Education for Sustainable Development and Employability

Final report

Developing participative Education for Sustainable Development to enhance the links between sustainability literacy, sustainability competencies and employability

A study funded by the
The Higher Education Academy
Education for Sustainable Development (ESD) Project

Marcus Grant, October 2009
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Education for Sustainable Development and Employability

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Education for Sustainable Development and Employability

Developing participative Education for Sustainable Development (ESD) to enhance the links between sustainability literacy, sustainability competencies and employability

Reflections and conclusions

The study raised some fundamental questions for everyone involved. Sustainable development and ESD are not the easiest of issues for people to engage with and there are a number of potentially conflicting and confusing agendas.

On the one hand, we have a strong policy lead from government; on the other hand a sector committed to supporting academic independence.

On the one hand we have sciences providing evidence of life threatening impacts from human society as now constituted; on the other hand we have sciences which support relativism and the notion that all knowledge is subject to multiple interpretations and is context dependent.

One the one hand we have a problem which demands synergy, collaboration and integration in order to generate solutions; on the other hand, at the University of the West of England (UWE) we have an institution with barriers that hinder joint working between academia and service operations and between faculties.

None of these contradictions are inevitably irreconcilable. As the environmental precariousness of humanity’s existence on the planet increases, we will find that socially constructed knowledge, and decisions based on it, will inevitably have to align themselves to knowledge based on natural processes if they are to provide a sustainable solution.

These contradictions need to be managed, especially when working across disciplines.

These contradictions can provide the grist to develop new collaborative working in sustainability.

Each higher education institution (HEI) needs to decide where they want to be on that learning curve. The further forward they place themselves, the more corporate commitment to integrating ESD into all activities will be required.

Subject-focused issues

One finding from the study is that subjects such as the Built Environment and Bioscience

i) are already predisposed to assimilate and understand the complexities of sustainability, especially the concept of environmental limits, and

ii) have a more mature sustainability literacy and discourse than many other disciplines.
Arising from this, for disciplines such as Public Health and Creative Arts, which were included in the study, multidisciplinary fora and joint working, especially when it includes the Built Environment or Bioscience subjects, is vital for raising levels of sustainability literacy.

This is not, however, a one-way-street. The Built Environment and Bioscience subjects have a lot to learn about issues of implementation, governance and communication in wider society. Engagement with subjects closer to social sciences can assist.

**Stakeholder groups**

At UWE, a high-level sustainability board is ensuring that the university meets the objectives and commitments in its sustainability strategy (UWE, 2008). An ESD group has been constituted with responsibility for the Key Performance Indicators (KPIs) related to the curriculum and teaching and learning. These are as follows:

- In 2008, establish an ESD group.
- By 2010, all undergraduate students to be exposed to the context of sustainable development for their professional lives through their degree courses or obligatory ancillary learning such as the Graduate Development Programme (GDP).
- By 2010, all postgraduate students to have the opportunity to include a response to sustainability within their degree courses.
- By 2010, an induction for new academic and academic-related staff to include education's contribution to sustainable development.
- Through the Continuing Professional Development (CPD) programme, provide the opportunity for learners to further develop their understanding of sustainability.

In order to meet these, however, in any university it is not only the academic staff who need sustainability literacy. This study sought to engage staff within the careers and student volunteering services. The next step at UWE will be for both the University careers service and the academic ESD group to respond to issues arising from this study. They will need to identify and prioritise provisional recommendations against their strategic objectives and the institutional KPIs.

The careers service is a busy service, at the heart of what a university offers students, with a potential to develop excellence in placing students with environmentally-responsible employers and launching lifelong careers. Of course, their role is not to ‘inculcate’ values, but to broker a relationship between sustainability-literate students and employers in the environmental industry sectors and beyond – employers who will increasingly require such understanding in order to prosper in the 21st century.

In this period of change, with tangible issues such as climate instability, the underpinning values of individuals – students and staff – and organisations – higher education and employers – need to be reviewed. Hopefully the sustainability literacy agenda can be articulated to generate a new sense of synergy between students and prospective employers.

The prize is for an HEI to be known for excellence in developing students’ sustainability literacy. The values and aptitudes conferred will be increasingly appreciated by employers and a society where they will be progressively needed.
1.0 Aims and background

The aim of this project was to explore the productive alignment of academic- and work-related sustainability literacy and competencies to enhance student employability. The anticipated and realised outcomes also included raised awareness of issues of sustainability literacy amongst academic staff and University careers staff.

