

Education for Sustainable Development

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10 minute introduction

45 minutes group debate

15 minute reporting back



Surely bioscientists don't have to worry about sustainability?

In the last hour

the net increase in world population has been about 8400 people or 72,000,000 per year

at a world level we will have consumed about 4M barrels of oil of which the US will have used about 25%

And released about 2,800,000 metric tonnes of carbon dioxide



From the Biosciences benchmark statement.....

Preamble- a knowledge of biology is essential for a viable human future..... only then can we face the challenging social, ethical and legal problems posed by new developments such as stem cell cloning, gene patenting and gene therapy while working to maintain biodiversity and a stable and **sustainable environment.**

Subject knowledge-engagement with some of the current developments in the biosciences and their applications, and the philosophical and ethical issues involved. Awareness of the contribution of biosciences to debate and controversies, and how this knowledge and understanding forms the basis for informed concern about the quality and **sustainability of life;**

Sustainable Development

Brundtland Commission 1987: *Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs*

Examples of themes linked to SD: population growth; poverty; aids and disease control; health; empowerment of women; resource use; energy generation; recycling; climate change; environmental degradation; economic development; and technological development.

So likely to be links into ALL Bioscience degrees if we want to make them!

Education for Sustainable Development

2005 is start of UN decade of education in sustainable development

UK Government pushing G8 and EU SD agenda during its presidency

2003 DfES launch SD action plan

HEFCE preparing its plan for SD in Education

Draft argues “*greatest contribution HEIs can make to SD is by enabling students to develop new values, skills and knowledge, through developments in curricula and pedagogy*”



The HEA and Sustainable Development

100k to HEA to develop the ESD agenda

50k to subject centres for initial scoping re ESD



2.5K to Bioscience- to provide an overview of current inclusion of ESD in the Bioscience curricula



Survey of 150 Bioscience Departmental Representatives 33 responses (22 % response rate) plus 6 employers

An overview from departmental representatives survey

- 82% bioscience respondents thought it important for young people to have an understanding of sustainable development
- half of bioscience respondents considered that sustainable development should be a compulsory part of bioscience courses
- the other half were unsure or against its inclusion in the curricula!
- whilst staff had knowledge and skills to teach sustainable development more training and resources were suggested as a way of increasing teaching
- lack of time and finance were seen as problems to introducing or increasing teaching of sustainable development

The views of the employers

- half of employers considered it “very important” for graduates to have an understanding of sustainable development
- half of employers considered that graduates who had knowledge of sustainable development would improve their competitiveness
- all employers thought that graduates would need knowledge and skills of sustainable development



Where does this leave us?

Our Bioscience Advisory Group suggested we should keep a watching brief and to pull together existing resources via “sustainability webpages”

I would like to use the next 45 minutes to gather a more detailed impression of your views on: (in groups of 4 or 5....may be best to group into similar interests?)

1. Why it is or is not important for sustainability issues to be incorporated into your curricula
2. How are or could sustainability issues be incorporated into your modules/ degree programmes
3. What (realistic) resources could be provided to try and make the incorporation of issues into your degree programmes