

*Review*

## **Hard Times in Higher Education: The Closure of Subject Centres and the Implications for Education for Sustainable Development (ESD)**

**Brian Chalkley**<sup>1</sup> and **Stephen Sterling**<sup>2,\*</sup>

<sup>1</sup> Faculty of Science and Technology, University of Plymouth, Plymouth, PL4 8AA, UK;  
E-Mail: bchalkley@plymouth.ac.uk

<sup>2</sup> Centre for Sustainable Futures, Directorate of Teaching and Learning, University of Plymouth, Plymouth, PL4 8AA, UK

\* Author to whom correspondence should be addressed; E-Mail: stephen.sterling@plymouth.ac.uk;  
Tel.: +44-1752-588898.

*Received: 28 February 2011; in revised form: 8 April 2011 / Accepted: 15 April 2011 /*

*Published: 18 April 2011*

---

**Abstract:** Within many British Universities and, indeed, across higher education internationally, how best to provide education for sustainable development (ESD) has become an increasingly important issue. There is now a widespread view that higher education sectors have a key part to play in preparing societies for the transition to a low carbon economy and the shift towards more sustainable ways of living and working. In the UK, a leading role in this field has been played by the Higher Education Academy and especially its network of 24 Subject Centres, each of which promotes curriculum enhancement in a particular discipline area. The mission of the Higher Education Academy has been to help raise the overall quality of the student learning experience across all disciplines and all Higher Education institutions (HEIs). As part of promoting and supporting many kinds of curriculum innovation and staff development, the HE Academy has championed the cause of ESD. Now, however, as a result of government spending cuts, the Academy is facing severe budget reductions and all its Subject Centres are soon to close. At this pivotal moment, the purpose of this paper is, therefore, to review the HE Academy's past contribution to ESD and to explore the likely future implications of the demise of its Subject Centres. The paper ends by outlining some ideas as to how the ESD agenda might be advanced in the post-Subject Centre era, in the light of the Academy's intention to support subject communities under its new structure. The paper has been developed

through participation in key committees, engagement with Academy and Subject Centre staff, as well as through a literature review.

**Keywords:** education for sustainable development (ESD); the higher education academy; subject centres

---

## 1. Introduction, Context and Aims

The reasons why higher education in the UK, as elsewhere, has recently shown a much strengthened interest in education for sustainable development (ESD) are not hard to find. Environmental and other sustainability issues have moved from the margins towards the mainstream of public debate and government policy. Indeed, there is now considerable public and media interest in issues such as climate change, energy resources, population growth, water shortages, land degradation and increasing levels of global socio-economic inequity. Put succinctly, there is a growing sense that humanity needs to live more lightly on the planet and to give greater consideration to the needs of future generations—ideas which lie at the heart of the sustainability concept [1,2].

Against this backcloth, it is not surprising that higher education is responding by focusing more of its research on environmental and sustainability problems and by adjusting its courses and curricula to acknowledge the importance of producing graduates who can help lead and contribute to the transition to a low carbon economy. There is, of course, a long way to go before sustainability ideas genuinely underpin and pervade the vision, ethos and day-to-day practice of most Universities but there is no denying a noticeable groundswell of interest in ESD and its increasingly prominent profile [3].

In 2005 the Higher Education Funding Council of England (HEFCE) produced its first policy on sustainable development [4], a lead later taken up by other parts of the UK. The Welsh Assembly produced a ‘Strategy for Action’ for what is termed ‘ESDGC’ (Education for Sustainable Development and Global Citizenship) across all phases of education wherein ‘HE has a key role’ (p. 29) [5], whilst more recently, the Scottish Government published an action plan reviewing progress during the UN Decade of Education for Sustainable Development, and setting actions for the forthcoming years ‘to help ensure that education for sustainable development is truly embedded in all areas of education throughout Scotland’ (Scottish Government) [6].