Central to the project have been focus group discussions with academic teaching staff and University careers staff.

The study has identified several issues for further development. These are to:

- assist with enhanced sustainability literacy for students;
- strengthen links to employability in the environmental industries, sustainable development and voluntary sector; and
- help to ensure that students are enabled to understand and contribute to the social and environmental responsibilities of potential future employers.

This project has been completed as part of the ESD initiative of the UWE Sustainability Board. The work was externally funded by the Higher Education Academy with matched funding in kind from the University. The project builds directly on a baseline audit of ESD (Grant, 2008) and extends the work into the important area of ‘sustainability literacy’ to enhance employability. The project was undertaken by Marcus Grant, Faculty of Environment and Technology, under the auspices of a steering group from the Sustainability Board comprising of Jim Longhurst, Judy Orme and Mark Webster.

2.0 Study approach

The approach taken in this study is based on that of Brown et al. (2004), who call on people to leave their bounded intellectual silos and reach out towards a transdisciplinary and multi-stakeholder consensus around ESD. Knowledge and understanding of sustainable development do not necessarily translate into a common currency across professional areas, but it is essential that an enhanced level of professionally-relevant sustainability literacy is developed during undergraduate education and training to ensure that future interprofessional working is facilitated (Gough and Scott, 2007). The need for synergy around knowledge and competency for sustainability in the three discipline areas of Public Health, Built Environment and Creative Arts provided an underlying rationale for the study presented in this report.

The study method, an action research approach, has been to set up a facilitated consultative forum with stakeholders, and to use participative enquiry techniques supported by briefing papers and orientation presentations. Results were captured on flip charts in the sessions and subsequently developed into this report.

Following discussions with the manager of the careers advisors, three lunchtime workshops were designed. The following enquiry structure was adopted.
The issues arising from these workshops fed into three subsequent consultations:

i Discussions with the Head of the Graduate Development Programme (GDP) about the relationship between ESD and the GDP

ii Discussions with the Head of Employability Service

iii Comments and feedback from a meeting of all the careers advisors

This report combines information and reflections from all these elements.

The findings have been divided into issues arising from the content of the discussions and a brief reflection on the process itself and engagement with the ESD agenda. The study was designed to capture the impressions, thoughts and experience from practitioners in the field. Integral to a participative enquiry approach is that these forms of evidence are validated over time through the reflections and comments of other stakeholders and also from contributory evidence from other sources. It was not in the remit of this study, however, to pursue the latter.

The findings have been organised to follow the format of the main enquiry process.

- What is happening now?
- What ought to happen?
- What steps can we take to achieve this?
- What will assist us?
3.0 What is happening now?

There were broad discussions about the current situation in terms of employability and sustainability. Three relevant themes emerged.

i. Student awareness of sustainability

ii. The UWE community engagement programme and diversity project

iii. What employers want

3.1. Student awareness of sustainability

There is a gradually increasing awareness and concern with environmental, and sustainability, issues in the student body. The bulk of students do not, however, raise sustainability issues in careers appointments or workshops. The exception is mainly from increasing interest being shown in sustainability issues amongst the students studying for some specific vocations, such as engineering, architecture, natural sciences, geography studies and public health. The lack of articulation of this agenda in connection with work is consistent with other policy areas. For example, it would not be expected for most students to raise issues of diversity in connection with employment.

However, where careers advisors are seeing an awareness of sustainability, it is expressed as students wanting to be more selective in the companies they will be working for: for example, asking about Corporate Social Responsibility (CSR) policies or ‘ethical’ companies, and an increasing ‘trickle’ of students interested in the ‘settings’ of their careers and ‘who they will be working with’. Some of this is represented as an interest in getting jobs in sectors such as internationally-focused Non-Governmental Organisations (NGOs), especially for students from the humanities disciplines. The UWE employability guide last year had an article about ‘ethical careers’.

The idea of employability through ESD is only starting to be addressed in higher education nationally, and the relevance of sustainability literacy to employability is yet to be developed and fully understood both nationally and by staff at UWE.

Provisional recommendation:

- That employability information, such as guides or websites, start to develop and signpost information relating to the sustainability sector.

