) ESD Indicators

UNECE, comprised of 55 countries across Europe, Central Asia, and including Canada and the United States, has conducted significant work on the establishment of an ESD indicator. In 2003 at the Environment for Europe Ministerial Conference, it endorsed a ministerial statement on ESD that led to the establishment of an ESD task force, who were charged with developing a regional ESD strategy. This strategy was adopted in a 2005 UNECE Committee on Environmental Policy high-level meeting of environment and education ministries, and is referred to as the Vilnius framework due to the location of the meeting. The Vilnius Framework in turn led to the formation of an ESD expert group, which was tasked with developing monitoring frameworks for assessing the progress of member states in implementing the ESD strategy, and also with gauging the impact of the ESD strategy's implementation.

The expert group, made up of stakeholders with considerable education and policy experience in both environmental education and ESD, began a process of regional ESD indicator development that yielded four indicator types:

- Checklist indicators measuring initial government action taken to support ESD in policy and practice
- Input indicators measuring the specific inputs or activities taking place
- Output indicators measuring the results or outputs of ESD activities
- Outcome indicators measuring the impact of ESD activities (Tilbury and Janousek, 2006)

These four indicator types all seek to identify ways of measuring progress in ESD in the context of the regional ESD strategy, and have been incorporated into the UNECE regional format for reporting, used by complying member states to report on their progress in ESD thus far in context of the DESD.

ESD Indicators in the UK

Since the launch of the Decade, the UK government has made efforts to develop an ESD indicator. In a report commissioned by the Sustainable Development Commission (SDC), the UK's government watchdog for sustainable development, six possible conceptions of ESD indicators were identified at the formal education level. These take into account several ways of viewing ESD processes for learners:

- The sustainable literacy approach would measure "the percentage of learners who attain the
 required level of sustainability literacy," and is thus primarily a way of formally assessing
 students' learned knowledge of ESD (see also Forum for the Future)
- The sustainable schools approach seeks to measure the "percentage of pupils that are able
 to relate activities carried out in school to key themes of SD and can recognise the values,
 skills and knowledge that are relevant to taking considered action on issues relating to such
 development"
- The citizenship survey approach, developed by Jake Reynolds at DCSF, would measure
 "the percentage of pupils who report knowledge, attitudes and activities relevant to active
 citizenship for a sustainable society in a questionnaire used by the NFER study into
 citizenship education"

- The *frame of mind* approach, which assesses "the percentage of learners who have development sustainability as a frame of mind"
- The dilemma approach looks at "the percentage of learners having the skill to match imaginary characters' decisions to the knowledge and values that is likely to have prompted such decisions"
- The action research approach would assess "the percentage of learners who have successfully taken part in action learning designed to explore ways of creating a more sustainable society" (Huckle, 2006a)

While it is beyond the scope of this report to offer formal assessments of student ESD learning, these possible indicator categories reveal competing methodologies and possible variation of learning outcomes that are all contained within ESD. More importantly, they highlight the specificity possible when devising indicators – the above indicators examine formal education only – which in turn points to the larger challenges of assessing what a country is capable of measuring, and designing indicators that capture learning outcomes across sectors and diverse contexts.

Methodological Considerations for Suggested UK National Commission ESD Indicators

As the discussion of ESD indicators above reveals, the development of meaningful ESD indicators for the UK is a complex process requires a clear strategy that lead to the establishment of benchmarks that allow for useful measurements of over time. Further, not all indicator development processes can be said to be definitive; even the SDC's commissioning of an ESD indicator development process did not result in the adoption of one by the UK government.

In light of the early stage of DESD in which this report is situated, and the absence of previous monitoring or evaluation efforts specific to the UK, the UK National Commission, with the support of ESD stakeholders in the UK, identified key headings for ESD in the UK, and have developed them into a set of suggested indicators that reflect a starting point for the ESD evaluation process.

While all of the suggested indicators and corresponding aggregated data will create a baseline set of benchmarks from which to assess progress in the DESD in the future, each of the possible indicators correspond closely to one of the key seven DESD strategies and can be linked also to the indicator framework outlined by UNESCO Asia-Pacific region national indicators guides.

UK National Commission for UNESCO Suggested Indicators

The following six suggested indicators have been selected based on feedback from the UK National Commission for UNESCO ESD working group and indicators advisory group, and with the assistance of project partners at UK National Commission for UNESCO. They are not exhaustive, meaning that there are other possible indicator categories that may also be relevant to UK ESD and DESD monitoring goals. Nor are the indicators in this report measured to gauge progress; rather, they are highlighted as "headlines" of ESD activity, and the aggregated information can establish a baseline of data corresponding to the five indicators that can be applied to future reports. For example, a future report seeking to examine the types of ESD in the UK to indicate their change over time can reference the baseline data under the "types of ESD" indicator category as a benchmark against which to assess progress.

Headline Area	Possible indicator	UNESCO Asia- Pacific Indicator Category		Key DESD strategies addressed	Advantages	Disadvantages
Types (strategies/ approaches) of ESD	The number of ESD programmes that come from environmental organizations; The number of ESD programmes overall	Category: Status Type: Baseline	•	Research and Innovation Use of ICTs	Can create a meaningful baseline of ESD efforts from which to conduct research on impact/outcomes	Not impact/ outcome focused
Leadership and Policy on ESD	The increase in activity within government for ESD (as measured by number of new policies during the Decade); Change in ESD policy to become more aligned with DESD (qualitative)	Category: Facilitative Type: Context	•	Advocacy and Vision Building Consultation and Ownership	Identifies existence and growth of substantive government policies on ESD; Can be correlated to outcome measurements	Not impact/ outcome focused
Networks and partnerships for ESD	The percentage of ESD actors engaged in partnerships or links (sector-specific)	Category: Facilitative Type: Process	•	Partnerships and Networks	Can identify the extent to which ESD stakeholders are working in collaboration or isolation	Not impact/ outcome focused
Prevalence of learning opportunities for ESD	The percentage of schools teaching government-led ESD; percentage of schools implementing an ESD award scheme or programme (NGO)	Category: Effect Type: Output	•	Capacity Building and Training	Can identify existing support structures for learning ESD	Not impact focused
Existence of ESD research and evaluation	Increase in ESD research over time; Percentage of ESD evaluations that highlight progress qualitatively and quantitatively	Category: Effect Type: Output	•	Research and Innovation Monitoring and Evaluation	Can bring together existing efforts to quantify impact, to make wider conclusions, and to identify trends and patterns (meta-evaluation)	Not impact/ outcome focused
Conceptions/inter pretations of ESD	Percentage of ESD programming that is holistic in nature	Category: Status Type: Baseline	•	Research and Innovation	Can identify the extent to which there is common understanding across sectors and levels of the purposes and goals of ESD	Not impact/ outcome focused; establishing baseline difficult

As is clear, the suggested indicators are not impact-focused; that is, they do not attempt to determine the impact of ESD in the UK on behavioural change.

A second possible indicator of ESD in the UK has been developed in consultation with stakeholders from the UK National Commission ESD advisory group. This indicator has been characterized as a **Learning Opportunities** indicator. For example, when we see a school decide to become a fair trade school, or when we see a business decide to adopt a new energy efficiency policy, it is evidence that some type of learning took place that inspired actual action and change in behaviour.

Policies for SD	Learners establish their own ESD indicators	Behavioural change as a result of learning on ESD that take
		place
Government departments, NGOs and Civil Society, Business incorporate SD into their overall missions/policies	Stakeholders begin to adopt new practices (e.g. businesses begin recycling, schools begin to implement the fair trade schools programme, universities adopt greening policies)	Self-reported changes in organisational practices as a result of policies

Example methods of measurement include:

- Surveys to businesses that explore their engagement with SD and decisions to implement SD policies
- Chambers of Congress surveys
- Regional and Local authority surveys
- School surveys on decision making process to become Eco or Sustainable schools

A third possible indicator, also developed in consultation with stakeholders, is one that analyses baseline data inputs and outputs to begin to measure outcomes:

Α	В	С	D
Because of xxxx,	we have come to understand that we need to change the ways that we	live our lives, conceptualise policy, view the curriculum, interact with suppliers, market ourselves, talk to customers, require managers to work, drive our cars, take holidays, etc	And this has meant that we now yyy

xxxx are the inputs discussed in the report: government policies, NGO programmes, networks and seminars, curriculum and resources. **yyy** are the changes in the way people do things as a result of the inputs. Using this baseline report, future reports could devise surveys to stakeholders identified in this report to determine a range of self-reported responses on how their practices and behaviours have changed as a result of the particular policies, initiatives, or programmes in their sector or area.

NB: The above indicator suggestions are all untested, and should be carefully developed by stakeholders working together as part of a larger evaluation process to create useful (and accurate) ways of measuring of progress.

Appendix 3: UK Government ESD Policies and Action Timeline: 1998-2008

The following appended section outlines policy and action in the UK government and the devolved administrations on ESD and ESD related subjects before and during the Decade of Education for Sustainable Development, focusing on key highlights that have informed the current position of ESD in government educational and sustainable development policy.

1998

- The Department for Education and Skills (DfES), and the Department for Environment, Food and Rural Affairs (DEFRA) formed the Sustainable Development Education Panel (SDEP) as a non-departmental public body with a five-year term to identify strategies for promoting ESD.² SDEP's ESD definition is: "education for sustainable development enables people to develop the knowledge, values and skills to participate in decisions about the ways we do things, individually and collectively, both locally and globally, that will improve the quality of life now without damaging the planet for the future."
- Timed with a review of the National Curriculum, SDEP advised the government in its first annual report to include ESD in the revised school curriculum, and proposed a strategic framework for ESD.

- The Department for Education and Employment (DfEE) in its statement of aims asserted that the national curriculum "should develop [children's] awareness, understanding, and respect for the environments in which they live, and secure their commitment to sustainable development at a personal, local, national and global level."
- SDEP's second annual report identified actions taken thus far by the panel, and cited as an achievement that "we [SDEP] made sure education for sustainable development was included in the new National Curriculum."³
- The National Curriculum included ESD, offering this definition: "Education for Sustainable Development enables people to develop the knowledge, values and skills to participate in decisions about the way we do things individually and collectively, both locally and globally, that will improve the quality of life now without damaging the planet for the future."
- The Department for International Development (DFID) published its strategy paper Building Support for Development Education, which prioritised support for development education in the formal education sector.
- The UK government published A Better Quality of Life, a sustainable development strategy for the UK.

² www.defra.gov.uk/ENVIRONMENT/sustainable/educpanel/index.htm

³ www.defra.gov.uk/environment/sustainable/educpanel/1999ar/index.htm (accessed May 2008)

2000

- Based on the work of two initiatives, the UK Round Table on Sustainable Development and the British Government Panel on Sustainable Development, the UK government established the Sustainable Development Commission (SDC).
- DFID published Achieving sustainability: poverty elimination and the environment, a report that
 examined the ways in which the international community could take action to meet international
 development targets for the environment and sustainable development. The report was framed as
 part of DFID's core mission to eliminate poverty.
- DfES revised the national curriculum to reflect the inclusion of ESD across subjects, outlined in its publication *National Curriculum Handbook for Teachers*.
- The British Educational Communications and Technology Agency (BECTA) initiated an ESD curriculum software programme, which outlined an ICT approach for promoting ESD.
- In Wales, the Qualifications, Curriculum and Assessment Authority for Wales (ACCAC) published Personal and Social Education Framework: Key Stages 1 to 4, which listed as one of its goals to "foster and encourage positive attitudes and behaviour towards the environment and the principles of sustainable development locally, nationally and globally."
- ACCAC published a report entitled Education for Sustainable Development, which gave the National Assembly for Wales information on the presence of sustainable development in formal education curriculum.

2001

- The Welsh Assembly Government (WAG) Department for Education and Training (now known as the Department for Education, Lifelong Learning and Skills or DELLS) set up the ESD Advisory Panel to create an ESD implementation strategy for schools and adult education.
- SDEP's third annual report was published, entitled *Education for Sustainable Development More Relevant than Ever*, and continued to call for the government to take increased action on ESD.
- DfES initiated the *Growing Schools* initiative in September, which aimed to promote the use of the outdoor classroom in schools "as a context for learning across the curriculum."

- SDEP published its fourth annual report in January, *Education for Sustainable Development Learning to create quality of life.*
- DEFRA initiated the Sustainable Development Education Panel Review to common on SDEP's work from 1998-2002.
- The Qualifications and Curriculum Authority (QCA) created curriculum guidelines for schools which identified seven key ESD concepts initially suggested by SDEP: *citizenship and*

stewardship; sustainable change; needs and rights of future generations; interdependence; diversity; uncertainty and precaution; quality of life; equity and justice

- The Learning and Skills Development Agency (LSDA) published Sustainable Development
 Education Panel Review: Comments from the Learning and Skills Development Agency as its
 contribution to the DEFRA review.
- LSDA published Good practice in sustainable development education, a research report that examined a 2001 initiative that funded 11 ESD projects among a number of FE colleges and partnerships.
- DFID, in partnerships with Estyn and the Welsh Assembly Government published 'Education for Sustainable Development and Global Citizenship Why? What? How?' Nine key concepts of ESDGC are articulated: interdependence; citizenship and stewardship; needs and rights; diversity; sustainable change; quality of life; uncertainty and precaution; values and perceptions; and conflict resolution.
- ACCAC published *Education for Sustainable Development and Global Citizenship*, which outlines the importance of integrating both ESD and GC into schools and also highlights good practices.

- SDEP reached the end of its five-year term in February, publishing its key document, Learning to Last: The Government's Sustainable Development Education Strategy for England. It recommended a specific ESD strategy for England and explicitly linked it to the commencement of DESD, asserting, "there has never been a greater opportunity nor a greater need for a coherent strategy."
- In February, DfES and DEFRA published A Sustained Lesson Reviewing England's Sustainable
 Development Education Panel. The report recommended that the SDEP be wrapped up at the end
 its scheduled term so that the ministers and departments could consider SDEP's strategy and
 possible methods of implementation (one of which includes tasking the Sustainable Development
 Commission (SDC) to take on an ESD remit.)
- Also in February, DfES published Building schools for the future: consultation on a new approach to capital investment, which detailed an ambitious new capital investment programme meant to revitalize England's schools to meet "21st century standards."
- In March, SDEP published its fifth and final annual report, *Understanding, Conviction and Commitment*. It recommended working to promote the DESD within formal education, through curricular reform, and through all aspects of education in which the government works (e.g. further and higher education).
- The House of Commons Environmental Audit Committee (EAC) published a report entitled Learning the Sustainability Lesson, aimed at drawing attention to the uncertain status of ESD in the UK. The report identified learning as a key driver for sustainable development and faulted the UK's sustainable development strategy for neglecting to "set out a clear vision of the contribution which learning can make to achieving the Government's sustainable development goals." The report was particularly critical of perceived inaction on the part of DfES.

- DFID published the report *Enabling Effective Support: Responding to the Challenges of the Global Society: A Strategy of Support for the Global Dimension in Education.* The report outlined a new initiative, which aimed to assist teachers in integrating the global dimension into their practices. It identified partnerships as a key strategy, and cites the need to work with government departments that are working in ESD.
- The Office for Standards in Education (OFSTED) published the report *Taking the first step forward...towards an education for sustainable development: Good practice in primary and secondary schools.* It reported on a survey of 14 primary, 2 middle and 10 secondary schools in order to identify the characteristics of good practice in ESD against its seven key concepts. It identified a number of curricular links appropriate for ESD, which included geography, science, design and technology, citizenship and personal, social and health education (PSHE). It also noted that the "successful" schools surveyed incorporated a whole-school approach and had a well-developed local support network.
- The DfES published its first Sustainable Development Action Plan for Education and Skills, in which Secretary of State for Education and Skills Charles Clarke stated, "We need to look at sustainable development as a whole how we use our resources without wasting them; how we teach and learn about sustainable development; how we generate the skills, knowledge and understanding to allow us to fulfil our duty as global citizens." The plan articulated the government's support for ESD as the first of four key objectives, that "all learners will develop the skills, knowledge and value base to be active citizens in creating a more sustainable society."
- In April, the Scottish Executive published *Communities Scotland: Sustainable Development Policy*, which outlined the Scottish strategy for achieving sustainable communities.
- In July, LSDA responded to the DfES SDAP with a three-page memo, offering comments and suggestions on how to further promote ESD in the learning and skills sector.
- Wales published an updated SD action plan, and one of the top ten commitments in the plan was to create strategies for both ESD and Global Citizenship (GC).
- The UK Government published *Every Child Matters*, an extensive policy on improving the lives of children in the UK, including their health and economic well-being.

- In February, DfES announced the launch of its ambitious Building Schools for the Future project, a 45 billion pound initiative that pledged to renew all secondary schools to make them sustainable by 2020.
- In March, the DEFRA published *Achieving a better quality of life: review of progress towards sustainable development*, the fourth and last annual report on SD in the context of the 1999 policy. It detailed action taken in the UK and the devolved administrations, and across government sectors.
- In April, the Sustainable Development Commission published *Shows promise. But must try harder*, an assessment of government action on SD across sectors.