Indeed, for some years Universities in many parts of the world have been producing declarations and promoting conferences in support of ESD [7]. This international dimension has been further strengthened by the United Nations Decade for ESD 2005-14, for which UNESCO is the lead agency. The UN Decade (DESD) aims to promote, at all levels of education, a commitment to inter-generational responsibility, social and economic justice and a respect for the earth’s diverse ecosystems. As part of their contribution to the UN Decade, Higher Education Institutions (HEIs) are called on to undertake both teaching and research on sustainability. They are also encouraged to provide practical leadership through modeling good practice in areas such as their own energy use, carbon emissions, procurement policies, recycling and campus management [8,9].

In England, HEFCE has clearly set out its commitment to these agendas. Its 2005 policy was based around the objective that over a ten year period the higher education sector should become recognised

as a major contributor to society's efforts to achieve sustainability. It argues that higher education's most important contribution should be through the production of graduates with the knowledge, skills and values to help lead the necessary changes in the way we live and work. In giving this level of priority to teaching and the curriculum, the HEFCE policy and action plan (lightly revised in 2009) makes clear that the Higher Education Academy and its Subject Centres are seen as the principal delivery mechanism. HEFCE itself does not have the staff resources, expertise or mandate to implement the ESD agenda and so it has looked to the Academy to take the lead in encouraging Universities and disciplines to engage. Moreover, HEFCE is sensitive to the political dangers of being seen to espouse too directly an area of work which critics might regard as controversial and too close to "green" politics and campaigning, and also because UK Universities guard jealously their autonomy in matters related to what and how they teach. Given that HEFCE is, therefore, reluctant to "interfere" in the curriculum, the Academy (for which it is the principal funder) is seen as an "arm's length" organisation which is well placed to promote ESD, alongside, of course, other priority areas such as graduate employability, e-learning and new approaches to student assessment and feedback.

The next parts of this paper, therefore, seek to outline and review critically the ESD contribution which has been made by the HE Academy and in particular by its Subject Centres, and propose steps that might be taken to ensure that ESD is supported in what may be regarded as 'hard times' in the sector given current funding cuts. In doing so, however, it is important to acknowledge at the outset that the Academy has not been the only player in this field, nor indeed was it the first. For example, in the late 1990s there was a UK government-funded ESD initiative run by Forum for the Future, known as HE21 which focused on promoting degree-level change in a small number of pilot disciplines. This was followed soon afterwards by the Forum's Higher Education Partnership for Sustainability (HEPS) which involved 18 UK Universities and covered both academic and also "managerial" issues such as reducing HEIs' expenditure on energy. Whilst neither of these early projects had major positive nor lasting impacts on teaching or courses, they opened the door for later ESD initiatives [10]. Amongst these, it should be noted that two of the UK's 74 Centres for Excellence in Teaching and Learning (CETLs) which operated from 2005–2010 were entirely focused on ESD. The CETL programme involved HEIs in competing to demonstrate their excellence in particular aspects of teaching and learning, with the reward being a grant of up to £4 million to enable each chosen institution to develop further its expertise in its nominated area(s). The two Universities which were successful in their claims for excellence in ESD were Plymouth and Kingston, whilst Gloucestershire also won a CETL with a significant ESD element. Amongst other developments one should also acknowledge the work of some of the professional bodies, such as the Royal Institute of British Architects (RIBA), and Engineering Council who have actively encouraged degree courses to address sustainability issues. However, although the ESD higher education landscape is complex and has attracted the attention of a number of different organisations, in recent years the lead national agency in terms of teaching and learning support has, without doubt, been the HE Academy.

## **2. The ESD Work of the HE Academy and Its Subject Centres**

The HE Academy, whose headquarters are based at the University of York, has a UK-wide remit to enrich the quality of the student learning experience. In helping Universities and discipline-based

communities to enhance the standards of teaching, it has sought to raise the profile and status of teaching in higher education, to professionalise the development of HE staff, to share good practice in all areas of teaching, to promote pedagogic research and to encourage higher education in addressing key policy agendas, including ESD. It has typically had an annual budget of well over £20 million of which about 50–60 percent has been devoted to its network of Subject Centres, whose role is to help lead change and support individual academics, subject departments and communities of practice in the disciplines. Such support includes websites, newsletters, publications, briefings and research outputs, learning and teaching guides, case studies, staff development programmes, and collaborative partnerships. Each discipline, or cluster of cognate disciplines, has its own Centre, typically employing about six staff and with an annual budget of about half a million pounds. Although each Centre is hosted by a particular HEI (or in some cases an HEI hosts two or more) their remit is always UK-wide in scope. A full listing of the Centres and their locations is available on the HE Academy website (<http://www.heacademy.ac.uk>) which also provides a means to access each of the Centres and find out more about their work.