3.2. The UWE community engagement project and the diversity project

There is a good fit between the ESD employability agenda and UWE community engagement / widening participation initiatives. Community investment is an objective with a measured KPI within the UWE Sustainability Strategy. The existing UWE careers web pages provide a set of links and resources related to opportunities in charities, developmental work and voluntary organisations. This could be augmented with environmental sector information eventually linking to sustainability-themed content.

On the negative side, at present, some careers advisors in the workshops reported that volunteering, whether working for ‘charities’ or in the voluntary sector, is not popular amongst students. The student economic profile at UWE means that our students are inevitably focused on using employment opportunities to supplement their income to a high degree. Indeed, even before the recession, a study found that, under current student funding
arrangements, students feel a pressing need to earn money rather than work for nothing (Wollenburg, 2008). This could affect placements with employers related to sustainable development. A strategic response of the careers service has to be to ‘sit’ volunteering within the curriculum.

During the study, Bradford’s ‘Ecoversity’ was cited as having been successful in developing a culture of engagement around sustainability issues. UWE students who are volunteering are not, however, specifically expressing an interest in sustainability.

The UWE diversity project works with many employers who have a positive social responsibility model. There are many other employers who have strong CSR statements, for example with environmentally-lead policies, that do fit into the remit of the more tightly defined diversity project. However, UWE already has many strong links with the local environmental industry sector through relevant awards, careers and volunteering. Over the next two years, the annual ‘Meet the Employers’ fair has a commitment to ensure that, from a field of 80, 15 employers will be from the charity/voluntary sector. This fair has a dual focus: on permanent employment and temporary student placements.

**Provisional recommendation:**

- That, using current systems at both University and Faculty level, better cross-faculty links are developed for placements and volunteering. These should be aimed at increasing both opportunities within the local environmental industries sector and other sustainability-focused opportunities. An example of the benefit would be a student from the Bristol Business School being placed with an environmental sector employer who has previously only partnered placements from Built and Natural Environments.

### 3.3. What employers want

A recent UWE study by Professor Kath Ross has shown that the ‘skills’ demand from employers focuses on ‘team working’, ‘analytic skills’, ‘flexibility’, etc. (Ross, 2007). Unlike the HE Academy’s *Employable Graduates for Responsible Employers* report (CADE, 2008), sustainability was not the focus. However, no evidence was found for ‘sustainability'-related knowledge or skills in non-environmental businesses. The Academy report was discussed in the sessions, and in contrast to its findings, the sets of issues that the report highlights are not particularly relevant within the broad employer groups associated with UWE graduates.

There needs to be clarity, and a distinction made, on the difference between;

1 – the employment opportunities in explicitly environmental areas (which, whilst growing, are still very small), and

2 – the relevance of an understanding of sustainability for all areas of employment in the modern world.

An important comment from the careers service was that it is difficult to see awareness of sustainability becoming a more important criteria for employers than aptitudes such as communication skills, ability to work as part of a team and analytic skills, etc. However, ‘sustainability literacy’ could be presented as a key factor for all sorts of employers in the future and be one of the distinguishing features that helps set a UWE graduate apart from others.

**Provisional recommendation:**
That policy development, within this agenda, is pursued in two distinct areas with different objectives.

Firstly, using our unique location to strengthen employability for our students within the growing environmental (and potential sustainability) industries sector. Although this has strong "unique selling point" potential, it is also more limited in terms of coverage of the student populace.

Secondly, the aspiration of delivering all students to the general jobs market with 'sustainability literacy' as a guaranteed attribute of a UWE graduate.

4.0 **What ought to happen?**

Through the workshops and comments, a shopping list of actions which could be part of a developing agenda has arisen. These are presented below in terms of:

i) corporate issues

ii) issues for the careers service

iii) issues for the ESD Internal Knowledge Exchange Network (ESD-IKEN)

iv) issues for the Graduate Development Programme (GDP)

v) issues for UWE estates and operations

The following potential goals were developed by study participants in response to the question 'what ought to happen?'

4.1. **Corporate issues**

Participants raised some broad points in response to the increasing density of sustainability policies, structures and initiatives at the University. The following were specifically mentioned for consideration by the Sustainability Board:

- Participants wanted greater clarity in leadership and direction setting. The use of existing faculty committees and structure, such as employability groups and widening participation groups to increase awareness of the sustainability/employability agenda was also mentioned. (The board may feel that current activity is addressing this point. These events were run prior to the roll out of the sustainability committees at faculty level).