- DfES redesigned its online education resource Teachernet to include ESD, which brought together resources and support for head teachers, teachers and staff on implementing the Sustainable Schools initiative.
- Scotland's Sustainable Development Education Network, a joint initiative of the Scottish Environmental Protection Agency and Scottish Natural Heritage, was created to enable specific policy and action SDE networks. The network's definition of SDE envisioned it as way for people "to acquire the knowledge, skills and attitudes needed to build a fair, just and equitable society that is living within the environmental limits of our planet."
- The UK Training and Development Agency (TDA), the national agency for educational training, funded both the Citized project, a citizenship website and network started to assist in training for the UK citizenship curriculum; and the Teacher Training Resource Bank web portal, which provides information for teacher training institutions and trainees.
- LSDA published Contributing to sustainable development: Centres of Vocational Excellence, an
 analysis of the contribution of the Centres of Vocational Excellence (CoVE) programme to
 sustainable development.
- LSDA published as part of its LSDA reports series Opportunities for sustainable development in the learning and skills sector: a policy analysis. It described ESD as "a process of learning how to make decisions that consider the long-term future of the economy, ecology and equity of all communities," and identified research and development activities for the post-16 education and training sector that can support SD and ESD.
- After receiving consultation the previous year, DfES published *Building schools for the future: a new approach to capital investment.* The strategy aimed to reform and rebuilding secondary (and eventually primary) schools for the 21st century. However, there was no mention of sustainability or sustainable development in the document.
- In Wales, Education and Learning Wales (ELWa) published its first report of sustainable development in the further education sector in Wales.
- The Welsh Assembly Government published its sustainable development scheme *Starting to Live Differently*, which called for the production of an ESDGC strategy as one of its ten core commitments.
- Also in Wales, the Education for Sustainable Development Advisory Panel and the Welsh
 Assembly Government's (WAG) Global Citizenship working group merged to become ESDGC,
 which represented a commitment by WAG to "consider them jointly from now on within education."

2005

- The UK government published its UK-wide sustainable development strategy Securing the Future. The report framed SD as holistic, bringing together social, economic and environmental considerations in charting a future for government action on sustainability. The report asserted that sustainable development should "enable all people throughout the world to satisfy their basic needs and enjoy a better quality if life, without compromising the quality of life of future

generations." ⁴ It identified four main categories of action: sustainable consumption and production; climate change and energy; natural resources protection; and creating sustainable communities.

- The UK government published the UK-wide shared framework for SD, *One Future, Different Paths*, which identified a shared understanding of the goal of sustainable development among England, Northern Ireland, Scotland and Wales.
- The Wales Assembly Government published the *Consultation Document on Education for Sustainable Development A Strategy for Wales*, in which Jane Davidson, the Minister for Education and Lifelong Learning, announced that "because of the increasingly evident synergy that exists between these two groups [ESD and Global Citizenship], I decided last year to merge them and in so doing to formally recognise the continuum that exists."
- The Wales Assembly Government published *Global Citizenship Secondary School Map Education for Sustainable Development and Global Citizenship*, meant to assist teachers in developing ESDGC programmes within their teaching practices and across the curriculum.
- In September, Wales' Department for Education, Lifelong Learning and Skills (DELLS) published
 Education for Sustainable Development and Global Citizenship A Strategy for Action, which
 outlined the strategy for Wales' new ESDGC approach in the school, youth, further education,
 higher education, and adult and continuing education sectors.
- DfES published Learning for the Future: the Sustainable Development Action Plan 2005/2006. The report laid out DfES' approach to embedding sustainability in schools. Its core proposals were the creation of a national strategy and framework on Sustainable Schools; a Sustainable School web service; and a Sustainable Schools self-evaluation tool. In the report, DfES also pledged to implement the UNECE ESD Strategy and support the UN DESD.
- DfES published *Developing the global dimension in the school curriculum*, which outlined ways in which schools can promote the global dimension.
- DfES published *Education for Sustainable Development: resource review tool.* The tool was intended to assist teachers in assessing "the extent to which ESD resources and initiatives address the breadth and depth of ESD appropriate to their unique learning objectives." The tool was designed to help teachers review curricular resources in relation to ESD.
- The UK government published a response to the 2003 EAC report critical of its engagement in ESD. The report reaffirmed the government's commitment to ESD and specifically mapped out three key actions to be taken: the development of an ESD indicator; the publication of SD strategies by Learning and Skills Council (LSC) and Higher Education Funding Council for England (HEFCE); and the launch of the Sustainable Schools website resource. Of these three actions, the latter two have been accomplished, while an SDC-initiated indicator development process did not conclusively identify an ESD indicator.
- The Learning and Skills Council (LSC), England's non-departmental public body for further education, published its sustainable development action plan *From Here to Sustainability: The Learning and Skills Council Strategy for Sustainable Development*, identifying ESD as the first

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⁴ HM Government (2005) Securing the future: delivering UK sustainable development strategy. TSO, London

element in the curriculum area for action. It proposed to "promote and encourage acceptance and delivery within learning programmes of the Sustainable Development Education Panel's key concepts for ESD."

- LSDA, on behalf of the Learning and Skills Council (LSC) initiated a national survey on current practice in sustainable development in the learning and skills sector. The survey identified key areas of SD engagement as: positioning the sector; buildings and estates; and curriculum and community.
- LSDA published *CoVEs focus on future skills: sustainable development in construction, agriculture and food technology* as a follow up report to its 2004 study of CoVEs.
- In July, the Higher Education Funding Council for England (HEFCE) published *Sustainable Development in Higher Education*, which outlined a new approach to promoting the SD agenda in the context of *Securing the Future*.
- The Scottish devolved administration published *Choosing Our Future: Scotland's Sustainable Development Strategy*, in which education and learning are core drivers for embedding sustainable development in the lives of individuals, community and voluntary sectors, businesses, and the public sector. Rather than provide an explicit, contextual definition of Sustainable Development Education (as is the preferred Scottish nomenclature), learning was presented as a pragmatic aim for the purpose of providing people with "the necessary knowledge, awareness, understanding and skills to play their part." The role of learning within the overall SD framework is illustrated here:



Learning and Teaching Scotland (LTS) published a Sustainable Development Education Liaison
 Group-commissioned research report entitled Sustainable Development Education: an

international study, which examined the ESD approaches of ten countries. The report identifies itself as part of Scotland's input into the DESD.

- The Council on Environmental Education (CEE) closed. Between 1984 and 2005, the CEE acted as a national, cross-sector networking body that linked ESD practitioners, researchers and policymakers together, and was supported by both DEFRA and DfES.
- DEFRA published its *Sustainable Development Action Plan: Just jump straight in*, which identified SD as the department's "overarching aim" and outlined its key policy commitments and actions
- DEFRA launched thinksustainable, an online resource aimed to provide a "coordinated approach
 to embedding SD in Government."
- DEFRA published Behaviour change: scoping the way forward, a research study on the waste and resources division that sought to learn more about research on pro-environment behaviours as they related to sustainable waste management.

- The remit of the SDC was expanded, and the organization became the government's independent watchdog on sustainable development across all sectors.
- In February, DEFRA published *Community Action 2020 community support programme overview*, which gave an overview of a new DEFRA initiative designed to support non-profit, voluntary and community groups to deliver an England-wide community support programme on SD. The initiative was developed from *Securing the Future*'s community action 2020 commitments.
- The TDA published its Environmental statement: April 2006 to March 2007, which reaffirmed the
 department's commitment to promoting sustainable practices in all of its activities and integrating
 ESD into all its programmes.
- In May, Northern Ireland published its first-ever sustainable development action plan (SDAP), First Steps Towards Sustainability: A Sustainable Development Strategy for Northern Ireland. It features a section entitled "Access for all citizens to sustainable development skills and knowledge" and set out specific ESD targets as part of its overall strategy for learning and communication. After first making reference to the DESD vision of ESD, it offered its definition: "Education for Sustainable Development aims to give young people the tools to make their own informed decision and act, individually and collectively, to achieve the positive behavioural change required to live more sustainably."
- In June, the SDC published *SD indicators for education: SDC proposal to the DfES and DEFRA*, which outlined its recommended proposals to both departments on creating an ESD indicator.
- Aiming its focus on the integration of sustainable development into England's schools, DfES published Sustainable Schools for Pupils, Communities and the Environment, which offered a framework for understanding ESD in the context of the new Sustainable Schools initiative. The programme is framed by three key areas for building sustainable schools: Curriculum, Campus, and Community. Eight interconnected doorways represent the possible approaches schools can take to become sustainable: food and drink; energy and water; travel and traffic; purchasing and

waste; buildings and grounds; inclusion and participation; local well-being; and the global dimension. This definition differs from understandings promoted by DESD but incorporates many of the same themes that are covered by ESD.

- OFSTED and DfES published s3: Sustainable School Self-evaluation for Primary, Middle and Secondary schools, an evaluation tool that allows schools to voluntarily measure the extent to which their schools are promoting sustainable development in the context of the sustainable schools project.
- The Department for Environmental, Food and Rural Affairs (DEFRA) published Sustainable Communities: A shared agenda, a share of the action: a guide for local authorities. In charting a course for the achievement of sustainable communities, the report emphasised the role of education and learning. Promoting the Sustainable Schools strategy was a key action recommended to local authorities.
- The Department for Culture, Media and Sport (DCMS) published its SDAP, which listed as one of its targets "to develop an education programme to increase the implementation of SD principles throughout the DCMS family."
- The TDA published its Sustainable Development Action Plan. It referenced the work of the SDEP, as well as the importance of partnership with DfES, and outlined its actions and targets for integrated SD into its programmes and departmental practices.
- HEFCE published the *Higher Education Funding Council for England (HEFCE) Sustainable Development Action Plan 2006.*
- Higher Education Academy (HEA) published two reports on Current practice and Future developments in SD, one for senior manages in HE and one for employers, unions and professionals.
- With funding from the LSC, the LSDA published Sustainable Development in the Learning and Skills Sector: national baseline survey. The survey found evidence of progress in the learning and skills sector in the four key categories of sustainable development addressed: leadership and management; buildings and estates; teaching and learning programmes; and community and business.
- In October, the Learning and Skills Network (LSN, formerly the Learning and Skills Development Agency), in partnership with the London Sustainability exchange, published the report Sustainable Development in London's Further Education and Sixth Form Colleges: Good practice and recommendations for further action. A nine-month research study, it surveyed further education and sixth form colleges to gauge the extent to which sustainable development was being promoted, and which strategies and practices were being successfully used. The study found that "overall, colleges are willing to engage with sustainable development...however, the majority of colleges do not yet see sustainable development as 'all embracing.'"
- Northern Ireland also published The Report of the Independent Strategic Review of Education (The Bain Report) in December, which made recommendations to further support sustainable schools in all of NI.

- The DCSF declared the 2006/07 academic year as a 'Year of Action on sustainable development for schools'.
- DfES set up the Sustainable Schools area of Teachernet, which brought together resources and support for head teachers, teachers and staff on implementing the Sustainable Schools initiative.
- Scotland published the first and only DESD-specific action plan, Learning for our Future: Scotland's first action plan for the UN Decade of Education for Sustainable Development. The plan details the "first wave" of actions that Scotland will take over the next five years in direct support of the DESD, which include: integration of ESD into formal education via the Ambitious, Excellent Schools programme; support expansion of the Eco-Schools programme; within further and higher education sectors and lifelong learning; and community development initiatives. It defines ESD this way: Sustainable development education is an approach which aims to deliver knowledge and understanding of these issues and how to act on them. It informs people's values through an exploration of the fundamental principles of the way we live our lives now and the impact our lifestyles have on the environment and society.
- Wales implemented an ambitious action plan for Education for Sustainable Development and Global Citizenship (ESDGC), its first ESD strategy. It committed to action in five categories: schools; youth; further education and work based learning; higher education; and adult and continuing education.
- Estyn, the Welsh body for educational inspection published the report, *Establishing a position* statement for Education for Sustainable Development and Global Citizenship in Wales, which outlined the current status of ESDGC in schools and further education colleges in Wales. It noted that slow but observable progress was being made, and that more was being done on sustainable development than on global citizenship.
- In November, the SDC published *Off the starting block*, SDC's assessment of government sectoral sustainable development action plans (SDAP) in response to *Securing the Future*. The report highlighted strengths and challenges of the various departmental SDAPs and ranked the departments on an informal scale of progress for year one.
- DEFRA launched the *Every Action Counts* initiative in partnership with over than 30 national NGOs as well as hundreds of voluntary and community sector groups. The project's aims are to reduce carbon emissions and take action to improve the environment overall.

- In January, the National Youth Agency (NYA) published *Working with young people to create a climate of change*, a resource that acts as a practical tool for practitioners wishing to develop knowledge of SD in their work and incorporate SD into their youth work programmes.
- In February, LSC launches a strategy for building "greener colleges of the future," which requires colleges to propose eco-friendly and efficient designs in order to receive funding.
- In May, LSC published its *Sustainable Development Action Plan 2007/08*, an updated strategy based on its 2005 *From Here to Sustainability* action plan. The strategy outlined key actions to be taken by the LSC. These included: undertaking an internal survey of SD activity within the LSC;

developing capacity building programme for LSC staff; developing a set of SD indicators for the LSC; contributing to the development of sustainable communities; and working with the further education system to facilitate sharing of good practices.

- Northern Ireland published *A Consultation on Schools for the Future: A policy for Sustainable Schools*, examining the Bain Report's conceptualization of sustainable schools for NI and proposing criteria and indicators for use by the Department of Education in promoting sustainable schools.
- In Wales, Estyn published an evaluation report entitled Values Education: an evaluation of provision of education for the promotion of social responsibility and respect for others. The report found that: "The promotion of education for sustainable development and global citizenship (ESDGC) is a key Welsh Assembly Government priority and plays an increasingly significant role in how schools promote social responsibility."
- The Qualifications and Curriculum Authority (QCA) published The global dimension in action: A
 curriculum planning guide for schools in 2007, which identified sustainable development and the
 global dimension together as a key cross-curriculum dimension.
- DCMS published its updated SDAP 2007-2010, in which it identified its contribution to SD in terms
 of "learning and engagement" and its role to promote SD learning in museums, libraries, galleries
 and arts organizations.
- The Sustainable Development Commission (SDC), in partnership with the Department for Children, Schools and Families (DCSF), published *Every Child's Future Matters*, which addresses children's well-being in the context of the environment and sustainable development, and discusses ways in which sustainable development can improve the implementation of *Every Child Matters*, the government's extensive policy for the well-being of children produced in 2003.
- The SDC published its sixth annual Sustainable Development in Government Report '07 (SDiG), which assessed the performance of government operations against targets set by the Framework for Sustainable Operations on the Government Estate (SOGE). The report found that although government on the whole is generally doing better than the previous year, individual departments still had work to do to meet their SOGE targets.
- In November, DEFRA published its second SDAP, which detailed its strategies and actions until March 2009. Two education targets are outlined for the two-year strategy, including the development and implementation of a sustainable procurement education and training programme, and the development of a sustainable business travel programme, both for the DEFRA network.
- In August, the House of Commons Education and Skills Committee published *Sustainable Schools: Are we building schools for the future?*, which examined the state of the "Building Schools for the Future" initiative in light of delays in the programme's implementation and offered recommendations on how to improve the project in the context of sustainability.
- In December, DCSF published *The Children's Plan: Building Brighter Futures*, a ten-year strategy "to make England the best place in the world for children and young people to grow up." The plan

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⁵ www.everychildmatters.gov.uk/strategy/childrensplan/

noted its support for sustainable schools in a section entitled 'Sustainable environments,' affirming that sustainable development is a "non-negotiable for children's well-being." It set targets for all schools in England to be sustainable schools by 2020.

- The Quality Improvement Agency for Lifelong Learning (QIA) published *Happy planet: sustainable development and citizenship*, a materials pack produced as part of the Post-16 Citizenship Support Programme meant to support the integration of citizenship education into post-16 education and training
- The National College for School Leadership (NCSL), an NDPB of the DCSF, has published its SDAP, which pledged to integrate SD across its programmes and initiatives for school leaders.
- NCSL published the commissioned research report *Leading Sustainable Schools: what the research tells us*, which asserted that "the status of the sustainable schools strategy needs to be raised" in schools if it was to have greater impact. It highlighted good practices among school leaders and made recommendations for increasing the profile and visibility of the Sustainable Schools project. From the report, NCSF initiated a new initiative of the same name, a grant scheme to provide 36 schools with individual grants of £5,000 to support the development of school leader networks and to build leadership capacity for Sustainable Schools.

- The Higher Education Funding Council for England (HEFCE) published A Strategic Review of Sustainable Development, establishing a broad benchmark for understanding the status of sustainable development in higher education. The report evaluates HEIs across England in four major areas: SD research; SD teaching; SD in estates and corporate management; and SD case studies. The data collected and analysed in the report gives the government substantial information on SD in the HE sector, which may have an impact on future government funding policies.
- The Quality Improvement Agency for Lifelong Learning (QIA) funded the LSN to publish a curriculum pack entitled *Happy Planet: sustainable development and citizenship*, a range of exercises designed to assist in the integration of citizenship education into post-16 education and training programmes.
- In March, LSC and the Department for Innovation, Universities and Skills (DIUS) published Building Colleges for the Future: The Learning and Skills Council's National Capital Strategy for 2008-09 to 2010-11. The capital investment strategy for further education features a section on "Enhancing client capabilities and sustainability in higher education," and the integration of sustainable development into its policies and everyday practices.
- In May, Ofsted published Schools and Sustainability: A climate for change?, which reported on inspection visits to primary and secondary schools to examine schools' performance in implementing the National framework for sustainable schools. Whilst the report identified the presence of good practices and innovative approaches, overall it found that most of the 41 schools visited did not incorporate sustainability as an integral part of the curriculum, and that there was generally a low level of knowledge about sustainability. It recommended that the DCSF, TDA and QCA prioritise sustainable schools and further integrate sustainability into the school curriculum.

Appendix 4: Regional ESD Activity in England

The regions of England have in many instances displayed an understanding of and commitment to ESD as a far-reaching framework for social, environmental, and economic change. A number of England's nine regions have directly incorporated ESD language into either regional policy or through the creation of ESD forums and networks. Some regional groups have used government-defined ESD frameworks emerging from the Sustainable Development Education Panel (SDEP) process and from Ofsted's 2003 ESD report. New ways of conceptualising ESD are also coming from the regions. This section summarises desk research undertaken on ESD activity in England's regions before and during the DESD.

