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'Greening' FE Professor Shirley Ali Khan curricula: a position paper

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Sustainability development definition

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Foreword

This paper is intended to stimulate FE sector debate about curriculum 'greening' - an area where little progress has been made to date. It broadly sets out the national position, draws attention to key achievements and identifies some of the areas of contention. It is an outcome of one of the LSDA's local sustainability projects which has been led by the Herefordshire and Worcester Local Learning and Skills Councils and the Pershore Group of Colleges.

The sustainability challenge for FE

The most significant, positive contribution an FE institution can make towards shaping a more sustainable future is through its students. The challenge is to develop in all students the ability to make choices and decisions which take account of sustainability principles and solutions. Developing this ability is an aspect of quality education and is in keeping with the repeated call of employers for sustainability literate employees.

Any attempt to communicate sustainability principles and solutions through FE programmes will be negated if, for example, the way a college chooses and uses resources and manages waste contradicts what is being taught. Colleges must simply practice what they teach if they wish to claim that they are taking their sustainability responsibilities seriously.

Context

International encouragements for an FE sector response

Johannesburg Earth Summit

At the 2002 Earth Summit in Johannesburg participating nations reaffirmed their commitment to the Rio principles and the full implementation of Agenda 21. They also signed up to an implementation plan which included a commitment to **'integrate sustainable development into education systems at all levels, in order to promote education as a key agent for change'**.

There is also a UN decade of education for sustainable development planned for 2005-2015.

NATIONAL ENCOURAGEMENTS FOR AN FE SECTOR RESPONSE

Government Sustainable Development Education Panel

The Panel was established in 1998 to consider sustainable development education in its broadest sense, in schools, further and higher education, at work, during recreation and at home; and to make practical recommendations for action in England. It ran for 5 years and, during its life, reported directly to the Deputy Prime Minister and the Secretary of State for Education and Employment. The Panel was chaired by Sir Geoffrey Holland, the Vice-Chancellor of Exeter University.

The Panel set further and higher education institutions (FHEIs) the following goals in the first of its five Annual Reports. By 2010 all FHEIs should

- be accredited to an internationally or nationally recognised sustainable development systems standard.
- have staff fully trained and competent in sustainable development.
- be providing all students with relevant sustainable development learning opportunities.

These goals are consistent with the largely unimplemented recommendations of the 1996 Environmental Responsibility Report (Toyne) Review and the 1993 Toyne Report (see Appendix I).

The Panel, in partnership with the Association of Colleges, produced 'Towards Sustainability: a guide for colleges' which included a set of headline sustainability indicators (please see Appendix II).

Before the end of its life (Feb 2003) the Panel drafted a national Sustainable Development Education Strategy which will be developed by officials and circulated for consultation.

When the Panel stood down in February 2003, the Environmental Audit Committee conducted an Inquiry 'Learning the Sustainability Lesson' to take stock. This prompted the Secretary of State for Education and Skills, Charles Clarke, (who is also the Department's 'green' minister) to develop a sustainable development education action plan for his own Department.

Learning and Skills Development Agency

The LSDA with the help of a core grant from the Learning and Skills Council, has taken a number of initiatives to encourage sustainable development responsibility in the post-sixteen sector.

In 2002 it hosted three national seminars, the content of which was summarised in a book called 'Learning to Last: skills, sustainability and strategy'. Around the same time it supported 11 college sustainability projects relating to both good-housekeeping practices and awareness raising. A second phase of 11 LSDA supported sustainability projects will be completed in 2003. Local Learning and Skills Councils were invited by LSDA to identify and work with collaborative partnerships to apply for project funding.

NCFE

In 2002 the NCFE launched its level one Foundation Certificate in Sustainable Development which it developed in partnership with the Environment Agency, Groundwork UK and the Black Environment Network. More recently a level two qualification has been developed and will be available in Autumn 2003. Both are designed to raise awareness of sustainable development. The learning can be evidenced through action at home, in the community and in the work place. Both programmes have been accredited by the Qualifications and Curriculum Authority and are part of the National Qualifications Framework.

Edexcel

Edexcel has produced specialist sustainable development units for its National Diploma and Higher National Diploma and Certificate in Agriculture, Animal Management, Countryside Management and Environmental Science. These are optional units.

