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# **Opportunities for sustainable development in the learning and skills sector: a policy analysis**

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# Preface

- 1 Sustainable development (SD) will and should reinforce existing government policy aims and objectives. The Treasury has recently shown its commitment to the SD agenda in the recent Spending review and its decision to include all 15 of the SD headline targets in Public Service Agreements spanning 10 government departments. Approaches to improving employer engagement are a major policy aim of the Skills Strategy and can be enriched by thinking about 'future skills'. The increasing impact of European regulations for integrated pollution prevention and control (IPPC) will mean that by 2007 one million people will be working in enterprises run in accordance with SD principles. Have we developed the capacity in the learning and skills sector to respond to this accelerating demand?
- 2 This publication was commissioned by LSDA to support our work on the development of education for sustainable development (ESD) and as part of our contribution to the development of a Learning and Skills Council (LSC) strategy for sustainable development.
- 3 It is designed to initiate new thinking around the strategy rather than to offer answers. It aims to:
  - analyse the current policies and policy discourses that will influence the future actions of the LSC
  - outline opportunities for integrating sustainable development into LSC policy and practice
  - identify some key action research and development activities to support their integration.
- 4 Examining major current LSC policy imperatives through the lens of sustainable development gives us a model for embedding SD thinking and practice into learning and skills sector mainstream activities. The interventions explored in this paper fall into the following broad policy dimensions: more effective engagement with employers and demand-led provision; stimulating demand for education and training; reviewing education and training missions; and achieving excellence in teaching and learning (curriculum and teaching reform).
- 5 The second paper in this suite, by Martin Yarnit, is entitled *Regeneration and all that: learning and skills and sustainability*. It explains the links between sustainable development, sustainable communities, active communities and learning communities. It then draws out the implications for the learning and skills sector, paying particular attention to the context of Success for All and the learning and skills implications of the Egan review of sustainable communities.
- 6 We recommend that providers and policy-makers read the two papers together. They form a complementary pair that can inform responses to the LSC SD strategy consultation and form the basis for longer-term strategic thinking. Readers may also like to explore the web-based toolkit on the LSDA website for practical examples of SD project work that has been ongoing since 2001<sup>1</sup> and the related new publication exploring the contribution that Centres of Vocational Excellence might make to this agenda.<sup>2</sup>

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# Introduction

- 7 The government strongly believes that we need to foster, through education, the values, behaviour and lifestyles required for a sustainable future. Education for sustainable development can be described as a process of learning how to make decisions that consider the long-term future of the economy, ecology and equity of all communities. Building capacity for such future-orientated thinking is a key task of education (UNESCO 2003) and the SD action plan for education and skills<sup>3</sup> from the Department for Education and Skills (DfES) sets out the actions therefore required of schools, colleges and universities, and national agencies such as the Office for Standards in Education (Ofsted), the Teacher Training Agency (TTA), the Qualifications and Curriculum Authority (QCA), the LSC, the Sector Skills Development Agency (SSDA) and the Higher Education Funding Council for England (HEFCE).
- 8 This paper is based particularly on an analysis of the following policies and policy discourses that will influence the future actions of the LSC.
  - DfES (2002). *Success for all: reforming further education and training*. Discussion document.
  - DfES (2003a). *21st century skills: realising our potential*. White Paper.
  - DfES (2003b). *The future of higher education*. White Paper.
  - DfES (2004). *Interim report of the Working Group on 14–19 Curriculum Reform*. (The ‘Tomlinson’ Group).
- 9 It identifies some key action research and development activities to support the integration of sustainable development into the post-16 education and training sector. Emphasis is on action research because successful SD integration will depend on a process of inquiry that is participative, democratic, grounded in experience and action-orientated. This approach will lead to wider ownership and action by the stakeholders in the learning and skills sector. The emphasis on inquiry is critical because successful action will depend on developing new approaches to current practice.
- 10 The LSC remit from the government is to:
  - improve participation in education and training, particularly among young people
  - raise attainment levels for adults and young people.
- 11 Their overarching objective is to raise levels of skills, knowledge and understanding for all adults and young people to world-class standards. LSC recognises that to achieve this it must secure the widest possible engagement from its strategic stakeholders, from schools, colleges and other training providers, from employers and the wider community and ultimately from its customers – young people and adult learners.
- 12 This paper therefore addresses SD opportunities through both ‘top-down’ and ‘bottom-up’ perspectives. At the top, high-level commitment is needed to integrate sustainable development into core LSC processes and decision-making; at the other end, a commitment from internal and external stakeholders is needed for its effective implementation. More fundamentally, sustainable development requires us all to rethink what we do (Sterling 2001; Jucker 2002; Scott 2002).<sup>4</sup> There is a clear role for the LSC to ‘turn up the volume’ on the sustainability agenda, stimulating wider engagement and building a sense of common purpose across the learning and skills sector.

## The policy context

13 Even a cursory review of the development of what is now commonly known as education for sustainable development<sup>5</sup> indicates a long history. It emerges from various discourses on environmental education, development education or education for global citizenship.

14 For a useful summary of national and international policy developments see John Blewitt's introduction in *Learning to last* (LSDA 2002).<sup>6</sup> For some of the most important milestones of this history see Table 1 (below). These make it clear that education for sustainable development has a crucial role in moving society towards a more sustainable future.