Sustainable Development in the Regions: Implications for ESD and Learning within SD. The survey identified the presence of strong regional networks across sectors, between government authorities, civil society stakeholders at local and regional NGOs, and regional businesses. These networks were generally more explicitly tied to promoting sustainable development within the regions rather than ESD, but they usually included ample opportunities for learning and acquiring skills for SD. In particular the national government's SD targets have created learning spaces for SD that appear to reflect regional imperatives of national SD strategy in non-educational sectors. For example:

- Regional development and planning in the context of Securing the Future's Sustainable
 Communities 2020 goal has subsequently created demand for knowledge on how to make
 these regional and local processes more sustainable.
- Conceptions of SD as they relate to regional planning and development have evolved from usage of the terms "regeneration," and "renaissance" to that of "sustainable communities." The Office of the Deputy Prime Minister (ODPM) coined the term when it established nine Regional Centres of Excellence (RCE) in 2004. The RCEs support local authorities in implementing national procurement policies and promoting efficiency, focusing on urban design with varying emphasis on skills. While the RCEs do not have an explicit ESD brief, the Academy for Sustainable Communities, the Department for Communities and Local Government's (DCLG) national learning body, has conducted a number of research projects, one of which is looking specifically at schools. The ODPM was reformed into the DCLG in 2006.
- In 2005, the UK government established the Sustainable Procurement Task Force to pursue SD strategy in its goods, services and buildings procurement policy. The Task Force's work resulted in the publication in 2006 of *Procuring the Future: The Sustainable Procurement Task Force National Action Plan (SPTF)*.
- The policies outlined in this strategy have impacted the work of the RCEs so that many now include directly in their remits references to regeneration, renaissance, sustainable communities and sustainable development. Some examples are:
 - Ignite North East, Renew North West, Inspire East, Integreat in Yorkshire and Humber and South East Excellence all cite the attainment of "sustainable communities" as central to their mission;
 - East Midlands Centre of Excellence does not make the same explicit references to sustainability or sustainable communities on its website but offers case studies on sustainable procurement;

- Part of the mission of RegenWM in the West Midlands is to secure a sustainable future.
- The survey found that within regional bodies participating in ESD activities, the following noneducational elements of SD in the UK most often informed conceptions of SD:
 - Sustainable Communities
 - Sustainable Procurement
 - Sustainability for the built environment

There is a considerable amount of formal and informal learning for sustainable development that is associated with changing and evolving regional and local processes that require new understandings of SD among stakeholders.

ESD at the Regional Level in England: Case Studies

The following section offers some key highlights of ESD activity in England's regions.

Regions (General)

- England's Regional Development Agencies were introduced primarily to foster regional economic development, with commitments to social and physical regeneration.
- The Workers Education Association (WEA) has regional offices that provide adult education services and advocate for individual and community learning opportunities. Their programmes are developed in conjunction with members and tailored to the needs of their particular community.
- Since 2006/07, DCSF has funded Government Offices (GO) in the eight regions of England to support the Sustainable Schools programme in each region. This entails specific support for networking sustainable schools with an annual grant of £25,000. Regional government office officials with an ESD remit in their portfolio meet twice a year, often with an NGO counterpart who is working in ESD.
- The Local Government Association (LGA) promotes responsiveness in local government practice, and active community participation in shaping policy, legislation, and public service decisions.

North East England

- The North East Strategic Partnership for Sustainable Schools (NESPSS) exists to support ESD and the Sustainable Schools initiative at the regional level. Its activities have included:
 - Production of a number of regional documents on ESD, including summary of ESD activity in the region and an ESD Sustainable Schools strategy;
 - Organising a February 2008 conference on Sustainable Schools entitled "Every Child's Future Matters" in York, in a cross-regional collaboration with both Yorkshire and Humber and the North West ESD Forum;
 - Initiating a wide range of action and sub-partnerships on ESD in the region, among regions, and with diverse stakeholders (schools, NGOs, etc).

North West England

- The North West Regional Assembly commissioned the creation of a North West ESD Forum with the remit to raise the profile of ESD through a number of activities for formal and lifelong learning. The forum produces an ESD newsletter, *E-Literate: Towards Sustainability Literacy*, which highlights local, regional and national activities, resources and events on ESD.
- The Government Office North West (GONW) and the NW ESD Forum commissioned the
 research report North West Sustainable Schools Network: An analysis of main activities and
 achievements, which was published in March 2008. The report situates the work of the
 network in the context of the DESD, and discusses findings on regional activity during 20072008.

Yorkshire and Humber

- In 2000, the Yorkshire and Humber Regional Assembly, in cooperation with SDEP, published its ten year ESD strategy, *Yorkshire and Humber Region Education for Sustainable Development Strategy 2000-2010.* The government office for the region defined ESD as: "A completely relevant agenda in terms of the school estate and the curriculum, as well as contributing to the overall health and attainment of children and young people in the region." The strategy was recently updated as a 2006-2008 operational plan.
- Yorkshire and Humber set up an ESD Forum, which has created a website with ESD educational resources, news and events.

East Midlands

- A consortium of further education colleges in the East Midlands set up a Further Education Partnership for Sustainability (FEPS) in 2003.
- East Midlands set up an Education for Sustainable Development (EMESD) Group in 2004 to focus on ESD activities for the region.
- The East Midlands was the first region in the UK to become a United Nations University Regional Centre of Expertise (RCE) for ESD. As part of its activities, it held a launch event for the East Midlands Sustainable Schools Agenda in 2007. The Regional Centre of Expertise East Midlands (RCEEM) has 36 member organisations divided into seven working groups including formal education, higher and further education, and youth. Additionally, RCEEM works with regional RCEs in Europe and has encouraged all the regions to adopt the RCE model. Some information on ESD in the East Midlands, provided by the RCEEM to UK National Commission, is detailed below:
 - There are approximately 40 organisations championing ESD in the region, comprised of regional government agencies, local authorities, universities, further education colleges, voluntary organizations, and business networks.
- In 2007, DCSF funded the Government Office for East Midlands (GOEM) Schools Working
 Group to undertake a three-year programme for Sustainable Development in Schools. As part
 of this programme, the will collect case study data from schools; develop a good practices
 website as a resource for school; and the creation of a sustainable schools directory.

West Midlands

- In the West Midlands, the regional authority established Sustainability West Midlands to champion SD in the region, and to provide advice and information on sustainability issues. Education is not specifically part of its mandate.
- In January 2008, Warwickshire County Council published the report *Educating for a Sustainable Future: Warwickshire's Framework to support schools to become 'Sustainable Schools.'*
- The Government Office for the West Midlands (GOWM) hosted the regional launch of the Sustainable Schools Framework in March 2007, with representatives from each of the Local Authorities (LA) in WM in attendance.
- GOWM supports the West Midlands Liaison Group for Sustainable Schools, which is coordinated by Teachers in Development Education (TIDE).
- TIDE is a key regional partner in the region supporting sustainable schools, and offers a number of reports on West Midlands ESD activity on its website [www.tidec.org]. It has held ten 3-day training courses for primary and secondary sustainable schools coordinators.
- GOWM, TIDE, and the Environmental Advisers Association partnered to host a Supporting Sustainable Schools Consultation Event in October 2007 for school governors.

East of England

- The East of England Development Agency commissioned the NGO UK Centre for Economic and Environmental Development to create an online SD "toolkit," which is an interactive web resource that allows users to gain information about SD and to appraise economic, social and environmental development projects against the regional SD framework. The tool is a learning resource, but is not explicitly tied to education.
- The Sustainable Development Round Table for the East of England (SDRTEE) works to
 promote SD throughout the East region, and provides the region with information on
 sustainability issues and events. SDRTEE has produced a number of reports on issues such
 as SD, climate change, energy, resources and waste, water, transport, and construction.

London

- In London, the London Schools Environment Award gives annual awards of 1000-2000 pounds to schools for demonstrating environmental achievements that have positively impacted the school.
- The Government Office for London (GOL) runs the London Sustainable Schools Forum (LSSF). The forum, which is open to anyone in London with an interest in ESD and Sustainable Schools, has approximately 500 members, including teachers and head teachers, governors, grounds staff, local authority representatives, and NGOs. The Forum produces quarterly e-bulletins, and holds regular events.

South East England

- In the South East of England, the South East Forum for Sustainability (SEFS) is the
 environmental network for the region, and it works with regional authorities to advocate for
 situating environmental concerns at the forefront of regional decision-making. There are a
 number of documents on SD specific to the region available for download, but there is no
 specific educational component mentioned either on the sites or in the documents available
 on-line.
- The Government Office for the South East (GOSE) in March 2008 published Supporting Sustainable Schools in the South East: A report on current local authority activity with recommendations for further action in 2008-09. The report details the state of sustainable schools in the region and compiles local s3 tool assessments.

South West England

- In South West England, Learning South West (LSW) is a regional NGO dedicated to learning, and is a member of South West Learning for Sustainability Coalition, a network of regional stakeholders working on sustainability learning. LSW's initiatives related to ESD include:
 - Reporting on the UNECE ESD indicator process and linking it to the South West ESD agenda;
 - Creation of a new initiative designed to produce a tool for the region in partnership with Sustainability South West.
- The South West Learning for Sustainability Coalition, with support from the Government Office South West (GOSW) and funding from DCSF, has co-ordinated *Linking for a change*, a networking website that links sustainable schools in the South West to share practices and communicate with each other about their sustainability agendas;
- Local Sustainability Group South West, a local authority-based group that was disbanded in 2007, initiated work in 2001 that led to a conference organised by NIACE in 2003, Learning and Skills for Sustainable Development: Developing a South West Strategy. This in turn inspired a regional ESD review: The Way Ahead?: Towards a Strategy for Sustainable Development, a research programme led by a partnership of Learning South West and Sustainability South West with support from the Regional Development Agency.
- Local Sustainability Group South West also produced a short report in 2001, Developing a
 Regional Education for Sustainable Development Strategy for the South West, which
 highlighted local practices, outlined a regional strategy and recommendation, and pointed to
 examples of ESD in other regions.
- The Way Ahead?: Towards a Strategy for Education for Sustainable Development for the South West made the case for a regional ESD strategy/action plan. No regional support has been provided since this 2004 and so progress has since been made on an entirely voluntary basis by committed organisations and individuals who formed the South West Learning for Sustainability Coalition. The coalition is an independent voluntary group with a broad cross-sector, cross-phase membership. It is currently in the process of becoming a community interest company.
- Also in the South West, the Regional assembly's 2001 SD framework A Sustainable Future for the South West identified 'learning and skills' as a key theme for implementing its strategy and

outlined a number of approaches for achieving sustainability learning and the potential partners and processes involved.

ESD at the Local level

According to the UK local authorities' gateway, all local councils have a remit to include sustainability issues in their work. The types of activities and initiatives that are happening at the local level are difficult to measure at the moment, however, and much of the information available is regional data that makes reference to particular local initiatives on ESD. It is beyond the scope of the report to identify any key ESD initiatives at the local level, but evidence gleaned from an analysis of regional initiatives suggests that local processes for ESD exist and are usually supported in some way by regional structures. Some examples are highlighted below:

- On a local level within the West Midlands region, the Warwickshire County Council created a Sustainable Schools strategy for Warwickshire in early 2008, setting up a 'Sustainable Schools Warwickshire Web' resource on the County Council website.
- On a local level within the South East region, the theme of Brighton and Hove City Council's
 annual sustainability conference in 2007 was ESD, which the Council recognised as a key
 driver for sustainable schools and communities. Speakers at the conference included a DCSF
 representative with ESD experience, Jake Reynolds, and Bill Scott, director of the University
 of Bath's Centre for Research in Education and Environment.

Support Structures in Place for Local Action

Government has put in place a number of mechanisms to help local authorities deliver sustainable communities on the ground:

- Local Strategic Partnership (LSP): Brings together the views of the local private, voluntary and community sectors with the sustainable community strategy in an area, to turn the vision of a sustainable community into a reality.
- Sustainable Community Strategy: Creates a long-term, sustainable vision in an area and sets the agenda for priorities in the local area agreement.
- Local Area Agreement (LAA): A three year 'contract' between a local area (represented by the local authority and other partners through the local strategic partnership) and central Government to deliver particular priorities as set out in its sustainable community strategy.
- The government also created in September 2005 "Local Area Agreements and the Environment" that provides examples of ways in which to join up environmental outcomes with other social and economic priorities in the area.

In the NGO sector, The Federation for Community Development Learning (FCDL) is a national membership body that promotes and supports "community development work learning for all those involved in community development as defined in the National Occupational Standards." FCDL published a Sustainable Development Action Plan in 2007 for the period August 2007 – March 2008. It also produced a resource pack for trainers and teachers to support the DEFRA initiative *Every Action Counts*.

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⁶ www.local.gov.uk/default.asp?sID=1088162663359

Appendix 5: Networks and Partnership Initiatives

Across the UK, there appears to be considerable momentum for ESD, supported by an increasing number of ESD-specific networks and partnership initiatives across a number of sectors and areas. This section provides examples of some important networks and partnership initiatives that underscore the range of collective activity for ESD in the UK. The list is not comprehensive, and it is possible that some networks or partnerships are no longer in operation.

UK and Devolved Administration Networks and Partnerships (Government and Civil Society)

 All local councils in England, Northern Ireland, Scotland, and Wales have sustainability programmes and sustainability officers, and are involved in Local Agenda 21.

England (See next section for details on England's regions)

- Until 2005, DEFRA supported the Council on Environmental Education (CEE) The CEE was a
 uniquely national, cross-sector networking body that brought ESD practitioners and policymakers together. It is no longer in existence, but was a key facilitator of individuals and
 organisations across sectors and worked on several ESD initiatives during its existence.
- The Sustainable Development Commission (SDC), in partnership with the Department for Children, Schools and Families (DCSF), published *Every Child's Future Matters*, which addresses children's well-being in the context of the environment and sustainable development, and discusses ways in which sustainable development can improve the implementation of *Every Child Matters*, the government's extensive policy for the well-being of children produced in 2003.
- England Regions Network (ERN) works with regional assemblies across England to support policy initiatives and conduct research on SD.
- Communities of Practice, an initiative of IDeA, is an online resource that supports connections between local government and the public sector, including an Environmental Sustainability and Climate Change Community.
- The Wildlife and Countryside Link (WCL) is a forum developed to facilitate collaborations between environmental conservation voluntary organisations in the UK.

Northern Ireland

- In 2005, the Interboard Education for Sustainable Development Group, a partnership of the
 Western Education and Library Board Curriculum Advisory Support Services (WELB CASS)
 and a number of other education and library boards in NI, created Education for Sustainable
 Development: Good Practice Guide for Primary, Secondary and Special Schools. The guide
 makes explicit links to DESD in describing its purposes.
- Northern Ireland Environment Link is a forum and networking body for organisations interested in the environment of Northern Ireland, with a remit for influencing policy and practice that has an environmental impact on NI.

 Sustainable Northern Ireland is an NGO that promotes and encourages the adoption of sustainability in all areas of life. Its website acts as a learning resource and features links to other NI organisations working in sustainable development.

Scotland

- Learning and Teaching Scotland (LTS) has a number of resources and initiatives on ESD that
 are accessible by visiting the site online. LTS manages the Scotland Sustainable
 Development Education Liaison Group (SDELG), which was established in partnership with
 the Scottish Executive Education Department in 2004. The remit of SDELG is to coordinate
 and facilitate the development of SDE in primary and secondary schools. Members of the
 partnership include stakeholders from regional government, NGOs, and professional bodies.
 The full network list is available at the site:
 www.ltscotland.org.uk/sustainabledevelopment/contactus/thesdelglist.asp
- Scotland's Sustainable Development Education Network was started in 2004 through a
 partnership between the Scottish Environmental Protection Agency and Scottish Natural
 Heritage, and is the national network for both policy and action on ESD. On 15 April 2008, it
 will host the SDE Networking Day, an annual event for anyone engaged in ESD that aims to
 build momentum for the sector by linking stakeholders to share ideas and build networks.
- In 2005, the Scottish Executive funded the Environmental Association for Universities and Colleges in Scotland (EAUCS) to implement the *Campus Sustainability Programme*, which promotes sustainable production and consumption in universities and colleges in Scotland. The project was launched at a national conference in November 2005 in Edinburgh.
- Scotland Environment Link is the forum and networking body for Scotland's environmental organisations, with 34 members who all share the goal of a more sustainable society.
- The BT Greener Schools Award is a collaboration between the Scottish government and BT's larger Scottish Education Awards programme. Despite its name, the Award category states that it is "about how we can encourage young people to take a greater interest in the issues of sustainability and climate change."
 [www.scottisheducationawards.org.uk/2008awards/greenerschools.asp]
- In January 2008, the UN Decade of Education for Sustainable Development Steering Group
 hosted its first meeting. The group was formed by the Sustainable Development Commission
 Scotland to advise government on the development and implementation of Scotland's action
 plan for the DESD, Learning for Our Future.
- The Scotland Sustainable Development Education Network held its 2008 Networking Day in April, bringing together Scottish stakeholders to exchange information and resources about ESD.

Wales

 The Wales Government created the Wales Education for Sustainable Development and Global Citizenship (ESDGC) website, which acts as a resource for educators and a link to over 140 organisations in all of Wales working in the field of ESDGC. The site can be found at: [www.esdgc-wales.org.uk]

- The Welsh Assembly Government (WAG) Department for Education and Training (now known
 as the Department for Education, Lifelong Learning and Skills or DELLS) set up the ESD
 Advisory Panel to create an ESD implementation strategy for schools and adult education.
 Members include Estyn (Her Majesty's Inspectorate for Education and Training in Wales),
 Education and Learning Wales (ELWa), The Environment Agency, Countryside Council for
 Wales, The Welsh Local Government Association and a range of voluntary organizations.
- The South East Wales ESDGC Forum was created in 2005 as a collaboration of officers from four local authorities (Blaenau Gwent, Monmouthshire, Newport and Torfaen), who meet on a regular basis to plan policy, events, curriculum, and evaluation tools.
- Cyfanfyd is an NGO and membership organisation that promotes ESDGC.
- The Cardiff Sustainable Education Network, initiated by the Cardiff council, is a networking
 website and resource for educators to obtain advice and planning tools for using ESD in their
 schools. The website features a direct link to DESD on its site, and also has a directory of
 over 50 network members available online.
- Wales Environment Link is a networking body for environmental organisations with an all-Wales remit to increase the effectiveness of the environment sector in protecting and improving the environment.

