GREENING BUSINESS

the ability to drive environmental and sustainability improvements in the workplace

Zoe Robinson, School of Physical and Geographical Sciences, Keele University

---

Introduction

The business sector accounts for a significant proportion of the UK's environmental footprint, in addition to having a major influence on wider social and economic sustainability issues both nationally and internationally. Making improvements in the environmental and sustainability performance of businesses and organisations is therefore crucial for achieving a more sustainable society. In order for employees at all levels to be able to contribute to making these improvements, a sustainability literate workforce is needed. This sustainability literacy must involve, alongside appropriate values and ethics, the practical knowledge, understanding and skills to drive positive environmental change within an organisation.

Sustainability issues are relevant to all organisations of all sizes and in all sectors. Increasingly, organisations themselves are demanding sustainability literacy skills for a wide range of roles and responsibilities. If learners can gain these skills they are therefore improving both their own employability as well as their ability to contribute to making their future workplace and society more sustainable. Yet despite this, and an ever-growing emphasis on employability within the education sector, there are currently few examples of sustainability literacy being addressed across the curriculum in mainstream education. This chapter describes how 'greening business' skills can be incorporated into the curriculum and gives some example exercises which can help learners gain those skills.

Integrating 'greening business' skills into the curriculum

In order to effectively contribute to driving environmental and sustainability improvements in their (future) workplaces, learners need to acquire knowledge, understanding, skills and experience in identifying opportunities for improvements and designing effective strategies for realising them. They also need skills in effectively and persuasively presenting the proposed changes, sometimes in difficult circumstances if the change goes against the ingrained culture of the organisation. Arguing persuasively requires an awareness of both the ethical and business case for improvements, and the benefits of, and barriers to, making those improvements. Helping students prepare to become effective change agents in their future working life involves introducing them to aspects such as the following within the curriculum:

> ➤ Environmental and sustainability legislative requirements (including national and international legislation), and the techniques that corporations frequently use to evade them (see Achbar et al 2005)
> ➤ The benefits of environmental and sustainability improvements to an organisation (e.g., financial savings; attracting and maintaining a high calibre, motivated workforce; customer/stakeholder expectations; accessing new markets; company image; creation of innovative new products/processes)
> ➤ The risks of not addressing sustainability issues (e.g. being closed out of future markets/tender opportunities; attacks on company image; legal risks and liability; supply problems with raw materials and energy; damage to people and the environment)

- The potential barriers to making environmental and sustainability improvements within an organisation (e.g. perceived costs; ignorance; lack of interest and scepticism; practical limitations such as available time and space and existing building stock)
- Techniques for environmental auditing (covering resource efficiency/waste management, utilities management, transport and purchasing practices and policies)
- Underpinning knowledge and understanding of the science of climate change and other human impacts on the environment, life cycle analysis, environmental footprinting etc.

It is essential that learners are introduced to 'real world' examples and case studies. This could involve, for example, engagement with local organisations and employers or their own institutions by conducting informal environmental audits for them, or researching the activities of larger organisations to expose environmentally-damaging practices and to identify paths for improvements.

The following are important generic employability skills essential for achieving environmental and sustainability improvements within an organisation, and can be developed as part of an effective active-learning focussed 'greening business' curriculum:

- research skills, including the investigation, interrogation and evaluation of the reliability of resources and evidence, for example determining assumptions used in claims of environmental benefits and improvements, and an awareness of bias and 'greenwash' (see *Technology Appraisal*, this volume)
- numerical skills and confidence in the handling and manipulation of numerical data, for example, the quantification of environmental and financial costs and savings across an organisation
- accurate observation, monitoring and recording skills for the auditing of observable environmental and sustainability practices within an organisation
- question setting and question posing to access information on environmental and sustainability practices that are not directly observable as part of an environmental audit
- action planning to produce a feasible and actionable strategy for organisational change
- negotiation skills to agree an achievable and worthwhile action plan and influence practices and behaviour of individuals within an organisation
- report writing and visual and oral presentation skills for the professional, confident and persuasive presentation of environmental audit findings and action plans for environmental and sustainability improvements

Wider benefits of 'greening business' skills

In addition to the direct benefits to learners from gaining sustainability literacy skills, the greening business curriculum has many wider institutional, societal and environmental benefits. Despite regular coverage of the unsustainability of society and reports of a newly environmentally conscious generation, a significant segment of society still remains disinterested and sceptical about their responsibility to work towards a more sustainable future. In particular, many learners claim to be bored of hearing about climate change and have become disengaged with environmental and sustainability issues, primarily because they can see that, on its own, the reduction of their personal environmental footprint will make little difference overall. A greening business approach has the potential to interest and engage learners both by making sustainability relevant to their future career prospects and by enabling them to have a much larger influence on the sustainability of society through potentially influencing the decisions of a large organisation. In this way, learners can become empowered to contribute towards a more sustainable society and help generate a positive culture of organisational change and optimism. That optimism might influence their own lives,

leading them to become better 'environmental citizens' and consider environmental and sustainability issues in their day-to-day behaviour and decision making.

An active-learning based greening business curriculum provides opportunities to integrate campus and curriculum developments, and can act as a mechanism for learners to influence environmental and sustainability developments within their institutions. In addition to being able to apply their knowledge and skills to their own immediate environment, opportunities to work directly with local businesses can also prove beneficial to the learners and businesses alike.