Although a small number of individual Subject Centres had been working on ESD earlier, it was in January 2005 that the Academy, via the Subject Centres, launched its ESD Project and made it a special theme within its overall programme of work, with £100k funding from HEFCE. An audit of subject communities was carried out which showed that ESD was still very much a minority area and that engagement was highly uneven across the disciplines. Nonetheless, there were already signs of a growing interest. This 2005 audit report [11] was being undertaken at about the same time as HEFCE was beginning to prepare its own policy statement on sustainability which identified the Academy and its Subject Centres as the key agencies through which Universities and discipline-based communities would be helped to engage with the ESD agenda.

Encouraged by HEFCE's support, the HE Academy's ESD Project identified its overall aim as:

‘to help institutions and subject communities develop curricula and pedagogy that will give students the skills and knowledge to live and work sustainably’.

This aim translated into three objectives:

- to *research and support* the development of ESD in the HE sector, particularly within subject communities;
- to *build capacity* amongst individuals, subject communities and institutions to embed ESD in curricula and pedagogy; and
- to assist the *coordination and dissemination* of policy, research and practice relating to ESD in institutions, the Higher Education Academy and the wider field.

These aims and objectives were later adopted by the Academy as part of its overall commitment to ESD as a key priority. However, it is important to state that in the early years, the Project's energy came from outside the Academy's central operation, and was driven by enthusiasts from the Subject Centre community, giving rise to a wide range of activities in support of these aims. The great majority of the Subject Centres have been actively engaged with ESD, many on a continuing or regular basis, however it is also fair to say that engagement has been uneven both across and within disciplines. Nevertheless, Sterling and Witham [12] have described the contribution of the Subject Centres as “a critically important and fundamental part of the ESD Project”. To give a few selective examples of some

Subject Centre's activity, the Bioscience Subject Centre designed a curriculum audit tool for ethics and sustainability; the Engineering Subject Centre worked in partnership with the Massachusetts Institute of Technology to develop a suite of ESD resources; the English Subject Centre helped to design staff guidance on eco-criticism and ESD; the built environment Subject Centre (CEBE) and Engineering Subject Centre worked with professional bodies; and the Centre for Geography, Earth and Environmental Sciences (GEES) ran a series of ESD workshops at GEES departments in HEIs in many parts of the UK (provided in partnership with Plymouth's ESD CETL, the Centre for Sustainable Futures); the Psychology Subject Centre published a report on psychology and ESD; the Education Subject Centre ESCalate developed a comprehensive website on ESD resources; and the centre for History, Classics and Archaeology produced a sustainability guide for archaeologists.

In addition, the Subject Centres have run small-grants programmes, many of which have been used in part to support discipline-based ESD projects within particular HEIs. Many have regular journals which have included articles on ESD and some have also run their own ESD conferences/workshops or provided keynote speakers at events run by other interested organisations. However, it would be wrong to convey the impression that Subject Centres have given a special pride of place to ESD. Indeed, in a recent booklet celebrating examples of Subject Centre activities, what is striking is how much they have also been involved in a wide range of other curriculum and staff development initiatives [13]. It is also important to note that whilst individual Subject Centres have evaluated the impact of their project grants, no overall independent evaluation of the ESD related work of the Subject Centres has been undertaken so it is not possible to point to a substantive analysis regarding their impact other than known effects and positive feedback from practitioners across the sector.