England - Regional and Local Networks and Partnerships

North East England

- In the North East of England, the Government Office (GONE), the North East Assembly (NEA), and One NorthEast (One NE) worked with regional partners to establish the integrated regional framework for sustainable development in the North East, known as Sustaine (Sustainability North East).
- The North East Strategic Partnership for Sustainable Schools (NESPSS) is a dedicated regional partnership organisation governed by a regional charity (NEEN), that has organised conferences, initiated regional sub-partnerships, and implemented Sustaine into their work on sustainable schools. NESPSS works in a collaborative framework with GONE, NEA, and One NE to implement regional SD strategy. Most relevant to this report, NESPSS has produced a number of regional documents on ESD, notably an ESD sustainable schools draft strategy for the North East in 2006.
- One World Network North East [www.ownne.org] was set up in February 2002 to support teachers in the North East region of England to integrate global perspectives and issues into their school curriculum.
- Newcastle University's Institute for Research on Environment and Sustainability (IRES)
 Education for Sustainable Development Project created a web site with links to information on
 thirty-four regional groups and organisations that have been described by IRES as "making a
 significant contribution to EfSD across the North East region." The network link for these
 organisations can be found at: [www.ncl.ac.uk/environment/research/EfSDUbuntu.htm]

North West England

- In the North West, three regional bodies (the Northwest Regional Development Agency; the Government Office for the Northwest (GONW); and the Northwest Regional Assembly) collaborated to produce Sustainable Development in England's Northwest, a report that outlined a regional strategic SD framework, regional and sub-regional partnerships, current regional initiatives, and areas for future SD research in the region.
- The North West Global Education Network (NWGEN) [www.globdimnw.fireflyinternet.co.uk] provides North West teachers with strategies and resources for incorporating a global perspectives and issues into their teaching, and is based on the national 'Enabling Effective Support for the Global Dimension in Schools' initiative created by the Department for International Development (DfID).
- NWGEN and the Development Education Project (DEP) collaborated with Manchester Metropolitan University to stage a one day conference on 8 June 2006 entitled, "Making it Real, Making a Difference: The Global Dimension, Citizenship and Sustainability in Initial Teacher Education and Training."
- DEP and GONW collaborated in 2006 to establish a learning network in the North West for Sustainable Schools in the region, the *North West Sustainable Schools Network*.
- The North West ESD Forum was created in 2006 by the North West Regional Assembly (NWRA) to address ESD within the regional framework for the North West, *Action for Sustainability*. The forum is meant to "raise the profile of ESD throughout the lifelong learning process and build capacity of education practitioners to deliver innovative ESD programmes that will stimulate behaviour and attitude change and motivate learners to participate in informed action for sustainability." The forum has produced "Towards Sustainability Literacy" *E-Literate* newsletters (e.g. December 2007, February 2008, May 2008). The e-newsletters highlight regional ESD activity, events, forum member activities and projects.

Yorkshire and Humber

- In 2000, five years before DESD, Yorkshire and Humber became the first English region to
 develop a ten-year regional ESD strategy, Yorkshire & Humber Region Education for
 Sustainable Development Strategy 2000–2010, which was developed by Yorkshire and
 Humber's Regional Assembly (YHRA) in partnership with the Government Office for Yorkshire
 and Humber (GOYH) and the national Sustainable Development Education Panel (SDEP).
- As part of the region's ESD strategy, an ESD forum for Yorkshire and Humber was created
 and can be accessed at [www.yorkshireandhumber.net/esd] The website is designed to help
 people share resources and network around ESD activities and events in the region.
- In 2006 YHRA updated the ten-year strategy with a 2006-2008 operational plan, which
 reviewed the ESD strategy since its 2000 implementation and called for increased regional
 partnerships.

The Yorkshire and Humber "Education and Business Link" can be found at [www.humber-eblo.co.uk], but there is no evidence at the present moment that ESD is a remit of this networking site.

East Midlands

- As early as 1994, the region initiated a Regional Environmental Education Forum that included stakeholders from schools, colleges and youth education sectors.
- In 2000, The East Midlands Network for Global Perspectives in Schools was established as a partnership of organisations that promoted global citizenship and sustainable development.
- In 2002, The English Regions Network and the East Midlands Regional Assembly commissioned four Sustainable Development projects, one of which reviewed and evaluated the breadth and quality of education for sustainable development materials within schools.
- In 2003, a consortium of East Midlands Further Education Colleges collaborated to create the
 Further Education Partnership for Sustainability (FEPS), which was modelled after Forum for
 the Future's HEPS programme and aimed to promote learning and skills for sustainable
 development.
- Also in 2003, The FEPS collaborated with the West Midlands ESD forum to conduct an East and West Midlands Cross-Regional ESD Forum, which comprised a series of meetings during March and April of that year. The aims were to explore the benefits of cross-regional approaches to ESD.
- In 2004, the Promoting Sustainable Development Group of the East Midlands Regional
 Assembly sponsored action research in five secondary schools on education for sustainable
 development, which was carried out by De Montfort University.
- The Regional Education for Sustainable Development and Global Citizenship group was
 established in 2004 and brought together ESD practitioners from various sectors including
 formal and higher education, adult and community education.
- The East Midlands Education for Sustainable Development Group (EMESD) was also established in 2004, and is supported by the Government Office of East Midlands (GOEM), who commissioned it in 2007 to:
 - Design an interactive sustainable schools website;
 - o Initiate action research on ESD; and
 - Promote regional signposting and dissemination.
- In response to the launch of DESD, 2005 saw the creation of the United Nations University
 East Midlands Regional Centre of Expertise Group (RCEEM) in collaboration with the
 University of Leicester Institute of Lifelong Learning. The RCEEM's aims are to support the
 implementation of DESD in the region and to promote ESD within the region's integrated
 sustainable development strategy. East Midlands became the first RCE in the UK, and one of
 only two in the UK and thirty-five globally.

- In 2006 it was agreed to merge the RCEEM and the EMESD into a single body with five flexible working groups: Communications and Website; Sustainable Schools; Higher Education; Regional Centre of Expertise; and Resources and Funding.
- In 2007, the region's Sustainable Schools working group organised the East Midlands Sustainable Schools Agenda Launch Event.

West Midlands

- In partnership with Teachers in Development Education (TIDE), a regional NGO based in Birmingham, the Government Office for West Midlands (GOWM) created the West Midlands ESD Forum, which has been disbanded. TIDE now coordinates the West Midlands Liaison Group for Sustainable Schools.
- TIDE also coordinates a West Midlands Broadband network on climate change.
- Sustainability West Midlands (SWM) was established by regional partners as the independent regional champion for SD, providing advice to stakeholders within the region on sustainability issues. It also produced a refreshed draft of the region's SD framework in 2008.

East of England

- The Sustainability Development Round Table for the East of England was formally launched in December 2007, the goals of which are to work with local government, policy makers, public agencies and private businesses to embed SD in the region.
- The East of England Development Agency (EEDA), in partnership with the UK Centre for Economic and Environmental Development, recently created the East of England Toolkit [www.toolkit-east.org.uk], an online website with aims to "highlight the economic, environmental and social impacts of policies, development proposals and other new initiatives within the region." The online resource is meant to provide information about sustainability to regional stakeholders.
- Also supported by EEDA, and with assistance from the Government Office for the East of England (GOEE), Regional Cities East (RCE) is an alliance of six cities in the East of England (Peterborough, Luton, Ipswich, Norwich, Colchester and Southend-on-Sea) committed to the idea that "medium sized cities can deliver economic growth in a sustainable way." The network uses a website to share best practices and other resources on sustainability.
- The East of England Energy Group, whose motto is "sustainable production and wise use of energy," boasts a membership of over 300 organisations drawn from private industry, academia, NGOs and the public sector.

London

• The London Sustainability Exchange is a self-described "learning network" website, the goal of which is to connect people in London to take action on sustainable development. The Exchange also works in partnerships with government, businesses, and the voluntary (civil society) sector on a number of issues, including Sustainable Communities, the built environment, and the 2012 Olympic games. Their initiatives on learning and skills include:

- London Students Towards Sustainability a London-based network that seeks to get students involved in SD;
- Sustainable Development in London's Further Education and Sixth Form Colleges an action research partnership for further education with the Learning and Skills Network and Council.
- The Government Office London works with local ESD networks, such as the London Borough of Richmond-upon-Thames ESD Network.
- Local4Global London and South East England Regions (LaSER) is a networking website
 that provides resources to teachers and educators who have an interest in the global
 dimension.
- London 21 is a network of community groups and individuals working in Greater London for a more sustainable city.

South East England

- The South East Forum for Sustainability (SEFS) is a self-described "environmental network" for the region and has partnered with the South East Regional Assembly to ensure that all government decision-making processes in the region take environmental issues into consideration.
- South East Excellence (SEE) is the Regional Centre of Excellence for the South East, and was formed through partnership with the major regional bodies of the South East England Development Agency (SEEDA), the Government Office for the South East (GOSE), and the South East England Regional Assembly (SEERA). The network is designed primarily as a learning tool for those organisations involved in planning, designing and building communities in the region. The website features videos that highlight challenges faced by the South East in becoming a more sustainable region.
- The Government Office South East (GOSE), in partnership with WWF, manages the South East Sustainable Schools Network, which was set up in 2003. In April 2008 the network produced South East Sustainable Schools Network: Draft Terms of Reference 2008-2009, an assessment of the region's ESD activity in 2007-2008.

South West England

- Learning South West (LSW) is an NGO and cross-sector membership organisation that
 includes local authorities, further education colleges, private training providers and voluntary
 sector organisations. The aims of the coalition are to create regional partnerships that
 promote excellence in learning.
- LSW is a member of the South West Learning for Sustainability Coalition (SWLSC), an
 informal network to "support and accelerate the development of a sustainable South West."
 SWLSC's goals reflect a commitment to ESD, specifically to give voice to the movement and
 to work with others to ensure that ESD initiatives can contribute to "a coherent framework of
 provision." SWLSC has initiated a number of projects based specifically on ESD, including the
 recently launched Linking for a Change web-based networking tool, which is designed to link

sustainable schools in the South West of England to encourage peer support and the sharing of good practices.

- Sustainability South West is the independent Champion Body for SD in the South West, and
 features a website that serves to link stakeholders in the region and provide resources on
 achieving sustainability. SSW coordinates the region's SD framework by way of an online
 interactive tool. "The Sustainability Shaper" is a "living" framework that was designed as a
 learning tool "to raise awareness, inform decision making and facilitate action on sustainability
 from the South West's public, private and voluntary sectors (as well as 'individuals')."
- The Association of Higher Education Institutions in the South West (HERDA) is the regional higher education association for South West England. HERDA provides a forum for the 14 regional universities and higher education colleges to work together on regional strategies and projects, although it is not clear from an examination of their website whether SD is one of their core areas of interest or activity.
- The South West Sustainability Checklist (SWSC) is an online tool that "helps developers, local
 authorities and other interested parties to assess how sustainable designs are for new
 housing and mixed use developments," and is meant primarily to assist organisations at the
 planning stages of new developments.

Higher Education Networks and Partnerships

- GuildHE is a representative organization within the higher education sector, with a
 membership comprised of higher education colleges, specialist institutions and universities. In
 2005 they published Sustainable Development in Higher Education: Response from
 Universities UK and SCOP, which responded to HEFCE's SD initiatives and made
 recommendations for promoting SD among the higher education sector.
- The Environmental Association of Universities and Colleges (EAUC) is the sustainability champion for universities and colleges in the UK, with approximately 200 institutional members. Established in 1996, EAUC has worked in environmental management and campus greening, and it set up a curriculum network for ESD in 2006. In 2006 EAUC established an ESD curriculum network as part of its work. In February 2007, EAUC supported the First International Meeting on Implementation of ESD for Higher Education (IMESD), which included members of the SDC, HEFCE, the UK Royal Academy of Engineering, and academics from Universities of Bath and Plymouth. The conference and report it produced discussed the state of ESD in higher education in the UK. And in April 2008, EAUC held its annual conference "Skills for Sustainability".
- Funded by HEFCE in 2001, the Higher Education Environmental Performance Improvement (HEEPI) was aimed to promote environmental management in HEIs. Four higher education institutions partnered on the project: the University of Bradford (who led the project), Leeds Metropolitan University, the University of Gloucestershire and the University of Manchester. The Learning and Skills Council also support the project.
- The University of Plymouth's Centre for Sustainable Futures will host the "All Our Future" conference in September 2008.

 London South Bank University's Centre for Cross-Curricular Initiatives, with the HEA's Subject Centre for Education (ESCalate) and the WWF organised the UK ITE network for Education and Sustainable Development/Global Citizenship conference on 10 July 2008. The conference will offer ITE case studies from the UK and paper presentations on ESD in ITE.

Further Education Network and Partnerships

- The Learning and Skills Network (LSN) is an NGO that evolved from the Learning and Skills
 Development Agency. LSN delivers staff improvement programmes supporting specific
 government initiatives, and has partnered with the Learning and Skills Council to produce a
 number of research reports on sustainable development in the sector. LSDA Northern Ireland,
 along with
- LSN delivers the Post-16 Citizenship Support Programme, which was funded by The Quality Improvement Agency for Lifelong Learning (QIA). Part of the programme involved the publication of *Happy planet: sustainable development and citizenship*, a materials pack for integrating citizenship education into post-16 education and training.
- The National Institute of Adult and Continuing Education (NIACE), the Workers' Educational Association (WEA) and the Development Education Association (DEA) have collaborated in partnership, first in holding a November 2005 conference Education for Sustainable Development: From policy into practice, meant to engage practitioners in the then-emerging Learning and Skills Council (LSC) sustainable development strategy, and to discuss how to implement ESD policies in the UK. In addition, NIACE, DEA and WEA launched an Education for Sustainable Development E-group and practitioner network that provides resources, information, and discussions on ESD in the adult and further education sector.
- The Learning and Skills Council (LSC) in partnership with the Environmental Association of Universities and Colleges launched the online resource *Sorted*, the Sustainability Online Resource and Toolkit for Education [www.eauc.org.uk/sorted/home].
- In 2006, DEA and the Centre for Excellence in Leadership (CEL) partnered to publish a
 research report, Leadership Practice in Lifelong Learning in a Global Society, which examined
 the contribution of development education perspectives to leadership practices in lifelong
 learning.
- In 2008, CEL initiated a series of four free London-based forums around leadership for sustainability: a champions' forum; a principals/CEOs forum; a partner organisation forum; and a collective forum on leadership for sustainability.
- CEL also commissioned research based on partnerships for two separate projects, with Forum for the Future and the London South Bank University Education for Sustainability programme respectively. The research was discussed in a 2007 report entitled *Making* sustainable development a reality for leaders.

Educational networks in the UK (primary/secondary/tertiary)

The following are mostly whole-school and awards initiatives, but they each form strong networks of participating schools:

- Eco-Schools
- Healthy Schools network
- Green Schools Award
- Greener Schools Award
- Green Gown Award
- Teacher Associations
- Ashden Awards for Sustainable Energy
- Future Vision Awards
- Supergrounds Awards

NGO/Civil Society Networks and Partnerships

NGOs working in similar fields can add value to their mission by collaborating in partnerships, and this is especially true for regional or local NGOs. However, even larger national and international NGOs recognise the value of partnerships for building momentum for their objectives. Below are recent examples of NGO partnerships for ESD:

- London Environmental Education Forum [www.leef.org.uk] a network for promoting environmental education across Greater London.
- Rising Tide UK [http://risingtide.org.uk] a grassroots network of independent groups and individuals taking action against climate change. There is no formal membership structure, so anyone with interest can become a part of the UK network, which is part of the International Rising Tide Network.
- Greener Schools Support Network (administered by EcoLocal in Surrey)
 [www.thecei.org.uk/GreenerSchools/default.htm] a local network that offers support for schools in the London Borough of Sutton and the Boroughs of Epsom and Ewell.
- Black Environment Network (England, Scotland and Wales) an organisation promoting full ethnic participation in the built and natural environment.
- The Energy Efficiency Partnership for Homes is a network of 480 organisations from public, private and voluntary sectors.
- Field Studies Council is an environmental education NGO with a network of 17 centres across the UK.
- The Women's Environmental Network is concerned with empowering women to make positive environmental change.
- Teachers in Development Education (TIDE) Global Learning Network is a network of educators working together around issues incorporating the global dimension.
- Waste Watch Education Network is a network working towards changing the way people use natural resources to be less wasteful.
- Community Recycling Network UK is a national membership organisation promoting community based sustainable waste management.