- UWE should seriously consider signing up to the Talloires Declaration¹. (This action has subsequently been taken).

- The board should consider the need to develop KPIs attached to the sustainability/employability agenda if it wants to ensure progress in this area.

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¹ Talloires Declaration on the Civic Roles and Social Responsibilities of Higher Education - September 17, 2005. All signatories of the Declaration have committed their institutions to creating a framework enlarging, supporting, and rewarding good practice in civic engagement and social responsibility. They have agreed to apply academic standards of excellence to community engagement and encourage education for active citizenship at all levels. See: [http://www.ulsf.org/programs_talloires.html](http://www.ulsf.org/programs_talloires.html)
• UWE should engage student energy, values and motivation more fully in the broad sustainability agenda. The role of student representation on the board, of ‘People & Planet’, and of student involvement in promoting ‘UWE Sustainability Week’ were all raised.

• A proposal to instigate an institution-wide competition for innovation in sustainability independently emerged in two out of the three lunchtime sessions. The goal would be to stimulate student motivation, providing an outlet for creative engagement.

4.2. Careers service issues

Discussion revolved around developing a better understanding of sustainability literacy and knowledge skills. We need to know better what the ESD skills set looks like. There seems to be an important skills set around coping with change, physiologies of change, motivation counselling, adaptation, and flexibility.

Provisional recommendations:

• That the ESD employability initiative needs to be reflected within the employability agenda of ‘the UWE Graduate’.

• That a relevant careers resource should be assembled: for example, a primer for students covering sustainability issues around careers, careers in the environmental industries/sustainability sectors, CSR and enviro/ethical employers, Community Volunteering, working environments and the nature of employment settings.

• That better data should be collected to underpin policy in this area – for example, using SIC code analysis on the environmental sector (see later appendix) to monitor employability in this sector against UWE programmes and faculties.

4.3. Development of ESD at UWE

Some issues were discussed of relevance to ESD curriculum development – issues that are now the responsibility of the recently formed Internal Knowledge Exchange for Sustainability Education group.

Provisional recommendations:

• That the Community Volunteering Programme should be seen as part of the ESD agenda. A deliberate programme of placements within firms in the ‘sustainable development’ sector should be developed.

• That the Knowledge Exchange for Sustainability Education group should acknowledge the employability agenda as part of its remit – ensuring that employability through ESD is on the academic agenda where appropriate. Messages about ESD and employability are needed within the subject specialisms and should not just be left to the GDP.

4.4. Institute for Sustainability, Health and Environment

The following issue was raised for consideration by the Institute for Sustainability, Health and Environment. The example of Birmingham University having a new national Centre for Third Sector Research was discussed and it was suggested that UWE should review opportunities to win money for sustainability/employability projects from this or similar funding sources.
Provisional recommendations:

- That the Institute for Sustainability, Health and Environment website be used as a portal to relevant career information in this area.

- That the wider stakeholder group, which the Institute is developing, looks at employability issues. It could potentially support a sectoral employers’ group to interact with careers and courses.

4.5. Graduate Development Programme issues

The following two issues were raised for the Graduate Development Programme (GDP).

Provisional recommendations:

- That links are made within the GDP between sustainability and employability and there is the creation of some GDP content in the ‘facilitated learning group’ sessions.

- That there is educational input to enable students to think through their values in relation to sustainability, for instance in GDP level 2, which is about motivations, values and incentives.

4.6. Issues for UWE estates and operations

The university can provide a first-hand action learning case study of sustainability in a large organisation. Many subject areas could benefit from governance and organisational change to technical issues of energy management and building design. Examples of activity could also include involvement of courses, students and student groups with food and biodiversity on UWE estates, including allotments for growing food.

Provisional recommendation:

- That subject-specific teaching resources are developed based on the growing knowledge gained from implementing operational sustainability across the University.

5.0 What will assist us?

Participants were asked what support or assistance would help in securing outcomes and carrying out some of the actions. The immediate response was that support from the Deans is critical for success. Participants also thought that a report from this study should go to the committee at the University responsible for the employability agenda.

More information was also called for, in particular:

- clarifying what is on the agenda for professional accreditation bodies in terms of sustainability;

- using the employment destination survey to yield data in this area; and

- providing more explicit links and examples within publications and e-learning resources, plus the opportunity for training or additional relevant learning resources for careers information and advisory staff.
6.0 What conclusions can be drawn from this study?