Alongside the work of the Subject Centres, the Planning Group running the Academy's central ESD Project has itself funded 25 curriculum initiatives through its own small/mini grant scheme, costing some £44 k in total. Further, to support the capacity building objective, it organised a series of "whole institution" ESD discussion events, drawing together participants from a variety of different disciplines, at the University of East Anglia, the University of Gloucestershire, Harper Adams University College, UHI Millennium Institute and Queen Margaret University, Edinburgh. These events have made a significant difference to further embedding sustainability in teaching and learning at these institutions [14]. In addition, the Project has run national and regional conferences including on interdisciplinarity and sponsored ESD-related research including an investigation (undertaken by StudentForce for Sustainability) into the relationship between graduate employability and sustainability and exploring the extent to which the "greening" of business is leading companies to recruit more environmentally responsible graduates [15]. Most recently, the Project commissioned national research through the National Union of Students, which has looked at first year attitudes towards, and skills in, sustainable development. These research initiatives reflect the Project's concern to develop research where gaps and needs are identified.

The Project's third objective—coordination and dissemination—has been particularly important and effective, judging by take up and feedback from the sector. To encourage the sharing of practice and information, the ESD Project has a website (<http://www.heacademy.ac.uk/esd>) a bi-monthly e-Newsletter and weekly e-Bulletin, and co-hosts the academic network SHED (Sustainability in

Higher Education Developers) with the national organisation EAUC (Environmental Association for Colleges and Universities).

As regards coordination, another key role undertaken by the Academy ESD Project has been bringing together and networking representatives from other organisations who share an interest in this agenda, for example, EAUC, Professional Practice for Sustainable Development (PP4SD), Forum for the Future and the two ESD CETLs at Plymouth and Kingston. This coordinating function has also facilitated the sharing of practice and “intelligence” across the Subject Centres who throughout have been the main “grass roots” engines of activity and delivery. Indeed, many of the ESD Project’s central services (such as the website, e-Newsletter and conferences) have depended in no small measure on information and expertise provided by Subject Centres; moreover Subject Centre staff made up the majority of the membership of the ESD Project Planning Group. The collaborative approach reflected by the Subject Centres and the central ESD Project makes it difficult to separate out their specific effect on the progress of ESD in the sector, as much work was undertaken with and through other players: however the loss of the Centres will undoubtedly leave a significant gap in this regard.

### **3. The Implications of Subject Centre Closure**

In November 2010, the Academy announced its decision to close all the Subject Centres with effect from the summer of 2011 (albeit a small amount of work will continue for a few months afterwards in order to harvest their learning resources, publications and other useful information sets.) The Academy says that it remains committed to the principle of working with the disciplines and that intends to appoint “Discipline Leads” who will coordinate staff and curriculum development work in their subject area(s), as well as a network of “Academic Associates” and consultants. However, given that most Subject Centres had six or more staff, these arrangements (even with central administration support at York) makes it clear that only a fraction of the previous work is likely to be continued. Not surprisingly therefore, the decision to shut the Subject Centre network has been controversial. Following the 2007 independent evaluation of the Academy (conducted by Oakleigh Consulting Ltd) [16] the Subject Centres were widely considered to be its “flagship” and the area of its work most valued by HE practitioners. However, faced with a one-third cut in its budget and the resulting need for major reorganisation, the Academy has opted for a unitary structure with most staff and activities to be centered at its York headquarters. The Academy has pledged to continue to work with discipline-based communities but the scale of activity in this area will be greatly reduced and it seems inevitable that the skills, expertise and experience of most Subject Centre staff will be lost. In future, promoting curriculum change through the disciplines and their academic staff seems likely to be much more difficult with respect not only to ESD but also in the many other areas of curriculum innovation in which Subject Centres have worked.