- People and Planet UK is the largest student network in the UK, focusing on campaigns to end poverty and to protect the environment.
- University of 3rd Age (U3A) is a fast growing voluntary life long learning organisation with over 200,000 retired persons functioning in 670 groups throughout the UK. In May 2005 U3A reached an agreement with UNESCO to develop an active commitment to ESD by involving its members in lectures, study groups and the development of publications that produce an active response to the challenge. Using its membership of the International Association of 3rd Age Trust (an NGO in collaboration with UNESCO) It is rolling its programme out to other member U3As world wide.
- Development Education Association itself is a major UK network of approximately 250
 member organisations that work across all sectors of education to promote development
 education. DEA supports local Development Education Centres (DECs) to implement
 community development education programmes across the country.
- DEA partnered with the Centre for Environmental Education (CEE) on the Sustainable
 Development and Youth Work Project, which created an online resource for integrating SD
 into youth work, along with an SD and youth work conceptual model.
- Leadership for Environment and Development International (LEAD) is an international NGO
 with an extensive global network, with an international secretariat based at Imperial College
 London. LEAD's mission is "to inspire leadership for a sustainable world," and the organisation
 has initiated a number of international programmes designed to develop leadership skills.
 LEAD is an international network of professional and training organisations working in SD, and
 its LEAD Fellows network and training programme brings individuals together from around the
 world.
- The Working Group on Climate Change and Development, coordinated by International Institute of Environment and Development and the New Economics Foundation is a partnership of several organisations that has produced a series of reports entitled *Up in* Smoke?. The group consists of environmental and development NGOs, and faith based groups, including:
 - ActionAid International
 - Birdlife International
 - CAFOD
 - The Catholic Institute for International Relations (CIIR)
 - Christian Aid
 - Columbian Faith and Justice
 - Institute of Development Studies (IDS)
 - International Institute for Environment and Development (IIED)
 - Friends of the Earth
 - Greenpeace
 - Medact
 - New Economics Foundation
 - Operation Noah
 - o Oxfam
 - People and Planet

- o Practical Action
- Royal Society for the Protection of Birds (RSPB)
- Tearfund
- o Teri Europe
- WWF
- WaterAid

Cross-sectoral Networks and Partnerships

Government/Regional Bodies and NGO/Civil Society Partnerships

- The Sustainable Development Research Network (SDRN), an initiative of the Policy Studies Institute in London funded by DEFRA and Department for Transport, acts to strengthen links between research providers and government policymakers.
- The Climate Change Communication Initiative (CCCI), started in 2005, is a three year partnership led and funded by DEFRA and including the Environment Agency, the Carbon Trust, the Energy Saving Trust, the UK Climate Impacts Programme, the Department for Transport and the Department of Trade and Industry. The programme was designed to change public attitudes towards climate change, and Their website provides a resource for understanding the challenges and the difference the public can make. The initiative created a website, [www.climatechallenge.gov.uk]
- DEFRA, in partnership with a consortium of voluntary and community organisations that are
 led by the Community Development Foundation, created the *Every Action Counts* Initiative,
 which gives support and advice to voluntary and community organisations that wish to change
 their practices to become more environmentally sustainable. The initiative features a website,
 [www.everyactioncounts.org.uk], with information for interested organisations.
- WWF-UK, in partnership with the Sustainable Development Commission, published a 2005 research report entitled Sustainable Development and UK faith groups: two sides of the same coin?, which discussed the contribution that UK faith groups can make to achieving sustainable development. Additionally, WWF worked with DfES to produce Education for Sustainable Development: resource review tool in 2004.
- Academy of Sustainable Communities (ASC) has an extensive partnership network with regional assemblies and regional centres of expertise in England.
- Newcastle University's IRES in May 2007 collaborated with NESPSS to submit a proposal for a Regional Centre of Expertise for ESD in North East England.
- DfES and the Development Education Association (DEA) collaborated to write a seminar report on *Every Child Matters* and the Global Dimension in 2006.
- The Sustainable Development Research Network (SDRN), an initiative of the Policy Studies
 Institute in London funded by DEFRA and Department for Transport, acts to strengthen links
 between research providers and government policymakers. It provides research on SD, and
 consultation to DEFRA's Sustainable Development Unit on research related to SD, as well as

- performing other networking functions. Its site features a number of research publications and reviews on SD. [www.sd-research.org.uk]
- DFID, Christian Aid and Oxfam partnered to initiate a three year project between the World Education Centre and School of Education University of Wales, Bangor that focused on integrating ESDGC in initial teacher education and training courses.
- The Eco-Schools programme, run internationally by the Foundation for Environmental Education (FEE), is delivered in England and the three devolved administrations by a separate NGO partner in each country with cooperation from government.

NGOs and Universities

- In Scotland, EnviroCentre and the University of Strathclyde partnered to develop a
 professional development course on river basin management planning.
- London South Bank University's CCCI/HEA Subject Centre for Education ESCalate/WWF UK Network for ESD inaugural conference and network.
- The National College of School Leadership's 2007 research project and report, Leading Sustainable Schools was carried out by a project team consisting of researchers from the Institute of Education in London and Reading University, along with colleagues from two NGOs, Education Direct and WWF-UK.
- The Higher Education Funding Councils for England and Wales' funded the 2000-2004 *Higher Education Partnership for Sustainability* (HEPS), a three-year research project implemented by Forum for the Future, a UK sustainable development NGO.
- One of NGO Dartington Hall Trust's key initiatives is Schumacher College, an institute that
 practices "transformative learning for sustainable living." In collaboration with the University of
 Plymouth, Schumacher has established the first ever MSc in Holistic Science.
- The Economic and Social Research Council (ESRC) in 2003 and 2004 conducted a research project entitled Natural Capital: Metaphor, Learning and Human Behaviour. Funded by ESRC, the project was a collaborative research effort between members of Lancaster University and the University of Bath.
- The Development Education Research Centre (DERC) of the Institute of Education, University
 of London partnered with the National Institute of Adult Continuing Education (NIACE) to
 organise a seminar in May 2007 entitled Research and Debates on Global Perspectives and
 Sustainability in Adult Learning, the focus of which was to discuss and propose potential
 research in the area.
- In 2006, Higher Education Academy (HEA) commissioned Forum for the Future to publish "Policy Road Maps" of sustainable development and education for England, Northern Ireland, Scotland and Wales, which discussed SD policies and key organizations in post-16 education (including FE and HE).
- The Academy for Sustainable Communities (ASC) has partnered with the Open University and the Bayswater Institute to create a sustainable communities generic module that can act

as a stand-alone course or can be integrated into existing undergraduate, postgraduate or continuing professional development (CPD) courses.

NGOs and Private Sector

- The Royal Bank of Scotland and the NGO Learning Through Landscapes partnered to create
 the Supergrounds Awards for Primary Schools, which assist primary schools in transforming
 their school grounds into better environments for children to live in.
- The Green School Awards offered by Young People's Trust for the Environment (an NGO) and Total (the fourth largest oil company in the UK) rewards schools for greening their school community.
- The Midlands Environmental Business Company (MEBC) is a national network for promoting SD values in business with more than 300 members from business and the public sectors. It runs the Midlands Environmental Business Club.
- MEBC, in partnership with the Business Council for Sustainable Development UK (BCSD-UK), published three Portfolios of Sustainable Development in Business Case Studies from 2004-2006.

Trade Union Networks and Partnerships

- Freight on Rail –Freight on Rail is a partnership between the rail trade unions, the Rail Freight Group, Network Rail, Campaign for Better Transport, and the rail freight operating companies, all of whom maintain that it is more sustainable to distribute goods nationally by train than by lorry. Freight on Rail works to promote the economic, social and environmental benefits of rail freight both nationally and locally. It advocates policy changes that support the shift to rail and provides information and help on freight related issues.
- The Trade Union Sustainable Development Advisory Committee (TUSDAC) was established in 1998 as a forum for consultation between government and trade unions on SD and the environment. Their members include major British trade unions, such as TUC, Amicus-AEEU (the UK's largest manufacturing union), BACM-TEAM, GMB, GPMU, Iron and Steel Trades Confederation, Prospect, Transport and General Workers Union, UCATT, UNISON and USDAW.
- The Advisory Committee on Business and the Environment (ACBE) and TUSDAC launched Sustainable Workplace, and online initiative [www.sustainableworkplace.co.uk] that acts as an information and learning resource for union representatives, employers and employees.
- In February 2006, TUC and CBI partnered to host a joint one-day conference entitled A
 sustainable energy policy for the UK, which was geared towards providing information to
 union officers interested in UK energy policy development.

Professional Body Networks and Partnerships

 Professional Practice for Sustainable Development (PP4SD) is a partnership project that started in 1999 and was led by the Environment Agency, the Institution of Environmental Sciences, the Society for the Environment, and the Royal Society for the Protection of Birds. The project features a website resource [www.pp4sd.org.uk] and is in its second phase. The goal of the partnership and network is to integrate SD principles into professional training. It has a strategic link with the Sustainability Alliance, a lobbying body that works on behalf of professional institutions on SD issues. PP4SD has also established a Wales programme via partnership with Swansea University.

 The National College for School Leadership, a DCSF supported Non-Departmental Public Body (NDPB) for headship training, in partnership with the World Wildlife Fund (WWF) in 2007 published the research report *Leading Sustainable Schools*.

Regional and International Networks

- The UK has been actively involved in the work of the United Nations Economic Commission
 for Europe (UNECE). The DfES was represented on the group that devised the ESD strategy
 for UNECE, and at the regional UNECE meeting in Vilnius in 2005 that launched the strategy.
 Further, its SDAP, Learning for the Future, declared that it would implement the strategy in
 England.
- In March 2006, the Bath Royal Literary & Scientific Institute held an Indicators for Education for Sustainable Development: Engaging the Debate conference, which discussed ESD indicators in various national contexts, including England and Germany.
- In December 2006, the Anglo-German Foundation published Indicators for Education for Sustainable Development: a report on perspectives, challenges and progress, a report that emerged from a June 2006 seminar ESD indicators with stakeholders from England, Germany, the Netherlands, Spain, and Sweden. The seminar was hosted by the Centre for Research in Education and the Environment (CREE) at the University of Bath. The Anglo-German Foundation's current research initiative, Creating sustainable growth in Europe, is meant to foster exchange between research and policy dialogue in the UK and Germany.
- The Youth Eco-Parliament (YEP) initiative is organised by Eco Emballages, Pro Europe, and Réseau Ecole et Nature, and engages approximately 2500 members from 10 participating countries in collective writing online. The initiative published a report, YEP report for the environment: Let's change our daily habits! as a contribution to the DESD. The UK is one of the ten participating countries.
- The World Business Council for Sustainable Development (WBCSD) is an international coalition of approximately 200 companies that deal with business and sustainable development. BSCD UK is a regional member of WBCSD UK and was started in 1999. Environmental Business Communications Limited of Birmingham currently manages BSCD UK.
- Although the UK is not a part of the Earth Council (an international NGO created in September 1992 to promote the aims of the Earth Summit 1992), it is represented in the Earth Council Alliance network by the Climate Group, an international NGO that seeks to advance government and business leadership on climate change. The group's head office is based in London.

Appendix 6: Learning Opportunities for ESD Stakeholders

Across the UK, there are a number of ways inside and outside of formal education where people can learn about sustainable development. This section highlights some of the ways in which it is possible to learn about sustainable development and/or ESD, and offers examples across a number of sectors.

Government Resources for Learning about SD and ESD – UK Devolved Administrations

- The UK and the three devolved administrations each have a website presence for ESD with a number of teacher and student resources, networks, and links, although they differ in terms of their exact approach.
 - England's Teachernet [www.teachernet.gov.uk] is the DCSF's web portal for its
 educational initiatives, and features a comprehensive Sustainable Schools website
 with links to resources, case studies, civil society ESD initiatives, and information on
 other whole school programmes such as Growing Schools and Healthy Schools, other
 whole-school initiatives related to SD.
 - Learning and Teaching Scotland has a dedicated Sustainable Development Education page that features classroom resources, links to other education website, and events.
 - Northern Ireland features ESD as a thematic unit on the Northern Ireland Curriculum and a set of links to further information.
 - In Wales, the government has set up a dedicated ESDGC web portal with resources, information, and an ESDGC directory for the whole of Wales.
- The website <u>www.sustainable-development.org.uk</u> is the government's on-line resource for learning about its efforts to promote SD and ESD. It includes "key priority areas" for SD, including:
 - Sustainable consumption and production
 - Environmental protection and enhancement
 - Developing sustainable communities
 - Addressing climate change and energy

Effects of UK Sustainable Development Policy on Learning

- In England, the survey identified the presence of key resources at the regional level that were not explicitly education focused or ESD in nature, but that nonetheless had a strong learning element.
- A case in point are nine Regional Centres of Excellence (RCEs), established by the
 Department of Communities and Local Government in 2003 to provide support to local
 authorities for implementing national procurement strategy. The remit of the RCEs in 2007
 was extended to include their new role to act as "lead change agents" for local government
 efficiency
- The creation of a sustainable procurement action plan in 2006 has embedded sustainable development into the procurement process, and as a result of that and their mandate for efficiency, many of the RCEs have taken on a role to promote knowledge for achieving sustainable communities. Several of the RCEs have incorporated sustainable communities

into their titles. In the North East, its RCE Ignite has created an electronic resource for learning about sustainability issues, while in Yorkshire and Humber, regional RCE Integreat has devised a number of "working activities," case studies and other online resources that give information about achieving sustainable communities.

In addition to the actions of RCEs, regional assemblies have also taken initiative to create
their own SD frameworks and strategies. These strategies incorporate direct learning tools,
such as the East of England Toolkit, enacted by the East of England Regional Assembly to
provide decision support for regional planners and developers. It takes users through a series
of surveys that explains how potential initiatives can meet the regional SD framework.

NGO resources

- NGOs and civil society organisations in the UK produce valuable educational resources, and
 the large number of UK NGOs working in ESD, environmental education, and development
 education ensure that there is a steady stream of learning opportunities and materials on ESD
 produced each year. The survey identified frequently incorporated learning methods in ESD
 offered by civil society organisations:
 - Curriculum materials for classroom (e.g. Global Action Plan's "Action at School" KS3 environmental curriculum resource);
 - Online resources for young learners, such as games, quizzes, or video tutorials (e.g. Global Dimension);
 - o Print and e-newsletters for students, academics, and professionals (e.g. Get Sust!);
 - Networks for best practices, campaigns or information (e.g. the Scottish Development Education network);
 - School linking programmes and networks (e.g. Linking for a change, the Southwest England regional ESD school link website);
 - Policy papers, research reports, evaluations and 'thinkpieces' (e.g. Development Education Association);
 - o Online course modules (e.g. Espresso Education's Sustainability Module);
 - o Case studies (e.g. Sustainable Schools).
- There are numerous examples of each of these learning methods for ESD and SD at the NGO level in the UK.

Higher Education

- In higher education, opportunities learning about sustainable development can be found in a number of places. Formally, courses, modules and degrees on ESD or related fields are available (often environmental education, but also sustainable engineering or sustainable business management). There are several examples innovative Master's degree programmes in the UK on ESD or SD, including:
 - University of Cambridge's MPhil in Engineering for Sustainable Development and postgraduate certificate in Sustainable Business
 - Schumacher College's MSc in Holistic Science
 - South Bank University's Education for Sustainability post-graduate programme
 - o Exeter University's MSc in Sustainable Development
 - o the University of York's MA with a focus on Education for Sustainable Development

- The University of Bath's MA in Environmental Education (with a focus on sustainability issues)
- The University of Gloucestershire's PhD in Education for Sustainable Development
- o Bangor University in Wales offers a BA/BSc in Sustainable Development
- In addition to taught courses and degrees, PhD level research on ESD is occurring at
 universities such as Cambridge, London South Bank University, Bath, Plymouth, the Institute
 of Education, Gloucestershire, and Oxford, where there are strong environmental education or
 sustainable development centres or departments. A prominent example is the University of
 Gloucestershire's project *Greener by Degrees*, which explored how to embed sustainability
 within the undergraduate and postgraduate curriculum.
- Some universities have begun implementing sustainability strategies across the whole
 institutions, which aim to embed ESD within existing courses.
- NGOs such as Greenpeace and StudentForce for Sustainability regularly work with universities and students for campaigns and extracurricular programmes.
- Finally, the output of higher education institutions, in the form of academic journals and scholarly research, as well as doctoral theses and dissertations are a valuable source of ideas and policies on ESD. One notable example is the journal Environmental Education Research, based at the University of Bath's Centre for Research in Education and the Environment, which has published research on ESD.

Further Education

- The Learning and Skills Council (LSC), England's non-departmental public body for further
 education, offers many resources that are aimed at integrating ESD into the sector. LSC, in
 partnership with the Environmental Association of Universities and Colleges launched the
 online resource Sorted, the Sustainability Online Resource and Toolkit for Education
 [www.eauc.org.uk/sorted/home]. Sorted offers case studies, policy documents, and
 information in the areas of leadership and management, building and estates, community and
 business, and teaching and learning.
- The Learning and Skills Network, an NGO dedicated to the learning and skills sector, has supported learning for SD in a number of ways. It delivers the Post-16 Citizenship Support Programme, and a notable contribution to learning for SD is the *Happy planet: sustainable* development and citizenship materials pack to support integration of citizenship education into post-16 education and training.
- The National Institute of Adult and Continuing Education (NIACE), the Workers' Educational Association (WEA) and the Development Education Association (DEA) launched an Education for Sustainable Development E-group and practitioner network that provides resources, information, and discussions on ESD in the adult and further education sector.
- DEA published Global Skills and Lifelong Learning: Future challenges in May 2007 as a resource for practitioners in the field. It built on previous DEA work in the sector on SD.

Initial Teacher Education

- SD is currently being integrated into ITT programmes provided by the Training and Development Agency (TDA), representing significant learning opportunities for future teachers.
- Citized, an NGO funded by the Training and Development Agency (TDA), published a number of reports and resources for teachers, including:
 - Citizenship Education for Sustainable Development in Initial Teacher Training. (2004)
 - Induction Pack for Tutors of Citizenship Education: Community Action for Sustainable Development. (Autumn 2004)
 - Briefing Paper for Trainee Teachers of Citizenship Education: Agenda 21, which discussed Agenda 21. (Autumn 2004)
 - Briefing Paper for Trainee Teachers of Citizenship Education: Policies and Practices for Sustainable Development, which addressed the links between SD and citizenship education and offered information on teacher resources for learning more about ESD in teaching practices. (Autumn 2007)
- ESCalate, a subject centre of the Higher Education Academy (HEA), in partnership with London South Bank University's Centre for Cross-Curricular Initiatives (CCCI) and the World Wildlife Fund (WWF), organised an inaugural conference, *UK ITE network for Education for* Sustainable Development/Global Citizenship, which will take place on 10 July 2008. The conference will feature paper presentations, discuss ESD in ITE in the international context, and present case studies within the UK.