**Table 1: Milestones in the history of education for sustainable development**

- The World Conservation Strategy, published by the International Union for Conservation of Nature (IUCN) in conjunction with the United Nations Environment Programme (UNEP) and WWF (1980), is usually credited with introducing the concept of sustainable development to an international audience. However, the definition used in *Our common future*, the 1987 'Bruntland' report from the World Commission on Environment and Development, is the most widely known: 'development that meets the needs of the present without compromising the ability of future generations to meet their own needs' (Bruntland report, page 43).
- The UN Conference on Environment and Development (UNCED), commonly known as the Earth Summit (Rio 1992), was one of the largest-ever gatherings of world heads of state and government. Its (non-binding) declaration, *Agenda 21*, called a blueprint for implementation of sustainable development, devotes an entire chapter to 'promoting education, public awareness and training'. It specifically states that 'Education is critical for promoting sustainable development and improving the capacity of the people to address environment and development issues' (*Agenda 21* 1993, 36.3).
- The 1997 Amsterdam Treaty made sustainable development an aim of the European Union (EU).
- The 2002 World Summit on Sustainable Development (WSSD) in Johannesburg confirmed the importance of education in implementing sustainable development. The final version of the WSSD implementation plan states that 'education is critical for promoting sustainable development' (WSSD 2002, page 116). Section 121 urges participating governments to 'integrate sustainable development into education systems at all levels of education in order to promote education as a key agent for change'.
- The 2002 United Nations General Assembly Resolution 57/254 proclaimed the 10-year period from 2005 to 2014 the United Nations Decade of Education for Sustainable Development.

- 15 It is also clear that there is a growing international consensus on the importance of education for sustainable development.

*Education is critical for promoting sustainable development and improving the capacity of the people to address environment and development issues ... Countries should stimulate educational establishments in all sectors, especially the tertiary sector, to contribute more to awareness building.*

*Agenda 21 (1993) Chapter 36<sup>7</sup>*

- 16 The Millennium Declaration, signed by world leaders in 2000, is a significant international agreement that sets eight goals and 18 targets for sustainable global development<sup>8</sup> which are time bound and measurable. Reflecting this in ESD development is a significant challenge and opportunity.
- 17 The Millennium development goals are to:
- halve extreme poverty and hunger by 2015
  - achieve universal primary education by 2015
  - promote gender equality and empower women
  - reduce child mortality by two-thirds by 2015
  - improve maternal health
  - combat HIV/AIDS, malaria and other diseases
  - ensure environmental sustainability
  - develop a global partnership for development through increased development assistance, non-discriminatory trading and contribution to sustainable debt levels in developing countries, among other things.
- 18 In the UK, the work of the Sustainable Development Education Panel<sup>9</sup> and its draft education strategy Learning to Last (2003), the UK Sustainable Development Commission,<sup>10</sup> the House of Commons Environment Audit Committee and its report *Learning the sustainability lesson* (2003),<sup>11</sup> developments in Scotland<sup>12</sup> and Wales<sup>13</sup> have all contributed to a major shift in thinking on the actions needed to implement education for sustainable development.

- 19 Despite the case for education for sustainable development being made so powerfully, far from re-orientating education and lifestyles the last 30 years have seen an acceleration of unsustainable activity, which has spread to ever more remote corners of the world, leading to 30% over-exploitation of the earth's carrying capacity. Our education system needs to engage with the SD agenda more seriously and urgently than ever before.<sup>14</sup> In their foreword to the Skills Strategy White Paper, the Prime Minister, Chancellor of the Exchequer, Secretary of State for Trade and Industry, Secretary of State for Education and Skills, and Secretary of State for Work and Pensions state:

*Sustaining a competitive, productive economy which delivers prosperity for all requires an ever growing proportion of skilled, qualified people. We will not achieve a fairer, more inclusive society if we fail to narrow the gap between the skills rich and skills poor.*

*21<sup>st</sup> century skills (DfES 2003)*

- 20 However, within other government departments, notably the Department for Environment, Food and Rural Affairs (DEFRA), there is a different emphasis, based on an accelerated 'shift towards sustainable consumption and production' set out in *Changing patterns – UK government framework for sustainable consumption and production*.<sup>15</sup> Here it is acknowledged that 'economic progress does not always take account of its potential impact on our society and environment' and it is argued that future prosperity at home and abroad will depend on decoupling economic growth from environmental degradation.

*Sustainable development is about looking at the whole picture and linking social, environmental and economic concerns, not putting one in competition against the other.*

*Taking it on: developing UK sustainable development strategy together<sup>16</sup>*

21 It is thus important to recognise that within government there are differences in emphasis on the SD agenda. An LSC SD strategy must retain a flexible approach to the implications for education inherent in sustainable production and consumption, since this is likely to be one of the main drivers of national policy. The annual report of the World Watch Institute emphasises some of the consumption issues.<sup>17</sup>

*Around 1.7 billion people worldwide, more than a quarter of humanity, have entered the 'consumer class' adopting the diets, transportation systems, and life styles that were limited to the rich nations of Europe, North America and Japan during most of the last century. In China alone, 240 million people have joined the ranks of consumers, a number that will soon surpass that in the USA.*

*State of the World (2004)*

22 In the UK, the current policy framework for sustainable development is set out in the government's 1999 policy paper, *A better quality of life: a strategy for sustainable development for the UK*.<sup>18</sup> Currently under review, this strategy will be influenced by individual policy papers on energy, sustainable communities, proposals for substantial reforms of agriculture (the 'Curry' report) and planning regulations, among other themes. The SD action plan published by the DfES in 2003 will also have to be taken into account.