For this reason the closure of the Subject Centre network is likely to have damaging consequences for ESD which will set back the task of producing graduates with the knowledge, skills and values to contribute effectively to the transition towards a low carbon economy and more sustainable society. Academics commonly define themselves by their affiliation to a particular discipline and this is a principal reason why discipline-focused staff development can be especially effective. In order to engage with a particular generic theme (such as sustainability or graduate employability), academics need to be sure of its relevance to their subject and that it can be addressed within their discipline

without distorting the subject-based curriculum. The great advantage of the Subject Centres, as confirmed by the 2008 Oakleigh evaluation, has been their capacity to understand and align with the culture, expectations and needs of individual disciplines. (And it is for this reason that the German higher education sector is currently establishing its own Subject Centre network, with three—Engineering, Medicine and Maths—already in operation.). In the case of ESD, the Subject Centres, working in partnership with their discipline-based communities, have been producing a valuable supply of ideas and resources which connect ESD to the subjects. Table 1 provides a very basic illustration of the opportunities for teaching sustainability-related topics and issues in a wide range of disciplines—an important task because society’s transition towards sustainability cannot be left to a handful of sustainability specialists but will require a broad transformation affecting all sections of society and demanding contributions from a wide range of professions and organisations. Indeed, the fact that the Subject Centres between them link to the full spectrum of disciplines and professional areas means that their demise will be widely felt.

**Table 1.** ESD teaching opportunities in a sample of disciplines.

•	Agriculture e.g., organic food and sustainable agriculture
•	Architecture e.g., low energy design
•	Biology e.g., ecology and conservation
•	Computing e.g., IT and energy savings
•	Economics e.g., the costs of climate change
•	Engineering e.g., coastal defences
•	History e.g., rise and fall of civilisations
•	Law e.g., environmental law
•	Philosophy e.g., ethics and nature
•	Politics e.g., green politics
•	Sociology e.g., consumerism
•	Tourism e.g., green travel

The Subject Centres have provided not only leadership, resources and expertise for their individual disciplines; in addition, many of them have come together to support and invigorate the Academy’s central ESD Project and its Planning Group. Without Subject Centres, this Group will cease to exist. Hitherto, the Subject Centres have given the Academy its principal means of reaching academic staff and their courses and students, and have often been key participants in national ESD conferences and workshops. Certainly, for HEFCE, the demise of the Subject Centres means the loss of an important delivery vehicle for its national sustainability strategy. Moreover, the decision to close Subject Centres follows closely on from the ending of the two ESD CETLs at Kingston and Plymouth. (The five-year funding period for the CETL programme as a whole ended in the spring/summer of 2010.) Although both ESD CETLs had as their first priority the promotion of ESD within their own institution, they also contributed significantly at the national level and actively supported the work of the Academy and the Subject Centre network.

All of this appears to add up to a rather gloomy outlook for the future of ESD in UK higher education; not least because as Universities enter a period of budgetary cuts and uncertainties, their focus is perhaps likely to be on financial savings rather than curriculum enhancements. However, while

acknowledging the legitimacy of these concerns, it is important not to overstate the threat to ESD or to exaggerate the dangers. Indeed, as outlined below, there are a number of reasons for believing, perhaps tentatively, that ESD can still make significant progress even without the support of Subject Centres.

The first is that, thanks in part to the work of the Academy and its Subject Centres, the position of ESD in higher education is now more substantial and secure. There are more HE teaching guides and resources on ESD, with a 2010 compendium including chapters from seven Subject Centres which track curriculum progress in their disciplinary areas [17,18]. Most UK Universities are now more strongly committed to sustainability, as evidenced, for example, by its increasing inclusion in HEIs' teaching and learning policies and corporate strategies. Although in practice the level of commitment is, of course variable, it has certainly grown. Increased institutional engagement, locally driven, could, therefore, help to compensate for the loss of the Subject Centres. Moreover, other national initiatives such as the Green Gown Awards ([http://www.eauc.org.uk/green\\_gown\\_awards](http://www.eauc.org.uk/green_gown_awards)) and Universities that Count (<http://www.eauc.org.uk/utc>) are in effect placing pressure on HEIs to continue to raise their game. In particular, the People and Planet League table, which annually rates UK HEIs on a series of "green" indicators, has attracted considerable media attention, with the result that Vice-Chancellors can no longer afford to ignore it. In addition, there is a variety of national organisations and initiatives seeking, among other things, to promote ESD; these include the Environmental Association of Universities and Colleges (EAUC), StudentForce for Sustainability, and Forum for the Future. Many professional bodies and associations are also active in this field, whilst a number of individual universities continue to set the pace for the rest of the sector. For all these reasons, the loss of one key player, namely the Subject Centre network, although a significant setback, will certainly not be terminal. At the same time, the undoubtedly important role that the Academy ESD Project has played in helping link and coordinate the ESD movement across the sector is likely to be much missed unless the Academy can find other equally effective mechanisms by which this work can continue. Most recently, the Academy has announced that it is continuing its identification of ESD as one of its key themes: this of course is both welcome and important.