Voluntary and Community Sector

- The Academy for Sustainable Communities (ASC) offers a number of resources and direct courses, including a sustainable communities foundation degree, and a sustainable communities generic module for use as stand-alone or integrated resource.
- Opportunities for learning about SD and ESD are present in terms of volunteering work for initiatives and organizations with a remit to promote SD as part of their work. The following list identifies groups that provide direct volunteer learning experiences on SD issues:
 - The British Trust for Conservation Volunteers [btcv.org.uk]
 - Capacity Global [www.capacity.org.uk]
 - National Council for Voluntary Youth Services [www.ncvys.org.uk]

Youth Work

- DEA has published a number of resources on SD in youth work since 2000, including:
 - o Guidelines on Producing Resources for Global Youth Work (2000)
 - Sustainable Development and Youth Work (2001)
 - o Global Youth Work: Training and Practice Manual (2004)
 - Sustainable Development

Faith Communities

 DEA has provided opportunities for stakeholders in the faith community to engage ESD, through a June 2006 seminar and subsequent report, both entitled Active Faith: Global Citizenship and Learning for the Future.

Trade Unions and Professional Bodies

- ACBE and TUSDAC (a trade union partnership) launched Sustainable Workplace, and online
 initiative [www.sustainableworkplace.co.uk] that acts as an information and learning resource
 for union representatives, employers and employees.
- In 2004, the Engineering Council UK introduced UK standards for professional engineering competence (SPEC), which required that degree courses in engineering promote sustainable development as a goal of engineering.
- The Royal Academy of Engineering published Engineering for Sustainable Development:
 Guiding Principles in 2005 to provide a learning resource to stakeholders in the engineering sector on how to become more sustainable.

Conferences and Workshops

- Environmental education, development education, ESD, SD, and sustainability conferences
 and workshops are important methods of promoting as well as learning about ESD. Since the
 launch of DESD there is anecdotal evidence pointing to a growing frequency of events around
 ESD or sustainability. Conferences can:
 - Build momentum for DESD (e.g., UK DESD launch conferences in Stirling, Scotland and London in spring and autumn 2005);
 - Engage key stakeholders on important ESD issues and produce reports that benefit the wider community (e.g. the "Indicators for ESD: perspectives, challenges, progress" conference in June 2006; "Learning Journeys Towards Sustainability" conference and book launch at London South Bank University in June 2008);
 - Facilitate networking among ESD stakeholders (e.g. the upcoming SDE Networking day in Scotland in April 2008);
 - Provide direct training for ESD practitioners (e.g. Cyfanfyd Training for Trainers in Education for Sustainable Development and Global Citizenship Course in June 2007).

Appendix 7: Research and Evaluation on ESD

This section highlights a range of ESD-related research and evaluation in the UK before and during the launch of the Decade. It is not comprehensive but highlights prominent initiatives that have contributed to current understandings of ESD in the UK.

Within Government

There has been considerable research activity over the past five years within both the government sector and higher education institutions.

England

- In 1997 the UK government funded the NGO Forum for the Future (FFTF) to conduct a twoyear project, *Higher Education 21*, which aimed to identify and promote sustainability best practices within the higher education sector by examining the work of 25 institutions.
- The Higher Education Funding Council for England (HEFCE), a non-departmental public body (NDPB) of the UK government, in 2000 commissioned Forum for the Future to undertake a three-year research project to devise a sustainability reporting system; entitled Higher Education Partnerships for Sustainability (HEPS), the project involved 18 universities and colleges. The project produced a report on its activities as well as an evaluation of its work.
- In 2002, under the auspices of the Learning and Skills Development Agency (LSDA), a NDPB of the government for further education, John Blewitt wrote a research report entitled *Good practice in Sustainable development education*, which identified as critical to the success of ESD practices a clear holistic understanding of the meaning of sustainability "in terms of curriculum, estates management and other aspects of provision." (Blewitt 2002 p. 7)
- In 2003, the government's Office for Standards in Education (Ofsted) produced a study entitled Taking the First Step Forward...Towards an Education for Sustainable Development, which considered the work of the SDEP between 1998-2003, the DfES' integration of ESD into the formal education, and the Qualifications and Curriculum Authority's (QCA) identification of seven key ESD concepts in 2002, in assessing the state of play of ESD in the UK. It concluded that good practice existed in many forms (such as a well-developed local support network, whole school approaches to sustainability, and a well-planned curriculum around sustainability) and suggested that more be done to fully integrate ESD across the curriculum (Ofsted 2003, p. 19).
- In May 2004, the Central Office of Information (COI) and DEFRA commissioned an
 independent research report entitled *The Impact of Sustainable Development on Public*Behaviour. The report found that public awareness of the term 'Sustainable Development' was
 low, with about a third of respondents indicating familiarity with the term.
- When drafting its policy on children, sustainable development, and the environment, Every
 Child's Future Matters (2007), the Sustainable Development Commission (SDC)
 commissioned two research reports from the University of York and the National Economics
 Foundation (NEF) to inform its policy, each entitled Review of the Environmental Dimension of
 Children and Young People's Well-Being.

- University of York's report concluded that the environment was of critical importance for "virtually all aspects" of the well-being of children and was salient to the Every Child Matters agenda, and incorporated some of the concerns of ESD by noting that "the ways in which environmental influences on the achievement of positive outcomes are mediated through interconnected social and economic factors." (York SDC p. 40)
- NEF's report argued that the SDC should consider a "greater emphasis on the feelings and behaviour of children and young people in relation to environmental sustainability" when drafting its new ECM environmental policy. (NEF SDC p. 47)
- The SDC also conducted research in 2006 on developing an ESD indicator, and submitted their recommendations to DfES and DEFRA in June 2006 in a short proposal that advocated for implementing either an assessment of the policy context for "sustainable behaviour change" or a survey of learners that would seek to assess sustainability knowledge, skills and values. Their main recommendation was to begin a dialogue with Ofsted or other partners to assess the possibility of conducting a regular survey of performance in sustainable schools.
- UK Trade and Investment (UKTI), the government's organisation for promoting UK businesses overseas, recently published *Educational Sustainable Development: What is the UK's expertise, and its potential for export?* The report cited the UK's ambitious environmental targets and the range of ESD activities in examining the UK's export potential for ESD.
- The National College for School Leadership, a DCSF supported non-departmental public body (NDPB) for headship training, in partnership with the World Wildlife Fund (WWF) in 2007 produced Leading Sustainable Schools, a research report meant to "inform the College, school leaders, policy makers and the wider education community about the current state of sustainable development in schools and the skills and qualities required by school leaders to move this important agenda forward." (NCSL 2007 p. 7)
 - The NCSL/WWF study found that schools that were successful in integrating sustainability "at the heart of their school" usually had leaders who were committed to sustainable development and who brought their own personal motivation and passion to bear on the application of sustainability to their school. They found that, in general, there is a lack of research on school practices for sustainability, though "there appears to be considerable grassroots support within schools and in the wider community."

Northern Ireland

- In Northern Ireland, the Northern Ireland Department of Education in 2006 published *Schools for the Future: Funding, Strategy, and Sharing*, an independent strategic review of education that called for a strengthened sustainable schools policy.
- In 2005, the Interboard Education for Sustainable Development Group published Education for Sustainable Development: Good Practice Guide for Primary, Secondary and Special Schools, which . The guide makes explicit links to DESD in describing its purposes.

Scotland

• In 2005, Learning and Teaching Scotland (LTS) published *Sustainable Schools Secondary Project*, a study of six secondary schools and nine partner organizations that examined

- various approaches to the provision of ESD within the context of sustainable schools. Its goal was to provide information to support the integration of ESD in Scottish formal education.
- Sustainable Development Education: an international study was published by LTS for the
 Sustainable Development Education Liaison Group (SDELG) in order to examine the
 practices in ESD around the UK and the World. The report is framed in the context of the
 DESD and reports on case studies of ten countries in assessing ESD approaches in several
 key areas (curriculum; progress made; support; and quality assurance).

Wales

- In 2003, Catherine Hester (of Oxfam/Cyfanfyd) reported on research on ESDGC in initial teacher education and training (ITET) to the Wales Advisory Panel on ESD and the Working Group on Global Citizenship, which aimed to identify good practices for helping colleges to embed ESDGC into ITET. The research generated specific proposals for action.
- Estyn, the Welsh body for educational inspection, has been proactive in support of ESDGC. A
 search of Estyn's website returned 11 school inspection reports on educational quality. Each
 of the reports offered a qualitative assessment by the author of the state of ESDGC in the
 school. 9 out of the 11 surveyed schools had received good or outstanding marks for
 embedding ESDGC into school life and activities. Most of the 11 schools had either an Eco
 committee or were designated Eco-Schools.

Research within the Higher Education Sector

- The Higher Education Academy (HEA), formed in 2004, has commissioned a number of research initiatives on ESD. They are identified below:
 - HEA has commissioned FFTF to conduct further research on ESD policy, and has also begun smaller scale research and development projects in ESD in eight different higher education institutions.
 - o In 2005, HEA published the report Sustainable Development in Higher Education: Current Practice and Future Developments, (also known as the Dawe report) which examined the areas of teaching and learning, and curriculum responses in order to identify the current status of SD within HE and ways to improve curricular practice. It noted that while barriers existed to embedding SD in HEIs, there was considerable support for increased action in the SD arena.
 - HEA has held seminars on ESD and commissioned the development of a generic teaching and learning framework and module for ESD in higher education.
 - Most of HEA's subject centres have begun to incorporate ESD into their work.
- In Scotland, the University of St. Andrews conducted a Student Sustainable Behaviour Survey in May 2007 to examine student knowledge of and behaviour on sustainable development.
 1526 students, a 22% response rate, completed the survey.
- In 2005, HEFCE funded the creation of two "Centres for Excellence in Teaching and Learning" in two English universities, with the aims of promoting SD within and beyond their institutions.
 The centres, University of Plymouth's Centre for Sustainable Futures (CSF) and London Kingston University's Centre for Sustainable Communities Achieved through Professional Education (C-SCAIPE), have generated research and promoted innovative approaches to ESD. CSF in particular has adopted a holistic approach to whole institutional change and is

- attempting to situate sustainability at the core of Plymouth's operation. It has contributed feedback and findings to HEA's SD projects.
- In Wales, the University of Bangor's World Education Centre published the research report
 Mainstreaming Sustainable Development and Global Citizenship in the Higher Education Curriculum, presenting its findings to the Welsh Assembly Government's ESDGC panel in
 September 2006.
- With support from the National College for School Leadership (NCSL), the Institute of Education, University of Reading, and the World Wildlife Fund (WWF) conducted the Leading Sustainable Schools: What the research tells us report, which surveyed the current state of SD in over 1,700 schools in order to provide policymaker and practitioners information about how school leaders could develop the skills to advance SD further. The report found that lack of status of sustainability was a major barrier for its integration in schools. It also identified key qualities needed by school leaders to promote a strong vision of SD across the school while facilitating an inclusive process of learning for SD.

Research within the Further Education Sector

- The Learning and Skills Development Agency (LSDA) in 2002 published Good practice in sustainable development education, a research report that examined a 2001 initiative that funded 11 ESD projects among a number of FE colleges and partnerships.
- Also in 2002, the Development Education Association (DEA) published *The Global Learning Challenge: Strengthening global perspectives in lifelong learning*, a briefing aimed at raising the profile of SD and the global dimension to policy-makers in lifelong learning in England.
- LSDA published *Contributing to sustainable development: Centres of Vocational Excellence* in 2004, a research study that surveyed 260 Centres of Vocational Excellence (CoVE). The survey had a response rate of 20%, and found that 92%
- Also in 2004, LSDA published as part of its LSDA reports series Opportunities for sustainable development in the learning and skills sector: a policy analysis, which identified research and development activities for the post-16 education and training sector to support SD and ESD.
- London Sustainability Exchange and Learning Skills Network published a research report
 entitled Sustainable Development in London's Further Education and Sixth Form Colleges:
 Good practice and recommendations for further action in 2006. The report reviewed attitudes
 towards and awareness of SD within the sector, concluding that the majority of further
 education (FE) colleges "do not yet see sustainable development as 'all embracing." The
 survey also revealed a range of responses indicating that CoVEs are taking action towards
 sustainable development.
- The Learning and Skills Council (LSC) published Sustainable development in the learning and skills sector: national baseline survey in 2006, which reported on the findings of a national survey of further education institutions on sustainable development practices in the learning and skills sector. The report found that the sector was making progress on implementing SD in four key areas: leadership and management, building and estates, community and business, and teaching and learning. In particular, 70% of respondents indicated that they were embedding SD into their teaching and learning programmes.

- With funding from the LSC, the Learning and Skills Network (formerly known as the Learning and Skills Development Agency) published Sustainable Development in the Learning and Skills Sector: national baseline survey. The survey found evidence of progress in the learning and skills sector in the four key categories of sustainable development addressed: leadership and management; buildings and estates; teaching and learning programmes; and community and business.
- DEA and the Centre for Excellence in Leadership (CEL) in March 2006 published a research report, Leadership Practice in Lifelong Learning in a Global Society, which aimed to examine the contribution of development education perspectives to leadership practices in lifelong learning.
- In 2007, CEL commissioned research on leadership in sustainable development, which resulted in the September 2007 publication *Making sustainable development a reality for leaders*. The report was based on two research projects conducted for CEL by Forum for the Future and a team from the Education for Sustainability programme at London South Bank University. The report identified key qualities for effective leadership in SD, and made recommendations about the need for sector leadership development to incorporate systems and futures thinking.

Research by Professional bodies

- The Economic and Social Research Council (ESRC), a major funder of UK research and training, has conducted research on ESD. A recent example is *Natural Capital: Metaphor, Learning and Human Behaviour*, which ran between 2003 and 2004. The project, which included workshops and seminars, was summarised in a *Policy Briefing Note: Aiming for Sustainability: Can we keep on track?*, which discussed indicators and the "capital model" of SD in the UK.
- The ESRC also funded the research and report Mainstreaming Sustainability into Local Government Policymaking (2003). Its key findings were that although the UK had clear SD policies, there were no examples of good practice on how to apply SD within local government; and that there was little cooperation or collaboration between departments despite the cross-cutting nature of SD.
- The National Foundation for Educational Research in England (NFER), British Educational Research Association, and the General Teaching Council for England in 2003 funded the Education for Sustainable Development Making Research Count research initiative. The initiative produced a report titled Connecting Research and Practice: Education for Sustainable Development, which is a 'professional user review' exploring research-practice links with seven practitioners, including primary schools, an education centre and an environmental estate management charity.
- The Sustainable Development Research Network (SDRN), an initiative of the Policy Studies
 Institute in London funded by DEFRA and Department for Transport, acts to strengthen links
 between research providers and government policymakers. It provides research on SD, and
 consultation to DEFRA's Sustainable Development Unit on research related to SD, as well as
 performing other networking functions. Its site features a number of research publications and
 reviews on SD. [www.sd-research.org.uk]

- In 2006 Estyn, the Welsh body for educational inspection, published the report, Establishing a
 position statement for Education for Sustainable Development and Global Citizenship in
 Wales.
- The National Environment Research Council (NERC) funds research on environmental issues such as climate change, bio diversity and natural hazards. NERC operates four research centres in the UK and recently implemented a five-year strategy (from 2002-2007) for its work entitled Science for a sustainable future. In 2006, NERC invested 19% of its annual budget (£71m) in research projects on sustainable economies.

Research by NGOs

Forum for the Future, as discussed above, has participated in a number of government-commissioned research projects on ESD, performs commissioned research on ESD, and has also written its own reports, notably:

- o Higher Education Partnerships for Sustainability (HEPS) (2000-2004)
- o Buying a Better World: Sustainable Public Procurement Report (2008);
- Policy Roadmap for Sustainable Development and Education: England/Wales/Scotland/NI (four separate reports);
- Future Leaders survey 2007/8, in partnership with UCAS, which surveyed over 25,000 university applicants to determine their attitudes to the environment.
- The NGO StudentForce for Sustainability undertook a research project to assess the labour market in England to understand the ways in which employers factored issues of sustainability into their recruitment decisions.
- The Anglo-German Foundation, based in London, recently launched a major research initiative until December 2009 entitled "Creating sustainable growth in Europe," which aims to address the challenges faced in working with governments to promote SD. The foundation also published a comprehensive report on ESD indicators from a 2006 conference organized by the University of Bath addressing the issue of indicators for England and Germany.
- The UK Centre for Economic and Environmental Development (UK CEED) produced ESD 'toolkits' for two regions of England: the East and the East Midlands.
- WWF-UK (together with the Sustainable Development Commission) published a 2005
 research report entitled Sustainable Development and UK faith groups: two sides of the same
 coin?, which discussed the contribution that UK faith groups can make to achieving
 sustainable development, specifically in the context of the moral case for SD.
- The International Institute for Environment and Development (IEED), based in London, conducts work on a number of research and policy areas.
- The Institute of Development Studies is a leading UK research organisation and has published a wide range of research on development and the environment.

Private Sector and Business-Related SD Research

In the private sector, a number of research initiatives have considered sustainable development and have provided business-specific research resources and publications.