23 All these policy changes will have a profound impact on education, training and employment for a range of occupations. Indeed, among the 5.5 million people in the UK who call themselves professionals, there is a growing realisation that they need help in understanding how to put the principles of sustainability into practice (Martin and Hall 2002). Employees in all sorts of roles increasingly have to demonstrate their competence in complying with complex environmental, social and ethical parameters. These trends will affect the curricula of all education and training programmes.

24 There has also been a great shift in EU employment, education, training and environment policy over the past decade. Much of this is encapsulated in the EU environmental policy framework, the Sixth Environmental Action Programme (EAP) *Environment 2010: our future, our choice*.<sup>19</sup>

25 The opening paragraph to the new framework sets out the EU vision:

*A healthy environment is essential to long term prosperity and quality of life and citizens in Europe demand a high level of environmental protection. Future economic development and increasing prosperity will put pressure on the planet's capacity to sustain demands for resources or to absorb pollution. At the same time, high environmental standards are an engine for innovation and business opportunities. Overall, society must work to de-couple environmental impacts and degradation from economic growth. Business must operate in a more eco-efficient way, in other words producing the same or more products with less input and less waste, and consumption patterns have to become more sustainable.*

26 Throughout the new EAP, greater emphasis is placed on integrating environmental concerns into wider economic and social policies through the new policy doctrine of sustainable development.

## Economy and employment: trends and opportunities

- 27 At the heart of the government's skills strategy is the aim to secure greater engagement with employers (Skills White Paper, Chapter 2). This is a major opportunity to maximise the integration of sustainable development into the policy for and the planning, design and delivery of demand-led provision because sustainable development has profound implications for all occupations – whether engineering, management, scientific, agricultural, environmental, construction, design, manufacturing or secretarial.
- 28 Engineers, for example, in designing solutions to meet modern needs, are responsible not only for the safety, technical and economic performance of their activities, but also for using resources sustainably; minimising the environmental impact of projects, wastes and emissions; and using their influence to ensure their work brings equitably distributed social benefits. These responsibilities increase the importance of ethics in curriculum design.
- 29 Recent data (ECOTEC 2002) on the market for goods and services produced by the 'eco-industries' in the EU indicates that they supply approximately €183 million of goods and services a year. In a global context the market for eco-industries is estimated at around €550 billion, which means that the EU has approximately one-third of the overall market – equal to the USA. The waste management industry has seen the most growth in recent years and has the largest annual expenditure. Direct employment in the EU eco-industries is over 2m full-time equivalents, with 1.5m jobs in pollution management and 650,000 in resource management.
- 30 There has been a shift in employment from the public to private sectors, particularly in waste management. Although part of the environmental sector (eg consultancy and research) comprises highly educated and skilled individuals, there is a continual need for improvement in technical skills and training, given some of the rapid technological changes taking place in recovery and recycling, and other aspects of environmental management (Martin and Jucker 2005). All these trends offer significant opportunities to education and training providers in the learning and skills sector.
- 31 It is important to recognise the rapidly growing non-governmental sector of public interest organisations, not-for-profit consulting firms and various publications, media and information outlets. New posts are emerging within the agencies of the EU itself as well as inter-governmental bodies. There is an increasing range of new and demanding career trajectories, all of which will define the curricula requirements of many occupations and professions.
- 32 There is also a growing market for goods and services that meet increasingly rigorous environmental and ethical standards (Cowe and Williams 2000). While the growth in absolute terms is small, the trends demonstrate real consumer power. Recent data<sup>20</sup> shows that sales in the ethical marketplace have grown from the baseline year of 1999 to 2001 by 42%. Within this overall increase in purchases green energy has grown by over 300%; ethical food by 56%; household goods by 88% and ethical banking by 56%. Such trends are beginning to influence many employers, large and small.<sup>21</sup>
- 33 There is an increasing body of evidence that companies that take a more sustainable approach enjoy positive benefits.<sup>22</sup> The benefits identified in Table 2, described as business benefits, are nevertheless relevant to many other sectors, including the learning and skills sector.

## Table 2 Business benefits

(taken from Sigma guidelines *Putting sustainable development into practice: a guide for organisations*)<sup>23</sup>

### Business benefits

Improved operational efficiency  
Preservation of licence to operate  
Enhanced brand value and reputation  
Promoting and increasing innovation  
Customer attraction and retention  
Improved access to capital  
Enhanced human and intellectual capital  
Building and sustaining shareholder value  
Improved management of risk  
Generating increased revenues  
Attracting and retaining talented staff

34 However, to date, apart from some notable exceptions, there is little evidence that education and training providers have begun to design differentiated provision to meet the objectives of an ethical and more sustainable future.

35 LSDA's 2003 response to the Skills White Paper recommends a clearer analysis of the different forms and purposes of employer engagement and suggests three types of role:

- **leadership:** active involvement of employers in the design, development, management or delivery of post-16 learning
- **purchaser:** employer buy-in to skills development
- **partnership:** sustained interaction between employers and the planners and providers of learning.