#### **4. Prospects and Proposals**

This article is being written within a few months of the decision to close the Subject Centres and it is obviously too soon to formulate detailed views on what will or should happen now to ensure that the momentum behind ESD does not falter. However, it is hoped that this paper will contribute to the discussions which now need to take place, both within and beyond the Academy. These discussions will, of course, have to span all the work undertaken by the Subject Centres and will include how best to support not only ESD but also other key curriculum areas such as internationalisation, assessment, employability and research/teaching relationships.

At the time of writing, it is by no means certain what level of resource the Academy will allocate to discipline-based, or indeed whole institutional work or how exactly this will in future be organised and staffed. In particular, it is not clear how the new system of Discipline Leads will operate or precisely how much support they will receive from the Academy's York headquarters which itself is undergoing major reorganization. Given these uncertainties, the next year or so is going to be a critically important

period for planning and change. The text below, though not intended in any way to be comprehensive, proposes a number of key action areas for ESD:

- An immediate priority will be to ensure a clear and prominent voice for ESD within the Academy, as well as maintain a monitoring role and critical intelligence regarding the state of play nationally. The Academy ESD Project has been advised by a Sustainable Development Advisory Group made up of experts in the field. This Group will need to bring together supporters and advocates in HEIs and other relevant organisations to continue to uphold the case for on-going Academy support for ESD. Not least, whilst Subject Centres will be lost, it is vital that the Academy is seen to continue to provide a lead and a mandate for ESD in teaching and learning. Moreover, the Academy needs to recognise ESD not as a separate agenda, but an orientation which is very close to and enriching its mission to promote quality in higher education provision. The current consultation on the UK Professional Standards Framework for teaching and supporting learning in higher education, gives some hope in this regard, although the consultative document does not fully grasp the broader significance of ESD.
- It appears that the current Academy Sustainable Development Advisory Group will continue. It is important that this is maintained by the Academy to offer expert advice, not least in the absence of Subject Centres' expertise. New members, for example, representing different professions and employment sectors and also different kinds of university might be invited. Most HEIs belong to an association which reflects their mission, key characteristics and values: for example, many of the most prestigious, research-led Universities belong to the Russell Group, whereas many business-orientated institutions belong to the University Alliance. There are currently six of these "mission groups" and ensuring in future that each is represented on the Advisory Board would be useful politically, not least in terms of raising ESD's profile in different kinds of HEI.
- In order to maintain links with the disciplines, it will be important to capture the ESD publications, learning resources and case studies from the individual Subject Centres before they close and also to gather lists of ESD enthusiasts and champions within the various subject areas. To a degree this is already underway. In addition to assembling documents, information and "intelligence" from the Subject Centres, it will be important to build direct relationships with the new Discipline Leads, and with relevant subject associations and professional bodies. Together, they could perhaps, to a modest extent, help to fill the gap left by the network's demise. Given, however, that overall it will in future be much more difficult to promote curriculum change and ESD through the disciplines, an alternative is to work directly with HEIs and to encourage them to strengthen their policies and practices in this area. As indicated earlier, the Academy has already undertaken some work of this kind and there are now plans to focus more on whole-institutional approaches through the "Green Academy" programme that is being successfully piloted in 2011. This builds on the well-established Change Academy framework with an emphasis on ESD and the sustainable university. In the Change Academy model (funded by HEFCE but part delivered through the Academy), Universities can prepare a bid for support which focuses on a key development area nominated by the institution. If the application is successful, the Change Academy process supports a cross-institutional team and

provides them with the space and time (including a substantial residential component) to plan for change. The “Green Academy” is intended to mirror this process and a pilot of this ESD version with eight Universities is already underway. Encouragingly, the pilot programme has been oversubscribed, but it will obviously be important to evaluate it very carefully and amongst other things to consider how far it can reach the disciplines and provide at least a partial substitute for the activities previously undertaken through the Subject Centre network.