THE CURRENT STATE OF PLAY

In 1996 the government reviewed the extent to which FHEIs were taking a strategic approach to 'greening' their curricula (the Toyne report review). It identified only six significant examples of good practice from the 756 institutions surveyed.

The national surveys conducted by the government's Sustainable Development Education Panel in partnership with the HE21 Project in 1999 on the extent to which sustainable development learning elements had been integrated in HE business, engineering, design and teacher education programmes revealed a general lack of any kind of strategic approach across all areas surveyed. Although there has been no equivalent strategic research relating to FE curricula, there is some evidence to suggest that the situation in FE is similar to that in HE. A trawl for good practice in the sustainable development education field in 2000, by the Association of Colleges, revealed little activity. Even amongst the LSDA best practice projects (see below) there are only a handful of pioneers experimenting in the curriculum 'greening' field. Neither is there any evidence of a consistent, strategic approach to integrating sustainable development education within the QCA national qualifications framework.

Whilst in the order of a fifth of colleges have policy commitments (some historic) to integrate either sustainable development or

environmental elements across their curricula, no one college can claim to be fully achieving this at present.

The evidence suggests that government recommendations relating to sustainable development education targeted at the FE sector have had little effect. A fully funded strategic support mechanism is needed to encourage and help FE institutions engage with the sustainability challenge.

KEY LESSONS LEARNT FROM PAST INITIATIVES TO ENCOURAGE FHE CURRICULUM 'GREENING'

The greatest collective achievement of the sustainable development education community over the last decade has been the identification of, and the establishment of consensus around, the common learning agenda for sustainable development, which broadly relates to the principles of sustainable development. The sustainable development community includes pioneering NGOs, specialist consultants, and FHE institutions.

The components of the common learning agenda for sustainable development are the same for both F&HE institutions. Which is why the summary of key initiatives are drawn from both sectors.

The Sustainable Development Learning Agenda

The common environmental learning agenda for the FHE sector began to be sketched out in the early nineties through initiatives such as:

- Greening the Curriculum (1991, Committee of Directors of Polytechnics)
- Towards Environmental Competence in Scotland (1991 Scottish Environmental Education Council/World Wide Fund for Nature)
- BTEC Environmental Initiative (1993, BTEC)

- Competencies of the environmentally educated teacher (1993, UNESCO)
- Taking Responsibility Series (1995, Council for Environmental Education)
- Environmental Integrity of GNVQ's (1995, National Council for Vocational Qualifications)
- Cross-curricular environmental education in further and higher education (1995, Institution of Environmental Sciences)

By the mid-nineties our understanding of the nature of the human response needed to protect the environment had shifted. To reflect this change in understanding, the language of environmental protection evolved into the language of sustainable development. By the late nineties a consensus had emerged within the sustainable development education community around the common learning agenda for sustainable development for FHEIs. The following key initiatives, undertaken during this period, broadly promote the same common learning agenda.

- Core sustainability learning agenda (1996, Environmental Responsibility Report Review)
- Core sustainability learning specifications (1999, HE21 Project/Sustainable Development Education Panel's specifications for business, design, teacher education and engineering)
- Core sustainability learning programmes (1997, The Natural Step; 1999, Professional Practice for Sustainable Development Programme)
- Sustainable Development Education Panel's submission to the Qualifications and Curriculum Authority on sustainable development education in the schools sector (1998)
- Generic sustainability unit for BTEC land-use programmes (2002, Edexcel)
- Core sustainability Guardian Standard (2002, Institute of Environmental Management and Assessment)

The learning agenda for sustainable development has two key elements

- sustainability principles
- sustainable development solutions

The common learning agenda relating to sustainability principles is relevant to all and is well defined. The depth to which these need to be understood will vary according to the level of the programme. We hear a lot about core/key/transferable skills but little about core/key/transferable knowledge - but this is what the common learning agenda for sustainable development is.

Sustainable development solutions will vary according to the level and nature of the programme - for instance the sustainable development solutions relevant to a farmer will be different to those relevant to an architect.

Feed-back from training programmes covering sustainability principles without reference to sector-based solutions reveal that individuals are left with the feeling that they know they should be doing something, but they have no idea what. The lesson is that sustainability learning at further, higher and professional levels must be solutions oriented and sector specific.