36 All three should play a pivotal role in developing education for sustainable development for different employment sectors. There are real opportunities for providers to identify and target the business leaders in ethical, environmental and sustainable development terms, to forge strategic and operational partnerships and to create new forms of demand-led provision based on an integrated approach to sustainable development.

37 Local LSCs, SSCs, and the Skills for Business Networks will, however, need to develop the capacity to understand and support the ESD agenda in a range of employment sectors. This will inevitably mean a greater initial emphasis on training and development for these agencies in the concepts and practice of sustainable development, based on effective case studies derived from leading businesses and providers.<sup>24</sup>

38 For more effective engagement with leading-edge employers on this agenda research is needed into best practice in sustainable development and corporate social responsibility in the business community. A database is needed for education and training providers as well as local LSCs and the Business Support Network. Some of this information should be incorporated into the proposed local LSC employer guides to good training (Skills White Paper, paragraph 2.30) along with emerging ESD best practice in education and training (Martin *et al.* 2004).

39 Other opportunities to create more effective integration of sustainable development into demand-led provision are outlined in the appendix.

- 40 Despite some scepticism about whether employers want to buy training services from the learning and skills sector, there is evidence of a growing market for private-sector training and development in sustainable development, corporate social responsibility, business processes and re-organisation. To achieve a significant transformation in the level of buy-in by employers the learning and skills sector needs to adopt a more proactive and professional engagement in developing and marketing new provision in this emerging market.
- 41 The sector has generally been slow to respond to the environmental skills market although it has been clearly assessed and targeted in many economic development strategies from the Regional Development Agencies (eg South West and East and West Midlands). This is probably due more to a lack of capacity than to unwillingness to engage with relevant employers and employment sectors.
- 42 There are opportunities for promoting capacity-building and new training provision in the learning and skills sector through:
- the proposed extension of employer-based training Level 2 pilots (possibly in organisations already using private sector training providers for sustainable development)
  - targeting the proposed funding subsidies at employers who are developing customised ESD training provision.
- 43 These opportunities should form the basis of a national programme of action research linked to rigorous monitoring and evaluation and dissemination processes. The objectives of the Skills White Paper of developing a modern vocational learning system can then be met by integrating sustainable development within its theoretical and practical delivery frameworks. Employer training pilots targeted at companies aiming to meet the emerging sustainability agenda (for example, Marks & Spencer, Carillion, Wessex Water) could provide useful information on how such provision can be rapidly designed and delivered by expert staff. They may also suggest how, operationally, such capacity can be developed.
- 44 Finally, the Skills White Paper refers to a new national Skills Alliance made up of government, business leaders, trade unions and delivery bodies. Given the right terms of reference<sup>25</sup> this body has the potential to take a coordinating role in the planning and delivery of education for sustainable development into the national vocational learning system.
- 45 Additional themes to support more effective employer engagement and development of education for sustainable development include research into:
- models of college/training provider support for businesses directly involved in the environmental goods and services sector
  - support needs of small and medium-sized enterprises (SMEs) and ethnic minority businesses, particularly as part of an ethical sustainable supply chain
  - SD training needs of SMEs
  - sustainable production/manufacturing systems to support teaching and learning.

## Vocational routes and employability

- 46 *The future of higher education* White Paper published in January 2003 emphasises the government's commitment to focus future expansion of higher education through two-year standard foundation-degree programmes. These programmes will not only strengthen the vocational progression routes from schools and colleges, but also offer opportunities for further curriculum reform based on ESD principles.
- 47 The HE White Paper also encourages the strengthening of higher education–industry links to ensure that curricular and course materials keep pace with changing business practice. As has already been argued, many leading-edge companies involved in implementing the sustainability agenda, including corporate social responsibility, could provide work-experience placements and curriculum partnerships in the design of relevant foundation degrees aimed at a wider range of vocational occupations.
- 48 There is also an essential role for the HE Academy in the development of new approaches to teaching and learning and sustainable development. The HE Academy is the successor body to the Institute for Learning and Teaching and the Learning and Teaching Support Network, and aims to build on their achievements in education for sustainable development. It is currently working on developing a strategy for sustainable development in higher education with the Higher Education Funding Council for England, focusing on subject-centre action groups comprising subject specialists involved with the SD agenda.

## Stimulating demand

- 49 A recurring theme in all recent educational policy is the need to increase participation and stimulate new demand for learning. Many of the interventions proposed in the Skills White Paper and *Success for all* are likely to have a positive effect on participation and demand. However, there is no clear vision from government about the purpose and content of a (vocational) education and training (VET) system in the 21st century. This is a major omission given the imperative of sustainable development as the most important and challenging contemporary issue facing human society, as well as the priority placed on it by the national and international policy context (see paragraphs 6–17 above).
- 50 Given the new emphasis on sustainable development in the grant letter to the LSC from the Secretary of State for Education and Skills, there is now an opportunity to review what would be an effective and sustainable (post-14) learning system for the 21 century, enabling access and coherent routes for successful learning for individuals and employers in a sustainable economy.<sup>26</sup>
- 51 This is an integral part of the ongoing research programme of the Learning and Skills Research Centre (LSRC), 'Modelling a vocational learning system for the 21st century'.
- 52 The question about the purpose and content of vocational education and training is central to addressing the opportunities for integrating sustainable development into the policy and everyday practice of the LSC. However, it seldom features in educational policy, perhaps because the purposes are taken as given. Sterling (2001) argues that to ask the question, 'What is education for?', raises questions of philosophy and values about the nature of education and beyond this about the nature of being human – all of which have a fundamental bearing on how society engages with sustainable development (see Table 3).