- A considerable part of the work of the Subject Centres has focused on particular initiatives, courses or case studies. Although the “grass roots” approach has its benefits, looking ahead to the forthcoming period of HE financial austerity, it could be more cost effective to adopt a deliberately strategic or macro-level approach, whilst maintaining key dissemination mechanisms such as the Academy ESD website and the SHED network. An example could be working more often in partnership with the various HEI “mission groups” referred to earlier (such as the Russell Group), and with various HE professional organisations representing groups such as education/staff developers, registrars, heads of teaching quality assurance units, pro-Vice Chancellors for Learning and teaching, the Quality Assurance Agency (QAA), estate and procurement managers, Trade Unions, the National Union of Students (NUS), the Association of Graduate Recruiters and, of course, the subject-based professional associations and bodies. Producing sustainability-literate graduates is arguably more readily accomplished where all the main HE practitioners and stakeholders are engaged and where sustainability is part of the HEI culture.
- Academics and institutions committed to ESD will need to encourage the funding councils to continue to provide funding, mandate and leverage to support ESD across the sector. Funding council endorsement in England, Wales and Scotland has been crucial to the recognition, standing and take-up of ESD in recent years.

## 5. Conclusion

Some ten years ago, ESD was not part of the landscape or part of the vocabulary used in higher education teaching and learning circles. Now, the acceptance—if not always the practice—of ESD is far more widespread amongst senior managers and practising academics, and the Academy Subject Centres and ESD Project can take well deserved credit for helping drive and support this change. Although the loss of the Subject Centres represents a significant setback and challenge to ESD (and indeed to many other major teaching and learning agendas), there are still many avenues via which ESD can be championed and through which HE can succeed in producing the sustainability literate graduates the future will require. Over the years, it has been the experience of the Academy ESD Project that there has been, and remains, a growing demand for support for sustainability in the curriculum and in organisational learning in the HE sector. As outlined in this paper, the Subject Centre network has played an active and important role in promoting and embedding ESD but neither its closure nor the impending period of financial cuts and uncertainties should be used as excuses for fossilising the curriculum or for parking ESD in an academic “lay-by”.

The Subject Centres will soon be gone but the need for sustainability-literate graduates will not: indeed this need can only grow. Looking back over the past five years, whilst the national mandate for

ESD has been quite strong at the top, the energy, ideas and initiatives came from a devolved network of practitioners including key Subject Centre members. In the past two years, the Academy at the centre has lent much more support. With the demise of the Subject Centre network however, a question of practical leadership, innovation and coordination now arises—at all levels. It is essential, therefore, that with the advent of its new structure, the Academy's support for ESD is publicly articulated and manifested in the policies and programmes the Academy champions and operates across the sector, in tandem with other key players. The challenge now is how to maintain momentum and profile, and help ensure a still wider and deeper engagement in higher education.

### Acknowledgements

Our thanks to Stephen Martin, the Higher Education Academy Sustainable Development Advisory Group, who encouraged us to write this article at a time of significant change in the HE Academy's programme.