Work now needs to be done on sustainable development solutions relating to different educational and vocational sectors. It is difficult for lecturers to keep up to date in this fast moving field. As such, sector-based support units, which provide information, training and advice, would seem an appropriate development.

Terminology and definition

The term 'greening the FE curriculum' is probably the most elegant phrase to describe the idea of integrating appropriate sustainable development education elements into FE programmes whose main focus is not sustainable development. But the term has been frequently misinterpreted and has occasionally provoked quite a hostile reaction. One commentator feared that 'greening' the curriculum would open the gate to 'redding' and 'blueing' the curriculum. Some have interpreted 'greening' as prescribed content, whilst others interpret it narrowly in terms of environmental education, which gives no attention to economic, social, political and cultural dimensions.

When using the term 'greening' it is probably advisable to provide an explanation of the term. In this regard, the Sustainable Development Education Panel's definition of education for sustainable development may be of use.

'Education for sustainable development is about the learning needed to maintain and improve our quality of life and the quality of life for generations to come. It is about equipping individuals, communities, groups, businesses and government to live and act sustainably; as well as giving them an understanding of the environmental, social and economic issues involved. It is about preparing for the world in which we will live in the next century, and making sure we are not found wanting'.

Sustainable development education as a form of moral education

Sustainable development education is not like education relating to a profession or a vocation, nor is it like education relating to a particular interest, eg in history or botany or art. It is more fundamental. It may be likened to religious teaching - not in the sense of promoting faith in a particular deity, but in the sense that it encourages an exploration of how as individuals we ought to live and how as a society we ought to be organised.

The term 'ought' is currently suffering the stigma of political incorrectness. Over the last fifty years, our moral vocabulary, arguably our most valuable resource in thinking about the future, has been eroded. We live in a world where I ought has been replaced by I feel, I want and I choose. Obligations can be debated - feelings, wants and choices only satisfied or frustrated. Sustainable development education invites debate about obligation and restraint.

Like religious teaching, sustainable development education has the potential to form and transform personal behaviour and the way society is organised. It is prescriptive in terms of principles, but not in terms of practice. At the level of the individual this is a personal judgment and at the level of a society it is a political judgment.

The universal ambition and moral tone of sustainable development education - which seeks to help people and societies to realise their potential, without compromising the ability of future generations and societies to do likewise - seems to make academics very nervous. Sustainable development education challenges the idea of value-free education and it insists unapologetically on a moral base for the process of learning about the world and our role in it. It is explicitly value driven and, some say, so much the stronger and more inspiring for it.

Sustainable development education as an agent for change

If sustainable development were a mainstream concern, sustainable development education would be a simple matter of reinforcing what might be described as 'common sense'. The reality is that, despite increasingly impressive government rhetoric, sustainable development is still a marginal concern for most. It follows that sustainable development education has to be an agent for change - and this has profound implications for pedagogy.

The pedagogical challenge has not yet been fully grasped even by some of the best sustainable development educators in the system who tend to teach sustainable development through an analysis of the complex causes of problems and a consideration of the range of solutions available. It is an academic approach which seeks to engage the mind and not the emotions.

It will be uncomfortable for some to hear, but sustainable development education has to engage the emotions. Something beyond academic interest has to be sparked for behaviour to change. Politicians, religious leaders and radical NGOs fully recognise this.

Which is not to suggest that sustainable development educators should only focus on engaging the emotions or that engaging any kind of emotion will do. School teachers have been criticised for generating a pessimism about the future in the young by laying the horror of global disasters before them - the destruction of the rainforest; global warming; the holes in the ozone layer; biblical scale famine - with no discussion of global solutions.

But it does suggest that inspiration and motivation have a role, particularly in promoting a belief in the principles of sustainable development and a belief that one has a part to play in shifting society onto a more sustainable path. Judgments in relation to solutions require the engagement of the mind.

Sustainable development education as the context for developing skills

There has been some recognition that sustainable development issues provide an excellent context for the development of a range of skills - eg responsible citizenship skills; life skills; employability skills. Core knowledge and core skills make natural 'bed-fellows'. However, anecdotal evidence suggests that the skills learning outcomes and associated teaching tend to be better defined and delivered than sustainability learning outcomes and associated teaching. This relates back to staff capacity.