The study raised some fundamental questions for everyone involved. Sustainable development and ESD are not the easiest of issues for people to engage with and there are a number of potentially conflicting and confusing agendas.

On the one hand, we have a strong policy lead from government; on the other hand, a sector committed to supporting academic independence.

On the one hand, we have sciences providing evidence of life threatening impacts from human society as now constituted; on the other hand, we have sciences which support relativism and the notion that all knowledge is subject to multiple interpretations and is context dependent.

On the one hand, we have a problem which demands synergy, collaboration and integration in order to generate solutions; on the other hand, at UWE we have an institution with barriers that hinder joint working between academia and service operations and between faculties.

None of these contradictions are irreconcilable. As the environmental precariousness of humanity’s existence on the planet increases, we will find that socially-constructed knowledge, and decisions based on it, will inevitably have to align themselves to knowledge based on natural processes if they are to provide a sustainable solution.

As an institution, we need to decide where we want to be on that learning curve. The further forward we want to place ourselves, the more corporate commitment to integrating ESD into all activities will be required.

Hence the importance and poignancy of these final comments from the careers advisors:

• ‘The links between employability and sustainability need to be more clearly specified and justified.’

• This is a fruitful area for UWE focus ‘but it’s a matter of discussing values rather than imposing ideas.’

• ‘Careers Advisers are impartial and objective in their interactions with students. Sustainability is fundamentally about values, which are hard to inculcate.’

Of course, the careers service is a busy service, at the heart of the UWE offer, with a potential to develop some excellence in placements for students with environmentally-responsible employers. Their role is not to ‘inculcate’ or even necessarily to ‘discuss’ values, but to broker a relationship between sustainability-literate students and employers in the environmental industry sectors and beyond – employers who will increasingly require such understanding to prosper in the 21st century.

The prize is for the University is to be known for excellence in linking students who have sustainability values and aptitudes with employers, and a society, which will increasingly need and appreciate such characteristics.
Additional project information:
The Objectives

This piece of work was designed to:

- explore the links between employability and sustainability in the curriculum and the potential for innovation and development in this area, and
- help link sustainability with careers advice and student volunteering.

It builds on and extends current UWE work to critique, develop and explore sustainability literacy skills and how best to embed this area in the curriculum.

This study explores ways of further embedding sustainable development in the curriculum discipline areas through an examination of the practices and opportunities presented by the multi-disciplinary fields of Public Health, the Built Environment and the Creative Arts. It explores the extent to which a productive alignment of student- and employer-related sustainability literacy and competencies can be achieved by working with stakeholders: academic staff and University careers staff.

As part of a corporate commitment to offer all students in all programmes access to ESD, UWE has already undertaken a baseline audit (Grant, 2008). Through a multi-method process, this audit examined where ESD is currently delivered and the way in which different disciplines are responding to the agenda arising from sustainability issues. This project sought to develop the audit findings and explore issues of employability with relevant stakeholders at UWE.

The aims of the project were:

i) to explore with the identified stakeholder groups:
   - the concept of sustainability across specific discipline areas,
   - the key issues around sustainability and 'sustainability literacy',
   - the productive alignment of academic- and work-related sustainability competencies through innovative curriculum development, and
   - the role of the Careers Service in providing a three-way information exchange between students, employers and academics.

ii) to work further with University careers staff in order to:
   - explore how knowledge and skills developed align with the needs of employers who are socially and environmentally responsible and how these impact on or influence employability, and
   - support them in understanding and in highlighting the importance of sustainability literacy in their work with students and employers.

iii) to work further with key academic staff including those involved in the Graduate Development Programme (GDP) group to develop input for ESD within their modular programme.
Additional project information:
**Workshop format**

A carefully structured two-hour lunchtime workshop was run on three occasions. The times and dates were chosen to maximize attendance from careers advisors.

Each workshop followed the format set out below. Snacks and an informal ‘green fare’ lunch were provided. Six pre-prepared flip charts were fixed on the walls. Two provided information including the agenda and the five principles of sustainable development, four were used to capture information from the four-fold agenda.