### References

1. Dobson, A.; Bell, D. *Environmental Citizenship*; MIT Press: Cambridge, MA, USA, 2006.
2. Robertson, M. *Sustainable Futures*; ACER Press: Camberwell, Victoria, Australia, 2007.
3. Gough, S.; Scott, W. *Higher Education and Sustainable Development: Paradox and Possibility*; Routledge: Abingdon, UK, 2007.
4. HEFCE. *Sustainable Development in Higher Education: Strategic Statement and Action Plan*; HEFCE: Bristol, UK, 2005; Available online: [http://www.hefce.ac.uk/pubs/hefce/2005/05\\_28/](http://www.hefce.ac.uk/pubs/hefce/2005/05_28/) (accessed on 20 December 2010).
5. Welsh Assembly Government. *Education for Sustainable Development and Global Citizenship: A Strategy for Action—Updates (January 2009)*; Welsh Assembly Government: Cardiff, UK, 2009; Available online: [http://www.esd-wales.org.uk/english/ESDreports/pdf/D674\\_English.pdf](http://www.esd-wales.org.uk/english/ESDreports/pdf/D674_English.pdf) (accessed on 23 December 2010).
6. The Scottish Government. *Learning for Change: Scotland's Action Plan for the Second Half of the UN Decade of Education for Sustainable Development*; The Scottish Government: Edinburgh, UK, 2010; Available online: <http://www.scotland.gov.uk:80/Publications/2010/05/20152453/0> (accessed on 23 December 2010).
7. Haigh, M. Greening the university curriculum: Appraising an international movement. *J. Geogr. Higher Educ.* **2005**, *29*, 31–42.
8. UNESCO. *Education for Sustainable Development: United Nations Decade 2005–2014*; UNESCO: Paris, France, 2004.
9. UNESCO. Bonn Declaration. In *Proceedings of World Conference on Education for Sustainable Development*, Paris, France, 31 March–2 April 2009; Available online: [http://www.esd-world-conference-2009.org/fileadmin/download/ESD2009\\_BonnDeclaration080409.pdf](http://www.esd-world-conference-2009.org/fileadmin/download/ESD2009_BonnDeclaration080409.pdf) (accessed on 23 December 2010).
10. Sterling, S.; Scott, W. Higher education and ESD in England: A critical commentary on recent initiatives. *Environ. Educ. Res.* **2008**, *14*, 386–398.

11. Dawe, G.; Jucker, R.; Martin S. *Sustainable Development in Higher Education: Current Practice and Future Development*; Higher Education Academy: York, UK, 2005.
12. Sterling, S.; Witham, H. Pushing the boundaries: The work of the Higher Education Academy's ESD Project. *Environ. Educ. Res.* **2008**, *14*, 399–412.
13. *Success Stories from the HEA Subject Centres*; Doyle, S., Ed.; Higher Education Academy Subject Centre for Materials: York, UK, 2010; Available online: <http://www.materials.ac.uk/resources/success-stories.pdf> (accessed on 18 December 2010).
14. Brooks, C.; Ryan, A. *ESD: Strategic Consultations among English HEIs*; Higher Education Academy's ESD Project, York, UK, 2008; Available online: [http://www.heacademy.ac.uk/ourwork/teachingandlearning/alldisplay?type=projects&newid=esd/esd\\_EnglishHEIs&site=york](http://www.heacademy.ac.uk/ourwork/teachingandlearning/alldisplay?type=projects&newid=esd/esd_EnglishHEIs&site=york) (accessed on 23 December 2010).
15. Cade, A. *Employable Graduates for Responsible Employers*; Student Force for Sustainability, Higher Education Academy: York, UK, 2008; Available online: <http://www.heacademy.ac.uk/assets/York/documents/ourwork/sustainability/EmployableGraduates2008.pdf> (accessed on 15 December 2010).
16. Oakleigh Consulting. *Interim Evaluation of the Higher Education Academy*; HEFCE: Bristol, UK, 2008; Available online: [http://www.hefce.ac.uk/pubs/rdreports/2008/rd02\\_08/](http://www.hefce.ac.uk/pubs/rdreports/2008/rd02_08/) (accessed on 15 December 2010).
17. Jones, P.; Selby, D.; Sterling, S. *Sustainability Education: Perspectives and Practice Across Higher Education*; Earthscan: London, UK, 2010.
18. Roberts, C.; Roberts, J. *Greener by Degrees: Exploring Sustainability through Higher Education Curricula*; University of Gloucestershire: Cheltenham, UK, 2007.

© 2011 by the authors; licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/3.0/>)