Integration v 'bolt-on'

Much time has been consumed debating whether sustainable development education should be integrated throughout mainstream educational programmes or delivered through specialist units. The debate has diverted energy away from the much more significant issues of pedagogy and appropriate content. Whether sustainable development education inspires and enables understanding which leads to action which contributes to sustainable development is much more dependent on how it is taught and whether it covers the necessary ground, than on how it is time-tabled.

When the sustainable development learning outcomes and appropriate pedagogies have been identified it becomes easier to see how programmes need to be adapted. A specialist unit could have a place in a curriculum 'greening' strategy for a

mainstream programme - but it is likely that other adaptations would also have to be made.

Capacity

There are very few mainstream FE lecturers fully competent and confident enough to deal with the sustainable development learning agenda. In fact, nationwide, there is only a small group of educators who can. Some of these are consultants, others reside in specialist FHE departments. It is ironic that specialist providers in the environment and sustainable development field are currently struggling to recruit students to their specialist programmes whilst at the same time, the massive challenge of 'greening' non-specialist programmes, which they are well placed to assist with, remains largely untackled. However until now, there has been no mechanism to enable the sector to tap into its own pool of sustainability educators and trainers to facilitate curriculum 'greening'.

The development of supporting teaching and learning materials can help, but only to a point. It is not possible to communicate and promote the principles of sustainable development well if they are not fully understood. There is a capacity building challenge which has not yet been faced up to.

Advocacy

As mentioned above, sustainable development is not yet a mainstream concern for most public and private sector institutions. Until it is, sustainable development advocates at practitioner and professional levels will be needed to help drive the mainstreaming process. This view is reinforced in the Sustainable Development Education Panel's fourth annual report. FE has a role to play in training advocates to facilitate the 'greening' of vocational practice.

Advocacy is a form of leadership which has persuasion and mediation at its core. Sustainable development advocates at a professional level would be skilled at resolving conflicts between and within organisations and communities of interest and at bringing people together to find solutions. They would be integrators able to look beyond obvious differences amongst organisations, sectors, disciplines, functions and cultures. They would be cross-fertilisers, bringing the best from one place to another. And they would be deep thinkers, able to conceptualise and communicate new possibilities.

Sustainable development advocates who have expertise relating to, and an understanding of the modus operandi of, a particular sector, as well as sustainable development knowledge and advocacy skills, have a 'way-in' to sector-based employment and sector influence. The employment and influencing opportunities for sustainable development advocates with no sector-based expertise are considerably less.

APPENDIX I:

ENVIRONMENTAL RESPONSIBILITY (TOYNE) REPORT & REVIEW

Environmental Responsibility (Toyne) Report

The Government White Paper ('This Common Inheritance' 1990), recommended that an expert committee be convened to consider the environmental education needs of the business community. The committee's report, 'Environmental Responsibility: an Agenda for Further and Higher Education', was published in 1993. The report's key recommendation states:

After consultation with its staff and students, every higher and further education institution should formally adopt and publicise, by the beginning of the academic year 1994/5, a comprehensive environmental policy statement, together with an action plan for its implementation.

The report made 26 other recommendations targeted at government, FHE institutions, funding councils and professional bodies. One of these recommendations was for a review progress after three years.

Environmental Responsibility Report Review (Toyne II)

The Environmental Responsibility Report Review was launched by two Secretaries of State from the Education and Employment and Environment Departments in 1996. The Review revealed that most of the institutions and organisations targeted in the 1993 Report, including government, had demonstrated 'considerable indifference' to its recommendations.

Only 114 respondents out of a possible 756 FHE institutions claimed to have environmental policies in place. Where policies existed, implementation was generally found to be at an early stage with most progress being made on the good housekeeping side, particularly in areas associated with obvious cost savings, such as energy efficiency or where the 'green' ticket could help institutions to introduce otherwise unpopular measures eg car parking charges. Little progress was found in areas such as purchasing.

As regards the curriculum, only 17 FHE respondents claimed to have set out in general terms what all their students needed to learn in order to be able to take account of sustainable development in their work and daily lives. Of these, less than half-a-dozen were making significant progress.