**The two prepared flip charts:**

**Workshop aims and the Principles of sustainable development**

**Workshop aims:**

- ¥ What is happening now?  
  *The current situation*
- ¥ What ought to happen?  
  *A normative vision*
- ¥ What steps can we take?  
  *A route map*
- ¥ What will assist us?  
  *Some actions*

**Principles of sustainable development**

- **Living within environmental limits**
  - Regulating the limits of the planet’s environment, resources and biodiversity to improve our environment and ensure that the natural resources required for life are sustainable and remain available for future generations.
- **Ensuring a strong, healthy and just society**
  - Working the diverse needs of all people in existing and future communities, promoting physical wellbeing, social cohesion and inclusiveness, and creating social opportunity.

**Workshop discussions**

The four-fold agenda consisted of four informal discussion periods of 15 minutes, each focusing on one of four questions. Each discussion was preceded by a verbal 10-minute presentation with supporting information from a data slide projection. The presentation gave a context for the discussion and raised relevant issues.
<table>
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<tr>
<th>Discussion focus</th>
<th>Preceding presentation outline</th>
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<tbody>
<tr>
<td>What is happening now?</td>
<td>The overall study aims and the workshop aims&lt;br&gt;The current situation&lt;br&gt;Main findings from the HE Academy report, <em>Employable Graduates for Responsible Employers</em>&lt;br&gt;What is ESD?&lt;br&gt;Does this set a new agenda in education?</td>
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<tr>
<td>What ought to happen?</td>
<td>International policy drivers for sustainable development in HE&lt;br&gt;Corporate drivers for ESD at UWE&lt;br&gt;The ‘sustainable organisation’&lt;br&gt;Principles of sustainable development&lt;br&gt;UWE KPIs for ESD</td>
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<tr>
<td>What steps can we take?</td>
<td>Key findings and outcomes from the ESD study&lt;br&gt;The details of the study of modules – core and specialised&lt;br&gt;Fit between ESD and the University’s strategic objectives</td>
</tr>
<tr>
<td>What will assist us?</td>
<td>Key findings and outcomes from the ESD study&lt;br&gt;Outline of the discussion-based study&lt;br&gt;Current strengths and weaknesses of the UWE offer&lt;br&gt;Current opportunities</td>
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Lively conversations developed in all the workshops. A synopsis of comments and issues from all three has been compiled.

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<th>Date</th>
<th>Attendees</th>
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<tr>
<td>2nd July</td>
<td>2 Academic staff – (Applied Sciences and Law)&lt;br&gt;1 Careers advisor – (attached to the Widening Participation Programme)&lt;br&gt;1 Staff – Community Volunteering Programme</td>
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<tr>
<td>16th July</td>
<td>3 Academic staff – (Media and Cultural Studies, Construction research [2])&lt;br&gt;1 Careers advisor – (attached to Business School)&lt;br&gt;1 Staff – Community Volunteering Programme</td>
</tr>
<tr>
<td>23rd July</td>
<td>2 Academic staff – (Public Health)&lt;br&gt;1 Careers advisor – (attached to Built Environment and Creative Arts)&lt;br&gt;1 Staff – Well-being Service</td>
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**Additional project information:**

**Workshop findings**

**What is happening now?**

There were broad discussions about the current situation in terms of employability and sustainability. Three relevant themes emerged: student awareness of sustainability, the UWE community engagement programme and diversity project, and what employers want.

**Student awareness of sustainability**

It was felt that there is a gradually increasing awareness and concern with environmental issues in the student body. The bulk of students do not, however, raise sustainability issues in careers appointments or workshops.

Some of the awareness is reflected in students wanting to be more selective in the companies they will be working for. For example, asking about Corporate Social Responsibility (CSR) policies or 'ethical' companies, and an increasing 'trickle' of students interested in the ‘settings’ of their careers and ‘who they will be working with’. Some of this is represented as an interest in getting jobs in sectors such as internationally-focused Non-Governmental Organisations (NGOs), especially for students from the humanities disciplines. There is also an increasing interest in environmental issues amongst the students studying for some specific vocations, such as engineering and architecture.

The UWE employability guide last year had an article about 'ethical careers'. As a rule, however, the majority of students are not interested in sustainable development or the broad values it represents, except on certain courses, such as those in the natural sciences, geography studies and public health.

The idea of employability through ESD is only starting to be addressed in HE nationally and the relevance of sustainability literacy to employability is yet to be developed and fully understood by staff at UWE.