Society will be faced with many major environmental challenges and changes in the twenty first century including peak oil, climate change, population growth, declining water resources and ecosystem destruction in parts of the world. Businesses and organisations will need to be prepared to operate within a very changed society. They will need to contend with changing markets and growing insistence from government, customers and employees for more sustainable products and practices. During the twenty-first century business will experience changes in the costs and supply of energy and water and have to contend with potentially unstable supply chains caused by environmental, societal and economic degradation in different parts of the world. Businesses and organisations that fail to adapt to these challenges will struggle in the future while those companies that have embraced a more sustainable organisational culture will thrive. Already examples are being seen of companies which are struggling because they have resisted adopting more environmentally sound and sustainable practices. By acquiring greening business skills for driving environmental and sustainability improvements in the workplace, learners will be well-placed to contribute to the success of businesses and organisations in the twenty-first century and to a thriving and sustainable society.

Active learning exercises

'Greening business' material can be integrated into the curricula of a wide range of disciplines or can equally stand alone as an autonomous module which is accessible and applicable to learners from any discipline. This is an area of learning which lends itself to active learning strategies, through analysis of case studies and the practice of acquired knowledge, understanding and practical skills. Some examples of learning activities are outlined below:

1) Environmental audits within the learners' institution (or partner organisation)

Training in a basic framework for environmental auditing provides learners with the practical skills to identify areas for environmental and sustainability improvements. There are many basic environmental auditing frameworks publicly available which are suitable for introductory auditing activities (see 'Further resources' below), or learners can draw up their own auditing frameworks. Learners can apply their auditing training to an area of their institution's (or on placement in another organisation) activities or estate, identifying areas for improvement and formulating realistic, well-researched and justifiable proposals for implementation of the improvements.

> Development of a spreadsheet for recording directly observable environmental and sustainability practices
> Formulation of a list of questions to establish environmental and sustainability practices which are not directly observable
> Carrying out an audit of a particular aspect of an organisation's operations (this could be a specific building, specific aspect such as purchasing or transport, or a particular area of an organisation's operations such as a manufacturing process)
> Talking with management and employees to understand the organisational culture and identify any barriers to change

- ➢ Development of recommendations for improvements and the formulation of realistic, well-researched strategies for implementation of the proposed changes
- ➢ Presentation of the audit findings and recommendations as a report, oral and/or poster presentation.

The need for a well-researched and professional presentation of the project findings can be emphasised through arranging for learners to present their findings to those responsible for implementation and policy making of the environmental and sustainability practices of the organisation/institution that has been studied. This can be effectively be carried out at a poster presentation session, for example.

Through these activities learners practice a wide range of employability skills, and gain experience in applying their new knowledge, understanding and skills to drive environmental and sustainability improvements within their own institutions or partner organisations.

2) Carbon footprinting an organisation's operations and prioritising strategies for change

The quantification of the different components of an organisation's carbon footprint can highlight priority areas for change and emphasise the carbon and financial savings that can be made through changes to the organisation's activities. The importance to an organisation's carbon footprint of making small changes can be emphasised when the savings resulting from changes are multiplied up to an organisational scale. There are several publicly accessible online resources reporting on aspects such as transport and utilities usage within an organisation's activities (see *Carbon Capability* and *Materials Awareness*, this volume). These can be used in combination with standard tables of average CO_2 emissions per unit activity to calculate the size of an organisation's carbon footprint, determine the most polluting activities and hence identify priority areas for action. This can be followed by discussion of appropriate and realistic strategies to reduce the organisation's carbon footprint. Example tables for these exercises are available at www.esci.keele.ac.uk/greeningbusiness.

3) Interrogating and evaluating environmental policies and corporate social responsibility reports

There is a vast array of online resources and environmental and sustainability literature available from corporations and organisations including environmental policies, corporate social responsibility reports and lifecycle analysis reports. Exercises which involve interrogating and evaluating these resources provide learners with skills in evaluating the potential bias of resources and also provide examples of positive activities being carried out by organisations. Group debates centred on a selected resource can provide a useful vehicle for the evaluation and discussion of these resources. Learners, or groups of learners, can take on different roles, for example acting as representatives from the senior management of the company, an employee environmental action group, a major customer and a representative of a major environmental group such as Greenpeace or Friends of the Earth. Each debater scrutinises the resource in question and presents a critique of the report from the perspectives of the viewpoint that they are representing. Where the resource under scrutiny is a document from the learners' own institution, this provides a further vehicle for increasing awareness of environmental and sustainability developments and driving positive environmental and sustainability change within their own institution.

Achbar, M. J. Abbott and J. Bakan. (2005) *The Corporation.* Vancouver: Big Picture Media [a fascinating documentary about the growing prominence of large global businesses and the way that their decisions are impacting the world]

Carbon Trust. www.carbontrust.co.uk [Provides a wide range of resources aimed at helping businesses and organisations reduce their carbon footprint]

Friends of the Earth online office audit. www.green-office.org.uk/audit.php [An online tool designed to find out how to identify the environment impacts of an office, find appropriate solutions and track progress.]

Greening Business: an online educational resource. www.esci.keele.ac.uk/greeningbusiness [Examples of teaching materials and learning activities for embedding 'greening business' curriculum developments]

Institute of Environmental Management and Assessment. www.iema.net [Established to promote best practice standards in environmental management, auditing and assessment and promote sustainability through improved environmental practice and performance]