**Table 3 Some key purposes of education**

To train people for employment <i>Vocational function</i>
To replicate society and culture and promote citizenship <i>Socialisation function</i>
To develop the individual and his/her potential <i>Liberal function</i>
To encourage change towards a fairer society and better world <i>Transformative function</i>

53 Other opportunities for enhancing the integration of education for sustainable development into the widening participation process are shown in the Appendix.

## Education and training missions

- 54 *Success for all* stresses the importance to colleges and providers of reviewing and developing their educational mission. The LSDA response to this consultation suggests that many mission statements have become bland and generic, and do not inform the decision-making processes of the organisation. It argues that a comprehensive mission development and review process enables providers to:
- establish a clear sense of purpose and direction
  - facilitate decision-making
  - assist in marketing the organisation and communicating with key stakeholders
  - support more effective evaluation.
- 55 Such a process is an essential component of developing an institutional approach to sustainable development in the curriculum. Integrating sustainable development into the curriculum is arguably the most important contribution that providers can make to the sustainability agenda, but probably the least developed.
- 56 Recent debate centres on two contrasting approaches to curriculum reform (see Martin and Jucker 2005). The first argues for the incorporation of SD knowledge, skills and concepts into existing curricula; the second promotes the idea of changes in the concept and processes of education and learning as a whole. In short, the curricular response to sustainability might be primarily piecemeal, affecting isolated parts of institutional practices, or systemic, where whole system change becomes the agenda. A recent study (Bor *et al.* 2000) has identified some of the key issues facing institutions in systemic change. Table 4 displays some of the key challenges for educational institutions seeking to integrate SD concepts and practices.

**Table 4 Key challenges in integrating sustainability concepts and practices**

- Integrating sustainability presupposes the rethinking of institutional missions.
- The imprecise nature of sustainability can be seen as an advantage in stimulating dialogue on implications for curriculum, pedagogy, etc.
- Sustainability is complex. The concept touches all aspects of our existence, involves deep questions about human responsibility and destination, and can be seen at different levels from micro to global and through different perspectives. Therefore, curriculum review based on sustainability is essentially a holistic and interdisciplinary exercise.
- Planning for education for sustainable development will lead to questions about purpose, content and method and the role of teachers in the institution. It requires teachers also to see themselves as learners, and work with uncertainty and open outcomes.
- There is no blueprint for institutional and curriculum reform. Successful change depends on an inclusive and communicative process.

## **Governance**

- 57 Governance is an essential element of the institutional review process. A key principle of good governance is making decisions that protect and enhance the services and public goods of an organisation into the long-term future (ie beyond the tenure of existing members of the governance structure). These decisions increasingly need to reflect the importance of ethics, environmental and societal performance and other societal responsibilities and values. In effect, governance in our educational and training organisations (LSC, local LSCs, SSCs, LSDA, schools, colleges and training providers, etc), like a growing number of leading businesses,<sup>27</sup> needs to include the 'triple bottom line.'<sup>28</sup> This means focusing not only on the prudent control of funds and assets (the economic value they add) but also on the environmental and societal value they add or destroy.
- 58 The issues described in the preceding sections suggest a number of key action research projects including:
- assessing how the new planning framework for area reviews can incorporate the cross-cutting theme of sustainable development
  - developing a methodology for embedding SD principles into corporate governance of local LSCs and provider institutions
  - developing a curriculum design toolkit for integrating education for sustainable development across the curriculum
  - assessing the environmental impacts of different learning delivery systems.<sup>29</sup>

## Achieving excellence in teaching and learning

- 59 The publication of *Success for all* signals a major drive to strengthen teaching and learning, and the quality of provision in the learning and skills sector. This is to be achieved through the development of new demonstration teaching and learning frameworks for major curriculum areas where weakness has been identified by inspection. These new frameworks are being developed by the DfES Standards Unit.<sup>30</sup> Work is currently in progress in construction, Entry to Employment (E2E), business studies, science, health and social care, ICT, maths, land-based studies, engineering, modern foreign languages, initial teacher training and adult and community learning.
- 60 This initiative is being broadly welcomed by the learning and skills sector and offers a real opportunity to integrate sustainable development into some nationally important curriculum areas and teacher education reforms. It also offers the sector opportunities to explore a more holistic, participative and practical focus on learning.
- 61 The Standards Unit (with LSC support) could act as a powerful ESD advocate in this early development phase. Most educational researchers argue for a more participative approach to policy change that is mutually compatible with the two expressions: 'education for change' and 'change in education'. Both are necessary functions of policy intervention: the former cannot be achieved without appropriate and sympathetic change in the latter and vice versa. Thus the Standards Unit's approach to developing the new teaching and learning frameworks will be critical in determining how the changes are received by the sector; for education for sustainable development the process needs to encourage ownership and be based on the undoubted expertise of the teachers and trainers.
- 62 Additional areas of research could include:
- new models for building practitioner capacity in the learning and skills sector to initiate the necessary ESD curriculum reforms; for example, through existing networks such as the Environmental Association of Universities and Colleges (EAUC)<sup>31</sup> and Professional Practice for Sustainable Development (PP4SD)<sup>32</sup>
  - how to integrate sustainable development into the teaching and learning frameworks for construction, health, science, etc; developing good practice frameworks similar to the FEDA 'Spotlight on Learning' programme
  - organisational change and sustainable development – researching and developing the business case for sustainable development in learning and skills sector institutions, including levers for change, based on *To whose profit: building a business case for sustainability* (2001)<sup>33</sup>
  - developing new forms of transformative education through participatory educational appraisal linked to sustainable development<sup>34</sup>
  - supporting and evaluating existing innovative practices in education for sustainable development in key institutions and vocational areas (eg land-based, science, construction) and extending the Centres of Vocational Excellence (CoVE) survey of good practice in education for sustainable development<sup>35</sup>
  - assessing the effectiveness of current continuing professional development (CPD) processes in furthering the development of key ESD competencies in teaching and learning (linked to the contribution other bodies might make to creating a professional body in the sector).