- SustainAbility is an independent business consulting agency that conducts independent research and advocacy and partners with other organizations to "explore critical trends and opportunities for business." [www.sustainability.com]
- Thinking Sustainable Development is an independent consultancy for research and evaluation in sustainable development [www.thinkingsustainabledevelopment.org.uk]
- The International Institute for Environment and Development (IIED) website features a section on "Sustainable Markets", which outlines current research being taken by the organization on different aspects of business and sustainable development (e.g. SD business models, SD standards and tools for business, and SD and direct investment) [www.iied.org]
- The Sustainable Development Research Centre (SDRC), based in Scotland, conducts research on SD, corporate social responsibility and social enterprise development. It is an Associate Institute for Sustainable Research within the UHI Millennium Institute. [www.sustainableresearch.com]
- The Business Council for Sustainable Development published a Portfolio of Sustainable Development Business Case Studies in 2005 and 2006, which identified areas of good practice for incorporating SD into business, and also highlighted barriers to success. The report noted that a lack of synergy between government and local policies, legislation and regulation for SD was preventing more progress from being made.

Evaluations of ESD

As ESD represents a new area of policy on many levels, evaluative practice on ESD is relatively sparse. There are, however, several significant, ongoing efforts to evaluate SD and ESD in the UK, and these are considered in the next section.

- To date, there have been no formal external impact assessments of direct ESD programmes such as the Sustainable Schools programme. DCSF has funded longitudinal research on work in 12 schools that WWF-UK has supported over time, and there will be a report in 2008.
- In 2003 the Department for Education and Skills (DfES) commissioned the Centre for Environment Education (CEE, who are now disbanded) and the University of Bath Centre for Research in Education and the Environment (CREE) to undertake an evaluation of the UK "Growing Schools" initiative's Innovation Fund Projects (between 2002-2003). The report assessed the project and made recommendations for future work in the project.
- In 2004, a CEE Working Group, with support from DEFRA and DfES, developed a guide to
 evaluating ESD entitled Measuring effectiveness: evaluation in education for sustainable
 development. The guide was aimed at practitioners working in environmental education and
 ESD organisations as a way of measuring the impact of learning programmes.

- Since April 2005, The Office for Standards in Education (Ofsted), England's inspection body for schools, has put in place a self-evaluation framework for sustainable schools, and in 2006 the Sustainable Development Commission, with support from the DfES and WWF, published the s3: Sustainable Schools Self-Evaluation, which, along with the required general self-evaluations (known as SEFs, or self-evaluation form,) is a voluntary means for schools to report action on promotion of sustainable schools as part of their mandatory evaluation. The s3 asks schools to assess six key areas in the context of sustainability:
 - School characteristics
 - Stakeholders' views
 - Achievement and standards
 - Personal development and well-being
 - Quality of provision
 - Leadership and management. (Ofsted s3, p. 7)
- In May 2008, Ofsted published a report on its study of 41 primary and secondary schools, entitled *Schools and Sustainability: A climate for change?*. The report measured the performance in schools towards integrating the National Framework for Sustainable Schools, and it also measured the extent to which schools were teaching sustainability in the classroom. The concluded that sustainability was peripheral in most schools, poorly coordinated, and that there was a low level of awareness of both sustainability and of local and national government's efforts to promote SD. It recommended the strengthening of sustainability as part of the curriculum, and for more action to be taken by government to promote sustainability.
- In the arena of higher education, HEFCE's Strategic Review of Sustainable Development,
 published in January 2008, represents perhaps the most significant body of work thus far for
 understanding the role of sustainable development within higher education institutions (HEIs).
 The report evaluated HEIs across England in four major areas: SD research; SD teaching; SD
 in estates and corporate management; and SD case studies. Its major findings in each area
 are briefly summarised here:
 - Over two-thirds of English HEIs conduct SD research of varying quality;
 - Treatment of SD in the curriculum varies considerably among English HEIs, interdisciplinarity in teaching is a major challenge, and many institutions assign low or no priority to SD;
 - Lack of response from HEIs on SD in estates and corporate management prevented the establishment of a credible baseline;
 - The case studies supported findings in the other three research areas while also pointing to a lack of consistent definitions for SD within and among HEIs. The researcher's definition of SD activities are those that contain "a significant element related to either or both of the natural environment or natural resources, PLUS a significant element related to either or both of economic or social issues."
 - The study also pointed to a generally low level of engagement with SD on the part of students, and that many SD activities in HEIs are the result of individual initiative.
- In 2007 Estyn published an evaluation report entitled Values Education: an evaluation of provision of education for the promotion of social responsibility and respect for others. The latter report found that: "The promotion of education for sustainable development and global

citizenship (ESDGC) is a key Welsh Assembly Government priority and plays an increasingly significant role in how schools promote social responsibility. However, provision for ESDGC has weaknesses in many schools."

• In January 2008, The UN DESD Steering Group (Scotland) published a progress report, Learning for Our Future Implementation Plan Progress Report, which assessed progress thus far in Scotland on implementing Scotland's DESD strategy. It declared mostly steady progress and identified a range of pledged actions that had been completed. It is a particularly valuable document in that it provides an informal benchmark and aggregates the range of activity in Scotland at present. However, it is not a systematic evaluation effort and cannot be validated.

Appendix 8: ESD in Higher Education in the UK

This section highlights a range of ESD activity and programming in higher education, and is not comprehensive.

HE Research Institutions, Foundations, Associations and Projects

ORGANISATION	ESD PROGRAMMES, INITIATIVES, OR ACTIVITIES
National Foundation for Educational Research in England (NFER) [www.nfer.ac.uk]	 Funded the Education for Sustainable Development – Making Research Count research initiative (2003), which produced the report "Connecting Research and Practice: Education for Sustainable Development"
National College for School Leadership [www.ncsl.org.uk]	 DCSF supported headship institution Sustainable development module (piloted July-November 2004) In Feb 2007 produced Sustainable Development Action Plan (SDAP) Website has an ESD initiatives and project section Conducted a Bursar Development Programme Impact Evaluation (2004/2005), which noted the importance of incorporating SD into bursar training Are leading Sustainable Schools research partnership, report published (2007)
British Educational Research Association (BERA) [www.bera.ac.uk]	 Funded the Education for Sustainable Development – Making Research Count research initiative (2003)
General Teaching Council of England (GTC) [www.gtce.org.uk]	 Funded the Education for Sustainable Development – Making Research Count research initiative (2003)
International Meeting on Implementation of Education for Sustainable Development for Higher Education Institutes (IMESD)	 First International Meeting on Implementation of Education for Sustainable Development for Higher Education Institutes (IMESD) in Amsterdam (8/9 February 2007), which identified many of the strengths and weaknesses perceived by HEI stakeholders with regards to ESD, and also identified key stakeholders at HE level
Higher Education Academy [www.heacademy.ac.uk]	 Published the Dawe Report on ESD (2005) Commissioned Forum for the Future to undertake research on ESD policy in the UK government and devolved administrations Published ESD Interdisciplinary Discussion Series and Report (2008), a key document for examining interdisciplinarity and ESD within HE In 2005, launched an ESD curriculum project for 16 of its 24 subject centres. The project aims to build capacity for ESD teaching and learning practices across the HE sector in the UK ESCalate subject centre offered a UK ESD in ITE conference in 2008
Higher Education Academy Subject Centre for Geography, Earth and Environmental Sciences (GEES) Note: this is part of HEA	 Resource database that includes an ESD resource list Dedicated ESD page with 7-8 downloadable reports GEES has published case studies for universities adopting ESD programmes
Higher Education Funding Council for England (HEFCE) [www.hefce.ac.uk]	 Funded the Higher Education Partnerships for Sustainability (implemented by Forum for the Future) in 2000 Funded the Higher Education Environmental Performance Improvement (HEEPI) in 2001, who implement the Green Gown

Awards

- Published Sustainable Development in Higher Education in 2005, outlining its updated approach to promoting SD
- Funded two Centres of Excellence in Teaching and Learning for SD in 2005 (University of Plymouth; Kingston University)
- Published Strategic Review of SD in HE in England and consultation on Sustainable Development in Higher Education updated statement of policy and action plan in 2008.

Higher Education Funding Council for Wales (HEFCW) [www.hefcw.ac.uk]

- February 2008 recently increased funding (22,500) for the following initiatives:
 - HEIs undertake a self-analysis of where ESDGC is being taught within their institution and where it could be further incorporated
 - HEIs encouraged to develop suitable environmental mgmt system

The Environmental Association of Universities and Colleges (EAUC) [http://www.eauc.org.uk]

- Network of 200 institutional members from further and higher education
- Traditional emphasis on environmental management, and campus greening in HEIs, but increasing interest in ESD
- ESD curriculum network was set up (2006)
- Have had 12 annual conferences, self-described as "the key annual sustainability event for UK Further and Higher Education"; 2008's theme was "Skills for Sustainability", held in March.
- Linked to Wales EAUC

Development Education Association (DEA)

[www.dea.org.uk]

- One of 3 NGO hosts of "ESD: From Policy Into Practice" conference (2005)
- Published The Global University: The Role of the Curriculum (2006), which situates its work in the context of DESD
- Hosted "Active faith: GC and Learning for the Future" conference and produced subsequent report of the same name (2006) to raise awareness of GC and SD in faith communities
- Member of NIACE/WEA ESD practitioner network
- Operate a "global dimension" resource website
- Published a number of resources on SD and youth work

EcoCampus

[http://www.ecocampus.co.uk

- Environmental Management System for the HE sector funded by HEFCE and hosted by Nottingham Trent University
- Prominent example of campus greening

Omega Project

[www.omega.mmu.ac.uk]

- Multi-disciplinary partnership of UK academics from nine universities (with dedicated Omega office at Manchester Metropolitan University) dedicated to working towards sustainable aviation
- The partnership has been established to study the environmental, business and operational impacts of aviation and develop strategies to reduce environmental impacts and business risk.

on Climate change and Higher Education (how environmental

Conducted "Future Leaders" survey with NGO Forum for the Future

Universities and Colleges Admission Services (UCAS) [www.ucas.com]

concerns shape student choices)

CITIZED [www.citized.info]

- Funded by TDA
- Collaboration within higher education for all providers of initial teacher education (ITE) in England

Universities

Prominent example of campus greening

LOCATION	INSTITUTION	ESD PROGRAMMES, INITIATIVES OR CENTRES
England – West Yorkshire (Yorkshire & Humber)	University of Bradford [www.brad.ac.uk]	 Institution-wide initiative to become an "Ecoversity," with aims to embed the principles and practice of SD across the entire institution, which requires "cultural change in management practices" Hosted ESD Conference (July 2007); Prominent example of 'campus greening'
England – Oxford	Oxford University [www.ox.ac.uk]	Oxford University Centre for the Environment [www.ouce.ox.ac.uk], which consists of:
Cambridge	Cambridge University [www.cpi.cam.ac.uk]	 The Climate Project - Al Gore Training initiative run in the UK by Cambridge Programme for Industry The Prince of Wales's Business & the Environment Programme (BEP) self-described as "the premier international forum for executive learning and leadership for sustainability Dept of Engineering - MPhil in Engineering for Sustainable Development Postgraduate Certificate in Sustainable Business
	Centre for Alternative Technology [www.cat.org.uk] – Not a university	Umbrella organisation for: School – Graduate School of the Environment [http://gradschool.cat.org.uk/graduateschool] offering MSc programmes The Wales Institute for Sustainable Education [wise.cat.org.uk/wise]
Cheltenham	University of Gloucestershire [www.glos.ac.uk/]	 Centre for Active Learning – sent delegates to Bradford ESD conference (July 07) "Greener by Degrees" project on sustainability in undergraduate and postgraduate curriculum; report published
Leeds	University of Leeds [www.leeds.ac.uk]	 MSc Sustainability (Environment ad Development) School of Earth and Environment, which includes: Sustainability Research Institute
Leeds	Leeds Metropolitan University [www.lmu.ac.uk]	Published Environmental Report with EAUC
London	Kingston University [http://www.c-scaipe.ac.uk]	Sustainable Communities Achieved through Professional Education (C-SCAIPE), one of two HEFCE funded 'Centres for Excellence in Teaching and Learning' in 2005 with five-year programmes to advance SD within and beyond their institutions
Plymouth	Plymouth University [http://www.csf.plymouth.a c.uk]	 Centre for Sustainable Futures, one of two HEFCE funded 'Centres for Excellence in Teaching and Learning' in 2005 with five-year programmes to advance SD within and beyond their institutions

		 Published University of Plymouth Sustainability Policy and Action Plan Upcoming "All our Futures" conference (Sept 2008)
Bath	University of Bath [www.bath.ac.uk]	 Centre for Research in Education and the Environment (CREE), umbrella group for all of the university's efforts on ESD, including MPhil, PhD, EdD and PGCE courses Environmental Education Research journal is based at CREE
London	Institute of Education [www.ioe.ac.uk]	 Hosted DESD Launch conference (November 2005) Development Education Research Centre launched in 2007, conducting research on ESD issues (including this report) and producing a new development education research journal Masters Level Module, <i>Principles and Practices of Development Education</i>, offered from January 2008 Education for Sustainable Development Special Interest Group formed in 2008
London	London South Bank University [www.lsbu.ac.uk/efs]	 Education for Sustainability post-graduate programme (CPD to Masters levels) since 1994, developed with assistance from WWF-UK, Oxfam and EU. Education for Sustainability Annual Conference (May 2007) Involved in DESD formation; "Developing the Decade" Conference hosted by EfS programme in conjunction with WWF-UK/Ed Dialogue group – (29 April 2006) Centre for Cross-Curricular Initiatives, a research and development centre on sustainable development – also involved in an ITE for ESD in the UK network Publications, including: Building a Sustainable Future: challenges for initial teacher training (2006) available from WWF. Teaching for a Sustainable Future: embedding SDE in the Initial Teacher Training Curriculum (2002)
London	London School of Economics [www.lse.ac.uk]	 Sustainable LSE – Make It Real' Workshop (Dec 2005) was a first step to the participatory implementation of the LSE Environmental Policy
SE England	University of Sussex [www.sussex.ac.uk]	 Collaborated with CSERGE on a one day conference "Grassroots Innovations for Sustainable Development" (10 June 2005)
SW England	University of the West of England, Bristol [www.uwe.ac.uk]	 ESD Case Study for HEA ICS Subject Centre PhD Studentship in Sustainable Development offered in 2007
SW England	University of Bristol [www.bristol.ac.uk]	Energy and Environmental Management Unit
SW England	University of Exeter [www.ex.ac.uk]	 MSc Sustainable Development One Planet Leaders Pathway initiative promotes corporate sustainability in the public and private sector; Involved in ESD university networks and regional initiatives
SW England	University of Gloucestershire [www. glos.ac.uk]	 Hosts the United National University Regional Centre of Expertise (RCE) in WSD West Midlands Provides ESD through its Green Business Club Was ranked as No.1 in The UK's Green League (2008) Winner of the Green Gown Continuous Improvement

Award	(2008)

- Winner of the Sustainable Communities Education Award (2008)
- First English University to gain ISO 14001 accreditation
- Hosts the Centre for Active Learning

rSustainableDevelopment.html

- Hosts the EAUC and leads its ESD Working Group
- Are embedding ESD across all course offerings
- Has professional development support for staff and students in ESD across the institution
- Hosts the Centre of Excellence in Teaching and Learning Linked to sustainability.

NE England Newcastle University - Newcastle [www.ncl.ac.uk]

- Institute for Research on Environment and Sustainability - Education for Sustainable Development (EfSD) Project [http://www.ncl.ac.uk/environment/research/Educationfo
- Direct links to both UNU EfSD initiative and DESD;
 Mission Statement is: To encompass a new vision of
 education; to empower people of all ages to assume
 responsibility for creating and enjoying a sustainable
 future; to find ways of promoting and implementing the
 United Nations Decade of Education for Sustainable
 Development (DESD), the initiative adopted by the
 United Nations General Assembly.; Good regional links
 to RCE North East; RCE East Midlands; UNU Global
 RCE Network

NE England – Newcastle

Northumbria University [www.northumbria.ac.uk]

- Sustainable Cities Research Institute, based within the School of the Built Environment [www.sustainablecities.org.uk]
- MSc Disaster Management and Sustainable Development

Manchester - NW England Metropolitan University [www.mmu.ac.uk]

- Environmental and Geographical Sciences Department offers undergraduate course in sustainable development
- Institute of Education at MMU website, Education for a Sustainable Future - joint teacher education development website with Moray House School of Ed [www.education.ed.ac.uk/esf/index.html]; there is a strong UK and European dimension as the website has developed from a Scottish initial teacher environmental education module and the European Commission funded SEEPS Project which promotes school focused programmes in education for sustainability. The site is part of the UK's contribution to the work of the UNESCO teacher education advisory group on education for sustainable development
- Centre for Air Transport and Environment (looking at impacts of air travel)

Manchester - NW England

University of Salford [www.salford.ac.uk/]

Centre for Sustainable Urban and Regional Futures [www.surf.salford.ac.uk]

Dorset - SW England

Bournemouth University [www.bournemouth.ac.uk]

- Education for Sustainable Development: Graduates as Global Citizens First International Conference (2005)
- Education for Sustainable Development: Graduates as Global Citizens, Second International Conference (10-11 September 2007)
- Global Perspectives Project
- Report, Global Vision for Bournemouth (1999)