**The UWE community engagement project and the diversity project**

There is a good fit between the ESD employability agenda and UWE community engagement/widening participation initiatives. The existing UWE careers web pages provide a set of links and resources related to opportunities in charities, developmental work and voluntary organisations (http://www.uwe.ac.uk/careers/students/job_find/volunteer.shtml).

On the negative side, at present, some careers advisors in the workshops reported that volunteering, whether working for ‘charities’ or in the voluntary sector, is not popular amongst students. This could affect placements with employers related to sustainable development. This is partially explained by the fact that this sort of experience is perceived by students as ‘second best’ CV material. It is interesting to note, however, that the careers staff report that working for charities or the voluntary sector is not perceived as second best on a CV by employers. Most academics at UWE are also aware of the relevance of the community volunteer programme to employability.

The main difficulties in getting students to volunteer, however, is: the need for UWE students to earn money to support themselves during their studies, and, for some, a negative perception of volunteering. This includes factors such as it being seen to be a ‘geek’ and/or a white, middle-class, middle-aged and female activity. Under current student funding arrangements, students feel a pressing need to earn money rather than work for nothing (Wollenburg, 2008).
During the study, Bradford’s ‘Ecoverity’ was cited as having been successful in developing a community of engagement around sustainability issues. UWE students who are volunteering are not, however, specifically expressing an interest in sustainability. The UWE diversity project works with many employers who model social responsibility. There are many other employers who have strong CSR statements that do not work with the more tightly targeted diversity project. The attributes needed in students that are being assessed for recruitment into volunteering for this sector are: having the right ‘attitude’ and having the ability to represent the organisation in question. UWE already has many strong links with the local environmental industry sector through relevant awards, careers and volunteering. It was reported that, in the past, UWE had a careers fair dedicated to the environmental sector – this is not actually the case but may be the impression left from former collaboration with Bristol University’s ‘alternative sector’ elements of the regional employment fair.

What employers want

A recent UWE study has shown that the ‘skills’ demand from employers focuses on ‘team working’, ‘analytic skills’, ‘flexibility’, etc. (Ross, 2007). Unlike the HE Academy’s Employable Graduates for Responsible Employers report (CADE, 2008), sustainability was not the focus. However, no evidence was found for ‘sustainability’-related knowledge or skills in non-environmental businesses. The Academy report was discussed in the sessions, and there is little awareness of the sets of issues that the report highlights as being relevant within the broad employer groups associated with UWE graduates. There needs to be clarity, and a distinction made, on the difference between employment opportunities in explicitly environmental areas (which, whilst growing, are still very small), and the relevance of an understanding of sustainability for any area of employment in the modern world.

An important comment from the careers service was that it is difficult to see awareness of sustainability becoming a more important criteria for employers than aptitudes such as communication skills, ability to work as part of a team and analytic skills, etc. However, ‘sustainability literacy’ could be presented as a key factor for all sorts of employers in the future and be one of the distinguishing features that helps set a UWE graduate apart from others.

What ought to happen?

Through the workshops and comments, a shopping list of actions which could be part of a developing agenda has arisen. These are presented below in terms of:

- corporate issues
- issues for the careers service
- issues for the ESD Internal Knowledge Exchange Network (ESD-IKEN)
- issues for Graduate Development Programme (GDP)
- issues for UWE estates and operations

The following potential goals were developed by study participants in response to the question ‘what ought to happen?’.

Corporate issues

A broad point was made in response to the increasing density of sustainability policies, structures and initiatives at the University. What is the relationship between this broad
sustainable development initiative at UWE and the ‘Transition’ movement? Could UWE become the first transition university!

The following points were also raised for consideration by the Sustainability Board:

• Participants wanted greater clarity in leadership and direction setting.
• UWE should seriously consider signing up to the Talloiries Declaration. (This action has subsequently been taken).
• The board needs to develop KPIs attached to the sustainability/employability agenda if it wants to ensure progress.
• UWE should engage student energy, values and motivation more fully in the broad sustainability ‘project’.

**Steps that can be taken**

Discussions of student motivation led to two ideas. First, that UWE should tap in to the energy and commitment of student environmental societies such as People & Planet. Second, that student group involvement be promoted during ‘UWE Sustainability Week’. One idea suggested was to involve students in creating a more engaging name for the UWE Sustainability Week initiative and give them a more prominent role in its development. UWE Sustainability Week was also thought to be a potential vehicle to act as a catalyst within the sustainability/employability agenda. One possibility would be to feature the employment potential in environmental industries, with a role for Bristol Environmental Technologies (BETS) to host a stand.