## Qualification reform

- 63 There is strong support for further qualification reform to make the education and training system easier for learners, employers and providers to understand, and more flexible and responsive to both learners' and employers' needs. Whatever the outcomes of these interventions, they offer some significant opportunities for integrating sustainable development into the curriculum.
- 64 The DfES Working Group on 14–19 Reform published its interim report in February 2004 setting out proposals for a new system of learning programmes and diplomas for the 14–19 group in England, particularly focusing on the principles and design features of a reformed system. The final recommendations are due this autumn.
- 65 The proposed reforms of the curriculum and qualifications for the 14–19 age group and the development of a unified framework offer a number of potential interventions for integrating sustainable development into the proposed learning programmes and diplomas. They fall potentially into the following four categories, integrating sustainable development into the:
- common skills element or core of the diploma
  - subject-specific component of the diploma
  - specialised diplomas designed to provide the knowledge and skills necessary for specific employment sectors
  - open diploma programme which enables a learner to select a mixed pattern of subjects.
- 66 Probably the most effective initial contribution that sustainable development could make is through the common skills or core. The principles upon which this is based (Interim report, para 48) include: 'to meet their future needs as well as those of the economy and *wider society*' (emphasis added). It goes on as the following quote:

*This aspect of the diplomas will require more discussion and elaboration but at this point we consider it helpful to think about the development of these attributes through three dimensions – the reflective and effective individual learner (eg skills such as problem solving, independent learning and the attribute of personal persistence); the social learner (eg interpersonal and teamwork skills and the ability to empathise); the learner in society and the wider world (eg the development of active citizenship and international awareness).*

- 67 All three dimensions afford opportunities for teacher and learner to develop an ESD approach.<sup>36</sup>
- 68 The government ESD Panel also published seven principles or dimensions (Table 5) which have been further elaborated in terms of values, skills and understandings that have generic relevance across the curriculum.<sup>37</sup> The panel recommended that the achievement of ESD outcomes is a function of the whole curriculum and hence requires engagement of all subjects. It assumes an impact on whole institutional development, including ethos, curriculum, pedagogy, organisation and community links, emphasising participation, coherence and consistency within and between these aspects. Although the concepts, framework, values and skills matrix were primarily designed for schools, their generic nature makes them relevant to all sectors of education and training.

# Citizenship

69 The framework for sustainable development, developed by the government's ESD panel, recognises a wide range of inter-related issues which may be appreciated and taught through the seven principles set out in Table 5. The first principle concerns the interdependent nature of the world, and it follows that to move towards a more sustainable society we need greater participation through active citizenship. QCA defines active citizenship as:

*equipping all young people with the knowledge, understanding and skills to participate effectively in society as informed, critical, socially and morally responsible citizens, convinced they can have influence and make a difference in their communities (locally, nationally and globally)*

[www.qca.uk/7907.html](http://www.qca.uk/7907.html)

70 That interdependence is also the basis of a growing body of knowledge and experience called systems thinking and practice<sup>38</sup> which involves looking at the interconnections between parts of a whole rather than concentrating just on the parts. There is an increasing recognition that systems thinking and practice are core to the new skills required for engaging with the SD agenda.

71 A recent DfES research report<sup>39</sup> suggests that successful implementation of citizenship education requires a holistic and coherent approach based on three inter-related components of citizenship education in:

- the curriculum
- the school as a community
- partnership with the wider community.

72 Although the citizenship programme in our schools and colleges is still in its infancy, it offers a significant opportunity to introduce education for sustainable development into the curriculum and ethos of education and training. The LSDA response<sup>40</sup> to the Working Group on 14–19 Reform suggests the need for a unit of active citizenship to form part of the core of the new diploma. It acknowledges 'all approaches to developing citizenship skills and knowledge rely on committed and enthusiastic staff and supervisors'. Building a cadre of such staff is an urgent requirement if the SD agenda is to be implemented through citizenship education.

## Table 5 Key ESD principles

**Interdependence:** of society, economy and the natural environment, from local to global

**Citizenship and stewardship:** rights and responsibilities, participation and cooperation

**Needs and rights** of future generations

**Diversity:** cultural, social, economic and biological

**Quality** of life, equity and justice

**Sustainable change:** development and carrying capacity

**Uncertainty and precaution** in action

## Leadership

- 73 Current education and training policy emphasises the importance of strong and innovative leadership in education and training and the need for sound and supportive governance and management (*Success for all*, paragraph 45). These are essential for the successful incorporation of sustainable development into education and training. However, a more detailed analysis based on an integrated action research programme is required, focusing on the following key themes:
- the role of leadership in the change process
  - the role of governance in the change process
  - the impact and influence of the educational estate
  - the contribution and place of learning communities in education for sustainable development<sup>41</sup>
  - how to create the capacity for change at the chalkface efficiently, effectively and quickly.