T-		
East Anglia - East of England	University of East Anglia [http://www.uea.ac.uk]	 Centre for Social & Economic Research on the Global Environment (CSERGE), in partnership with the University of Sussex, hosted the Grassroots Innovations for Sustainable Development, a one-day conference for researchers, practitioners and policymakers (June 2005) School of Environmental Sciences
Brighton - South East	University of Sussex [www.sussex.ac.uk]	 Science and Technology Policy Research (SPRU), research project funded through the Economic and Social Research Council's Sustainable Technologies Programme
Nottingham - East Midlands	Nottingham Trent University	 The Institute for Sustainable Development in Business (CLOSED) – former staff are acting as SD consultants and researchers
Nottingham - East Midlands	University of Nottingham [www.nottingham.ac.uk]	 The Centre for the Study of Social and Global Justice (CSSGJ) Learning Through Other Eyes Project, - The aim of this project is the development of a free online programme of study for teachers in order to build a set of tools for an ethical engagement with indigenous knowledge that will enhance equity in North-South dialogue and set a practical and theoretically sound framework for the introduction of global perspectives in the classroom.
York - Yorkshire and the Humber	University of York [www.york.ac.uk]	 MA with focus on Education for Sustainable Development Partnered with Y&H ESD Forum and SSAT Authored 2006 Review of Environmental dimension of children and young people's well-being for SDC
Sheffield - Yorkshire and the Humber	Sheffield Hallam University [www.shu.ac.uk]	 Centre for Regional Economic and Social Research (CRESR) specialises in social and economic regeneration,
Milton Keynes - South East England	Open University - [www.open.ac.uk]	Published report, Towards Sustainable Higher Education: Environmental impacts of campus-based and distance higher education systems (2005)
South West England	Schumacher College [www.schumachercollege. org.uk]	 Institution fully dedicated to sustainability In partnership with the University of Plymouth, Schumacher is the first in the world to offer a postgraduate programme in Holistic Science (Full time MSc in Holistic Science) Schumacher Certificate in Education, a vocational programme in education for sustainability Publish the twice yearly Schumacher Briefings, research booklets on different dimensions of sustainable development
Scotland – Fife	University of St Andrews, Fife – [www.st- andrews.ac.uk]	School has a Sustainable Development SocietyConducted a student sustainability survey
Scotland – Glasgow	University of Glasgow [www.gla.ac.uk]	Offers a sustainable development website, with links to university policies and initiatives [www.gla.ac.uk/services/estates/Sustainability]
Scotland – Aberdeen	University of Aberdeen, [www.abdn.ac.uk]	Law & Sustainable Development taught programme
Scotland – Edinburgh	University of Edinburgh [www.ed.ac.uk]	 Centre for the study of Environmental Change and Sustainability – offers MSc/diploma in Environmental Sustainability

		 Participated in 2005 Interboard ESD Group (NI) study Education for Sustainable Future website co- collaborator with Manchester Metropolitan University IOE
Scotland – Edinburgh	Heriot-Watt University [www.hw.ac.uk]	School of the Built EnvironmentThe Scottish Institute of Sustainable Technology
Scotland – Dundee	University of Dundee [www.dundee.ac.uk]	 Conference in July 2008 – Concrete: Construction's Sustainable Option [www.dundee.ac.uk/civileng/research/concrete/ctu- events.htm]
Scotland - Glasgow	University of Strathclyde [www.strath.ac.uk]	 Postgraduate course in Sustainable Engineering Environmental Economics & Sustainable Development at the UofS business school; Online class resource: [homepages.strath.ac.uk/~cbs95104/definingsdhandout .html] Partnered with EnviroCentre to develop a professional development course on river basin management planning.
Scotland – Stirling	University of Stirling [www.external.stir.ac.uk]	 MSc in Sustainable Development; School of Biological and Environmental sciences [www.sbes.stir.ac.uk]
Scotland – Glasgow	Glasgow Caledonian University [www.gcal.ac.uk]	 The Glasgow Sustainability Centre (GSC), [www.gcal.ac.uk/bne/research/researchcentres- sustain.html]
Scotland – Edinburgh	Queen Margaret University [www.qmu.ac.uk]	 Staff at the School of Business and Enterprise are engaged in sustainable development research (mentioned in Business Management undergraduate course webpage)
Wales	Bangor University [www.bangor.ac.uk]	 World Education Centre, promoting ESDGC in Wales [www.bangor.ac.uk/addysgbyd] Published report Mainstreaming SD and GC in the HE curriculum (2006) for the WAG ESDGC panel; Published Educating for Global Citizenship - An INSET resource for teachers in Wales (2003) Offers a BA/BSc in Sustainable Development
Wales – Cardiff	Cardiff University [www.brass.cf.ac.uk]	 The ESRC Centre for Business Relationships, Accountability, Sustainability and Society (BRASS) (established in 2001)
Wales – Glamorgan	University of Glamorgan	MSc Sustainable Environmental Development
Wales – Swansea	Swansea University [www.swan.ac.uk]	 Towards a Sustainable Swansea [www.swan.ac.uk/university/TheCampus/Sustainability/] Partnership with forum Sustainable Swansea [sustainableswansea.net]
Wales – Aberystwyth	Aberystwyth University [www.aber.ac.uk]	 Environmental Sustainability online resource [www.aber.ac.uk/ensus/]
Wales – Cardiff	University of Wales Institute [www.uwic.ac.uk]	 In May 2006, UWIC marked National Learning at Work Day with the theme of sustainability and environmental issues with funding from the Welsh Assembly Government to produce sustainable awareness for staff in the Higher Education sector.

Wales – Newport	University of Wales, Newport	 ESDGC course [www3.newport.ac.uk/courses/displayCourse.aspx?course_id=30]
Wales	North East Wales Institute of Higher Education	 North East Wales Institute of Higher Education (NEWI) The School supports a research centre, the Centre for Sustainable Enterprise
Northern Ireland	Queens University Belfast [www.qub.ac.uk]	 MSc Spatial Regeneration and MSc Environmental Planning Website resource that is a summary of sustainable development policy within a rural UK and Irish context Hosted the UK-Ireland Planning Research Conf 2008 "Sustainability, Space and Social Justice" 18-20 Mar 2008
Northern Ireland	Stranmillis University College [www.stran.ac.uk]	 The Orchard Building at Belfast's Stranmillis University College was awarded the 'Northern Ireland Sustainable Planning Award' (2008). The Sustainable Planning Award is run jointly by the RTPI and the RSPB.

Appendix 9: Key Regional Stakeholders

NB: This list identifies a range of ESD stakeholders dating back to 2000, and it is likely that some organisations and/or initiatives listed may no longer exist.

England

- · Communities of Practice for Local Government
- England Regions Network (ERN)
- Government Office Sustainable Development in Education Network
- Improvement and Development Agency for local government (IDeA)
- Local Development Education Centres
- Wales and England Local Government Association
- Regional Centres of Excellence (RCE)
- Regional Development Agencies

England - North East

- Government Office for the North East
- Groundwork North East
- Ignite Regional Centre of Excellence (RCE)
- North East Assembly North East England RDA
- North East Strategic Partnership for Sustainable Schools
- One World Network North East
- RCE North East Partner Organizations
- Sustaine

England - North West

- Centre for Construction Innovation
- English Heritage
- Elevate East Lancashire
- Government Office for the North West
- North West ESD Forum
- North West Improvement Network
- North West Regional Assembly
- Northwest Regional Development Agency
- RENEW Northwest RCE for Sustainable Communities
- The Royal Institute of British Architects North West

England - Yorkshire and Humber

- ESD Forum Yorkshire and Humber
- Government Office for Yorkshire and Humber
- Humber Education and Business Link
- Integreat Yorkshire RCE
- Yorkshire and Humber Assembly
- Yorkshire and Humber Global Schools Association
- Yorkshire Forward (The Region's Development Agency)

England – East Midlands

- East Midlands Development Agency
- East Midlands Education for Sustainable Development Group (EMESD)
- East Midlands Integrated Toolkit
- East Midlands Regional Assembly Promoting Sustainable Development Group
- Government Office for East Midlands
- East Midlands Regional Centre of Expertise on ESD (UNU)
- Regeneration East Midlands

England – West Midlands

- Advantage West Midlands
- Government Office of West Midlands
- RegenWM Sustainability West Midlands
- TIDE Global Learning
- Warwickshire County Council
- West Midlands ESD Forum
- West Midlands Local Government Association
- West Midlands Regional Assembly

England - East of England

- East of England Development Agency
- East of England Energy Group
- East of England Toolkit
- Inspire East (RCE) for Sustainable Communities in the East of England
- Government Office of East of England
- Regional Cities East
- Renewables East
- The Sustainability Development Round Table for the East

England - London

- Government Office for London
- London Sustainable Schools Forum
- Local 4 Global London and South East England Regions (LaSER)
- London Development Agency
- London Schools Environment Award
- London Sustainability Exchange
- Mayor of London London Sustainable Development Commission
- London Centre of Excellence (RCE)

England - Southeast

- Brighton and Hove City Council
- Government Office for the South East
- South East Excellence
- South East Forum for Sustainability
- South East Regional Assembly
- The South East England Development Agency

England - South West

- Government Office for the South West
- Creating Excellence
- Learning Southwest The South West Learning for Sustainability Coalition
- Local Sustainability Group South West
- Our Southwest
- ReZolve Kernow Ltd
- South West Regional Assembly
- South West Regional Development Agency
- South West Sustainability Checklist
- Sustainability South West
- The Association of Higher Education Institutions in the South West (HERDA)
- South West Centre of Excellence (SWRCE)

Wales

- Cardiff Sustainable Education Network / Cardiff
- Cyfanfyd
- **ESDGC Advisory Panel**
- Estyn
- Glyncornel Environmental Centre
- Keep Cardiff Tidy Keep Wales Tidy
- Local Government Association
- Rhondda Cynon Taf County Borough Council
- South East Wales ESDGC Forum
- The Really Rubbish Campaign
- Department for Education, Lifelong Learning and Skills
- Wales Assembly Government
- Wales Youth Agency
- Welsh Further Education Procurement Consortium
- Welsh Local Government Association

Scotland

- Aberdeen EcoCity / Aberdeen City Council
- Development Education Centres (6 in total)
- Eco-Schools Scotland
- Grounds for Learning
- International Development Education Association of Scotland
- Learning and Teaching Scotland
- Scotland Qualifications Authority
- Scottish Education Awards
- Scottish Environment Link

- Scottish Natural Heritage
- Scottish Sustainable Development Forum
- SDC Scotland
- Sust
- Sustainable Development Education Network
- Sustainable Scotland Network
- Sustainable Secondary Schools Project
- WWF Scotland

Northern Ireland

- General Teaching Council for Northern Ireland
- The North-Eastern Education and Library Board for Northern Ireland
- Belfast City Council
- Belfast Education and Library Board
- Comhairle Na Gaelscolaíochta
- Council for Catholic Maintained Schools
- Council for the Curriculum, Examinations and Assessment (CCEA)
- Interboard Education for Sustainable **Development Group**
- Northern Ireland Council for Integrated Education
- Staff Commission for Education and Library **Boards**
- Sustainable Northern Ireland
- The South Eastern Education and Library Board in Northern Ireland
- The Southern Education and Library Board in Northern Ireland
- Tidy North Ireland
- Wester Education and Library Board

Appendix 10: UK Civil Society Organizations

- Academy for Sustainable Communities
- Action with Communities in Rural England
- Action for Sustainable Living
- Action Renewables
- AECB The sustainable building association
- Anglo-German Foundation
- Ashden Awards for Sustainable Energy
- Association for Citizenship Teaching
- Association for Science Education
- Bassac
- Big Lottery Fund
- Black Environment Network (Wales), working in England, Wales, Scotland
- British Trust for Conservation Volunteers
- **Business Council for Sustainable Development**
- Cabe (Commission for Architecture and the Built Environment) Education Foundation
- Campaign to Protect Rural England
- Capital Waste Learning
- Care International UK
- Catholic Agency for Overseas Development (CAFOD)
- Centre for Research, Education and Training in Energy (CREATE)
- Centre for Alternative Technology (Wales) and Wales Institute for Sustainable Education (opening Fall 2008)
- Centre for Accessible Environments
- Centre for Excellence in Leadership
- Christian Aid
- Christian Ecology Link
- Citized
- Commonwealth Youth Exchange Council
- Community Recycling and Economic Development Programme
- Community Recycling Network UK
- Council for Environmental Education (Inactive)
- Dartington Hall Trust
- DEA/CEE Sustainable Development and Youth Work project
- Development Education Association
- Development Education Project
- Earth Charter
- Ecocongregation
- Environmental Association of Universities and Colleges
- **Ecoreports**
- E4S Education for Sustainability
- Environmental Issues Network of Churches Together in Britain and Ireland
- **Environmental Teaching Resources**
- **ENCAMS**
- Encyclopedia of Sustainable Development
- **Energy Saving Trust**
- EnviroCentre (Scotland)
- **Environmental Investigation Agency**
- Environmental Transport Association
- Espresso Education
- Federation of City Farms & Community Gardens
- Federation for Community Development Learning
- Field Studies Council
- Forum for the Future
- Friends of the Earth
- Geographical Association

- Get Sust!
- Global Action Plan
- **Global Connections**
- Global Dimension Online
- Global Education Derby
- Global Teacher Project Globe Programme
- Green Choices
- Green Engage
- Green Guides
- Greenpeace UK
- Grounds for Learning
- Groundwork
- Institute of Development Studies
- Institute of Environmental Management and Assessment
- International Development Education Association of Scotland (IDEAS)
- International Institute for Environment and Development
- Ipsos MORI
- Islamic Foundation for Ecology and **Environmental Sciences**
- Islamic Relief
- John Muir Trust
- Leadership for Environment and Development International (LEAD)
- Learning and Skills Network (England, NI, Wales)
- Learning Through Landscapes
- Livingroofs.org
- Local4Global London and South East England Regions (LaSER)
- London 21
- London Community Recycling Network
- London Environmental Education Forum
- Midlands Environmental Business Company
- National Association for Environmental Education
- National Association of Field Studies Officers National Children's Bureau
- National Energy Foundation
- Natural England
- Natural History Museum
- New Economics Foundation
- National Institute of Adult Continuing Education
- Oxfam UK
- Partnership For Schools (PfS)
- People and Planet
- **PLATFORM**
- Practical Action
- Primrose Earth Awareness Trust
- Public Management and Policy Association
- Rainforest Foundation
- ReZolve Kernow Ltd
- Rising Tide UK
- Royal Society for the Protection of Birds
- Royal Society of Wildlife Trusts
- Seas Shepherd Conservation Society
- Sustainable Development Education Network
- Soil Association Specialist Schools and Academies and iNET
- StudentForce for Sustainability Surfers Against Sewage
- Sustainable Build
- Sustainable Communities Initiatives (Scotland)
- Sustainable Energy Action
- Sustainable Stuff

- Sustrans
- Teachers in Development Education (TIDE) Global Learning Network
- Television Trust for the Environment
- The Carbon Trust
- The Climate Group
- The Eden Project
- The Energy Efficiency Partnership for Homes The Institute for Citizenship
- The Institution of Environmental Sciences
- The Permaculture Association
- Think Energy Tourism Concern
- Town and Country Planning Authority
- Transition Town Totnes
- Trust for Urban Ecology
- UK Centre for Economic and Environmental Development
- UK National Commission for UNESCO
- University of the Third Age
- Waste Watch
- Waterwise
- Wildlife and Countryside Link
- Women's Environmental Network
- Workers' Educational Association
- Working with Kids
- World Wildlife Fund UK, NI, Scotland and Wales
- Young People's Trust for the Environment
- Youth Link Scotland

ENDNOTES

Some notable exceptions are:

- NGOs that describe themselves as committed to sustainable development and base their work around SD exclusively (e.g. Forum for the Future, StudentForce for Sustainability);
- NGOs with a sustainability 'specialisation,' such as construction, regeneration, energy, or climate change (e.g. National Energy Foundation, 'Get Sust' sustainable construction education site, Living Roofs UK site for green roofing).
- ii Examples:
 - The MSc in Holistic Science at Schumacher College (a school dedicated to the practice of sustainability)
 - London South Bank University's Education for Sustainability post-graduate programme
 - The University of Exeter's MSc in Sustainable Development.
- Two innovative forms for promoting ESD on an institution-wide level are specifically worth mentioning:
 - University of Bradford's 'Ecoversity' whole-university approach, which aims to embed SD throughout the entire institution:
 - University of Gloucestershire initiated the 'Greener by Degrees' project, which led to professional and
 curriculum development in ESD and the publication of a book which included curriculum modules and
 articles on sustainability in the classroom, sustainability across the university, and sustainability through
 local, national and international partnerships.
- ^{iv} E.g. the Green Gown Awards, People and Planet's "Green League 2007" environmental performance score, and The Academy for Sustainable Communities' Future Vision Award.
- For example, Cambridge University has implemented the Climate Project, an initiative linked to training people on the use of Al Gore's An Inconvenient Truth climate change lecture. These types of ESD are occurring through the initiative of individual universities who unlike government or NGOs have space and ability to innovate.
- vi One example of a professional body developing sustainable development guidelines is the Royal Academy of Engineering, who in 2005 published *Engineering for Sustainable Development: Guiding Principles.*
- vii A clear example of LSC's policy initiatives for SD can be seen in its 26 June 2006 news release, which outlined the LSC's expectation for all FE providers to carry out SD audits and develop SD action plans.
- viii A good example is the Linking for a Change networking website [www.linkingforachange.org.uk], described by one of the involved stakeholders as "a dating service for sustainable schools." The website was set up through a partnership between the Government Office in the South West (GOSW) region of England and the South West Learning for Sustainability Coalition. The site has created new opportunities for ESD stakeholders and practitioners to share best practices and promotion strategies.
- For example, Yorkshire and Humber currently have regional agency support from the Regional Development Agency (RDA) for a regional ESD post, but in the South West there has been no support for regional ESD from any regional agency since the RDA's support for the "Way Ahead" research in 2003-2004. However, the South West Learning for Sustainability Coalition is a major initiative in the region and has partnered with GOSW to create innovative initiatives such as the Linking for a Change website mentioned earlier.
- One possible method of examining ESD outcomes is to assess activity in formal education over time against each devolved administration's ESD policy.
- xi The concept of ESD 1 and 2 was developed in the South West region, specifically, by the South West Learning for Sustainability Coalition. This concept (explained earlier in the report) offers a distinction between ESD as promoting learned behaviours and ESD as building capacity for critical thinking about SD.