Toyne Review

Key Recommendations

- 1 Enabling responsible global citizenship (which is the outcome of sustainability learning) should be recognised as core business of learning institutions and a legitimate purpose of life-time learning;
- 2 Funds should be made available to establish a national programme to support the FHE sector's response to the challenge of sustainable development;
- 3 Within three years all FHE institutions should be either accredited to, or committed to becoming accredited to, a nationally or internationally recognised environmental management systems standard, such as the Eco Management and Audit Scheme;
- 4 Within three years all FHE institutions should have developed the capacity to provide all students with the opportunity to develop defined levels of competence relating to responsible global citizenship;
- 5 Those responsible for defining national standards relating to industrial and professional practice, and associated qualifications and standards, such as industry lead bodies and professional bodies, should ensure that appropriate reference is made to sustainable development issues;
- 6 Within three years all funding councils should introduce a mechanism for linking environmental performance to the allocation of funds, for example by introducing environmental criteria into existing quality assessment and inspection procedures.

APPENDIX II

FE SUSTAINABILITY INDICATORS

Headline Indicators

Economic

- Percentage of FT students who, by the end of their learning programmes, have been taught key sustainability concepts
- Compliance to a nationally or internationally recognised environment/sustainable development standard
- Percentage of students achieving qualifications who find full-time employment, or embark on further study, within six months of completing their programmes

Environmental

- CO₂ emissions per FTE per annum
- Percentage of FTEs daily journeys to the college routinely made by car
- Volume of water (litres) used per FTE per annum
- Key regional habitats/species actively stewarded
- Kg of waste per FTE per annum

Social

- Percentage of FT students gaining qualifications at 19
- Percentage of FTEs participating in local community activity relating to sustainable development (eg local learning partnerships, volunteering, national, regional and local committees)
- Percentage of FT students from disadvantaged groups

Strategic Management Indicators

- Publicly available sustainability policy covering all sites
- A sustainability related staff development programme
- A publicly available annual report, or section of the corporate annual report, relating to the college's sustainability performance
- Published sustainability objectives and targets relating to education, research, land use, procurement, resource efficiency, transport and waste management
- A senior sustainable development advocate to drive the implementation of the sustainability policy
- A team with representation from key stakeholder groups to steer the implementation of the sustainability policy
- A manual which documents responsibilities, practices, procedures and resources to ensure implementation of the sustainability policy
- An annual internal sustainability audit process

FTE = full time equivalent members of staff and students unless otherwise stated eg FT students, indicating students only

FE indicators taken from the Towards Sustainability guide for FE produced by the Sustainable Development Education Panel and the Association of Colleges

THE BULMER FOUNDATION

The Bulmer Foundation is a new sustainability charity formed by the Herefordshire based cider manufacturer HP Bulmer plc and the Bulmer family. Its vision is of a sustainable Herefordshire and its mission to catalyse a shift in people's values to favour more sustainable ways of living and working.

CARROT?

Carrot is a brand. The Bulmer Foundation is the steward of the Carrot brand. The brand is currently applied to initiatives undertaken with the Pershore Group of Colleges and Advantage West Midlands which contribute to creating a sustainable Herefordshire.

EXAMPLES OF CARROT INITIATIVES

Learning programmes

The Sustainable Development Advocacy Programme will be launched in October 2003. This will offer a challenging, masters level learning programme for twelve exceptional young people who will have studied or worked in the land based-sector, and is intended to equip them to become advocates for sustainable development in the land-based industry.

Demonstration

The 224 hectare Holme Lacy College Estate is being developed as a demonstration of best practice in sustainable land management. The Estate farm, Pound Farm, has recently achieved organic status and the adjacent woodlands and medieval deer park will be the subject of new management plans. Public awareness of the Estate's change programme is being encouraged through farm walks and plans for further tourism, waste management and direct marketing initiatives are being developed.

Commercial programmes

A rural 'Enterprise Zone' is currently being created at Pound Farm. The first phase refurbishment of the old farmhouse to create new offices and training rooms has been completed. The next phase, due for completion in autumn 2004, will include the renovation of redundant farm buildings to include food processing, business start up units, wood workshops, a training kitchen, shop, café and information centre.

Holme Lacy campus

Over time, the Holme Lacy College will be almost completely rebuilt using the best ecological design and locally sourced materials. The intention is for the College and Estate to become carbon neutral. Environmentally 'friendly' technologies will be introduced, and water and waste systems will be designed to integrate with the farm's composting and irrigation systems.

For further information about Carrot initiatives please contact:

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