## Conclusions

- 74 The ideas and proposals set out in this paper offer the LSC and its stakeholders a number of opportunities to create 'education for change' and 'change in education' in a more sustained manner than piecemeal interventions. There is clearly scope for more research and development in all these dimensions.
- 75 The leadership themes are components of the change already taking place in the learning and skills sector. For example, the new Centre for Excellence in Leadership (CEL) has as one of its objectives 'the delivery of high quality, effective and innovative leadership development programmes'. Clearly, it is essential that sustainable development is integrated into these programmes as part of a wider national change programme. Similarly, the Environmental Association of Universities and Colleges has played a crucial role over the past decade in developing greater energy and resource efficiency in the educational estate.
- 76 However, further action research is needed to join up existing good practice with national policy developments. This will enhance the work of the LSC in developing a coherent and systemic process of change in the learning and skills sector.

## **Appendix: Additional opportunities for integrating sustainable development into demand-led provision**

- Make education for sustainable development a mandatory component of Sector Skills Agreements.
- Make education for sustainable development a mandatory component of CoVE agreements, including review and evaluation procedures.
- Give RDAs a statutory responsibility for education for sustainable development as part of their role as the interface between Skills for Business Network and LSC operations and providers.
- Build ESD elements into the new Modern Apprenticeship frameworks in both the technical and key skills elements.

Interventions such as outlined in the first three points above will require further research and development, possibly through an action-research and piloting process in targeted Regional Development Agencies (eg South West, North West, East Midlands and Yorkshire and Humberside). The opportunities identified in the fourth point might be explored through large in-company schemes where there is a strong track record in sustainability (eg MA in retailing with Sainsbury's).

## **Additional opportunities for enhancing the integration of education for sustainable development into the widening participation process**

- Make education for sustainable development a discrete but integral component of the Ofsted/Adult Learning Inspectorate quality assurance and reporting roles. Such an approach could be based on the 10-point checklist for self-assessment by schools.<sup>42</sup>
- Refine the approaches to skills needs analysis to focus on those directly relevant to the environmental goods and services sector, as well as those required for implementing sustainable development within key regional employment sectors.
- Integrate sustainable development into the Skills for Life programme as part of the literacy, numeracy and ICT programmes.
- Recognise sustainable development as part of the e-skills passport for adult learners.
- Integrate sustainable development into the Foundation Skills for Employability programme to Level 2.
- Develop more effective and accessible information on courses and careers opportunities in sustainable development for the expanded Connexions Service, Ufi/Learndirect, libraries and Jobcentre Plus.<sup>43</sup>
- Make sustainable development a cross-cutting theme in all Strategic Area Reviews (based on a similar 10-point checklist as in the Ofsted/ALI process) to assess the current range, gaps and overlaps in provision
- Develop education for sustainable development as a cross-cutting element of the citizenship and language programmes for migrants.

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- Working Group on 14–19 Reform. The ‘Tomlinson’ Group. At [www.14-19reform.gov.uk/](http://www.14-19reform.gov.uk/)

## Notes

<sup>1</sup> [www.lsda.org.uk/programmes/sustainable](http://www.lsda.org.uk/programmes/sustainable)

<sup>2</sup> Martin Cohen and Martin (2004). *Contributing to sustainable development centres of vocational excellence*. At [www.LSDA.org.uk/curriculum/cove/](http://www.LSDA.org.uk/curriculum/cove/)

<sup>3</sup> [www.dfes.gov.uk/sd/action.shtml](http://www.dfes.gov.uk/sd/action.shtml)

<sup>4</sup> The current review of the UK Sustainable Development Strategy, *Taking it on*, argues that changing behaviour is a key component of implementing sustainable development ([www.sustainable-development.gov.uk/taking-it-on/index.htm](http://www.sustainable-development.gov.uk/taking-it-on/index.htm)).

<sup>5</sup> Other commentators use 'education for sustainability' because it avoids the inherent contradictions in 'sustainable development'. More recently Sterling (2001) coined the phrase 'sustainable education' implying a more fundamental role for education as part of a whole paradigm change.

<sup>6</sup> [www.lsda.org.uk](http://www.lsda.org.uk)

<sup>7</sup> [www.un.org/esa/sustdev/documents/agenda21/english/agenda21toc.htm](http://www.un.org/esa/sustdev/documents/agenda21/english/agenda21toc.htm)

<sup>8</sup> [www.un.org/millenniumgoals/](http://www.un.org/millenniumgoals/)

<sup>9</sup> [www.defra.gov.uk/environment/sustainable/educpanel/](http://www.defra.gov.uk/environment/sustainable/educpanel/)

<sup>10</sup> Sustainable Development Commission (2004), *People, planet, prosperity*. At [www.sd-commission.gov.uk](http://www.sd-commission.gov.uk)

<sup>11</sup> [www.dfes.gov.uk/sd/education.shtml](http://www.dfes.gov.uk/sd/education.shtml)

<sup>12</sup> See *Learning to Sustain* ed John C Smyth (Stirling, Scottish Environmental Education Council, 1998).

<sup>13</sup> See the Welsh National Assembly's web pages at [www.wales.gov.uk/themessustainabledev/index.htm](http://www.wales.gov.uk/themessustainabledev/index.htm)

<sup>14</sup> See *21st century skills; Success for all; Future of higher education*.

<sup>15</sup> [www.defra.gov.uk/environment/business/scp/](http://www.defra.gov.uk/environment/business/scp/)

<sup>16</sup> *Taking it on: developing UK sustainable development strategy together*. [www.sustainable-development.gov.uk/taking-it-on/](http://www.sustainable-development.gov.uk/taking-it-on/)

<sup>17</sup> [www.worldwatch.org/pubs/sow/2004/](http://www.worldwatch.org/pubs/sow/2004/)

<sup>18</sup> [www.sustainable-development.gov.uk/uk\\_strategy/content.htm](http://www.sustainable-development.gov.uk/uk_strategy/content.htm)

<sup>19</sup> <http://europa.eu.int/comm/environment/newprg/>

<sup>20</sup> [www.greenconsumerguide.com/epi.php](http://www.greenconsumerguide.com/epi.php)

<sup>21</sup> Examples include The Co-operative Bank ([www.co-operativebank.co.uk/](http://www.co-operativebank.co.uk/)), Day Chocolate Company ([www.divinechocolate.com/](http://www.divinechocolate.com/)) and Beacon Press ([www.beaconpress.co.uk/](http://www.beaconpress.co.uk/)).

<sup>22</sup> See Pierce B, Roche P, Chater N (2002) *Sustainability pays*, Co-operative Insurance Society, which draws on almost 400 separate research papers.

<sup>23</sup> [www.projectSigma.com/Guidelines/SigmaGuidelines.pdf](http://www.projectSigma.com/Guidelines/SigmaGuidelines.pdf)

<sup>24</sup> There is no simple SD business model. The DTI-funded Sigma project offers some useful guidelines. For effective practice see Martin *et al.* (LSDA 2004) *Contributing to sustainable development centres of vocational excellence*.

<sup>25</sup> The published terms of reference ([www.dfes.gov.uk/skillsstrategy/subPage.cfm?action=skills.t](http://www.dfes.gov.uk/skillsstrategy/subPage.cfm?action=skills.t) or ) make no specific reference to ESD.

<sup>26</sup> Revised from the Learning and Skills Research Centre research question.

<sup>27</sup> eg Wessex Water ([www.wessexwater.co.uk/](http://www.wessexwater.co.uk/))

<sup>28</sup> Business annual reports usually focus on performance against a single, financial bottom line (profit/loss). Some companies are now reporting performance against a triple bottom line also measuring social and environmental costs.

<sup>29</sup> Recent research shows that distance learning courses on average involved nearly 90% less energy consumption and produced 85% less CO<sup>2</sup> emissions per student per 10 CAT points than full-time campus-based courses. Rob *et al.* (2002). *Towards sustainable higher education* <http://technology.open.ac.uk/technofile/tlinks.htm>

<sup>30</sup> [www.successforall.gov.uk/](http://www.successforall.gov.uk/)

<sup>31</sup> [www.eauc.org.uk/](http://www.eauc.org.uk/)

<sup>32</sup> [www.pp4sd.org.uk/](http://www.pp4sd.org.uk/)

<sup>33</sup> [www.wwf.org.uk/core/about/ta\\_0000000482.asp](http://www.wwf.org.uk/core/about/ta_0000000482.asp)

<sup>34</sup> For the 'participatory research' role of teachers and trainers in ESD curriculum reform (see Sterling 2001; Scott and Gough 2004; Corcoran and Wals 2004).

<sup>35</sup> See note 2.

<sup>36</sup> Similar ideas on curriculum design can be found in the NCFE Foundation Certificate in sustainable development and the 1999 report from the Youth Affairs Unit of De Montfort University *Youth work and learning for sustainable development*.

<sup>37</sup> DEFRA (1998). Sustainable Development Education Panel interim report (September 1998). Report to DfEE/QCA. At [www.defra.gov.uk/environment/sustainable/educpanel](http://www.defra.gov.uk/environment/sustainable/educpanel)

<sup>38</sup> See [www.open2.net/systems](http://www.open2.net/systems)

<sup>39</sup> NFER 2004. Citizenship education longitudinal study: second annual report: First longitudinal survey: *Making citizenship education real*. RR531

<sup>40</sup> LSDA (2004) *Interim report of the Working Group on 14–19 reform. An LSDA paper on the place of citizenship within the proposals*. At [www.lsda.org.uk/pubs/dbaseout/download.asp?code=Resp1419RefCitizensh](http://www.lsda.org.uk/pubs/dbaseout/download.asp?code=Resp1419RefCitizensh)

<sup>41</sup> Yarnitt M (2004). *LSDA reports: Regeneration and all that: Learning and skills and sustainability*. This also applies to the learning communities that exist in education and training organisations.

<sup>42</sup> Ofsted (2003). *Taking the first steps forward – towards an education for sustainable development*. HMI 11658.

<sup>43</sup> Student force for sustainability is currently developing a website for students seeking roles in environmental management and sustainable development ([www.studentforce.org.uk/](http://www.studentforce.org.uk/)).