An enthusiastic proposal to instigate an institution-wide competition for innovation in sustainability independently emerged from two of the three lunchtime sessions. The goal would be to stimulate student motivation, providing an outlet for creative engagement.

The use of existing Faculty committees, such as employability groups and widening participation groups, to increase awareness of the sustainability/employability agenda was also mentioned.

**Careers service issues**

Two issues for consideration by the Careers service were raised:

• Will ESD lead to better employability? This could be a motivation. The links between ESD and employability ought to be clarified.
• UWE should define, cultivate and form strong links with a local ‘environmental industries’ sector for student placement and graduate employment.

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2 The Transition Initiative: In response to the twin pressures of Peak Oil and Climate Change, some communities in the UK, Ireland and beyond are taking an integrated and inclusive approach to reduce their carbon footprint and increase their ability to withstand the fundamental shifts that will be necessary. The towns, neighbourhoods and villages involved are associated with a loose collaboration – the transition movement/initiative. Former UWE student Rob Hopkins has been instrumental in initiating and developing this movement. See: [http://www.transitiontowns.org/](http://www.transitiontowns.org/)
Steps that can be taken

Boost support for careers in the sustainability sectors

- Hold a ‘careers’ fair dedicated to this sector. Consider a special ‘careers’ fair with an ‘ethical’ focus plus alternative employment, self-employment, the voluntary sector, the environmental and sustainable development industries.
- Develop more explicit resources linked to ethical careers and sustainability on the careers website.
- The ESD employability initiative needs to be written into the employability agenda of ‘the UWE Graduate’.

Developing a better understanding of sustainability and the knowledge skills

- Knowing better what the ESD skills set looks like. There seems to be an important skills set around coping with change, physiologies of change, motivation counselling, adaptation, and flexibility.
- The UWE employability guide last year had an article about ‘ethical careers’. This could be located, updated and placed on a proposed web resource (see proposals later in this report).
- Compile a careers resource. For example, a primer for students covering ethical questions around careers, careers in the environmental industries/sustainability sectors, Community Volunteering, working environments and the nature of employment settings could be developed.

Development of ESD at UWE

These comments relate to ESD curriculum development and issues that are relevant to the recently formed Internal Knowledge Exchange Network for ESD, a group which has now chosen the title ‘Knowledge Exchange for Sustainability Education.

- We should make the Community Volunteering Programme (focusing on employers engaged in sustainable development), a central part of the ESD agenda.
- The new ESD Internal Knowledge Exchange Network should have ESD employability links as part of its remit. UWE should ensure explicit links are made between the ‘sustainability project’ and employability. For example, employability through ESD should be on the academic agenda.
- UWE should engage student energy, values and motivation more fully in the sustainability ‘project’.

Steps that can be taken

- There is a need to scope the interest and potential relevance and added value of ESD for different Faculties.
- Messages about ESD and employability are needed within the subject specialisms and should not just be left to the GDP. Both within and outside the GDP interested academics should be involved. Student motivation will come from how their actions can impact on society. Academics need to be aware of the Community Volunteering Programme and its potential contribution to employability through the ESD agenda. A deliberate programme of placements within firms in the ‘sustainable development’ sector should be developed.
- There is a need to have an academic sustainability ‘Champion’ in each department.

Institute for Sustainability, Health and Environment

The following issue was raised for consideration by the Institute for Sustainability, Health and Environment.
• Use of the Institute for Sustainability, Health and Environment website as a host and portal for relevant career information.

**Steps that can be taken**

• Birmingham University has a new national Centre for Third Sector Research. A point was made that UWE may be able to win money for sustainability/employability projects from this fund.

• Use the wider stakeholder group that the Institute is developing to form an Environmental Industry Sector Employers’ Group to interact with careers and courses. This should also be linked to the Bristol Environmental Technologies and Services (BETS) Partnership Board.

**Graduate Development Programme (GDP) issues**

• Links need to be made within the GDP between sustainability and employability.

• Educational input to enable students to think through their values in relation to sustainability.

**Steps that can be taken**

GDP level 2 is about motivations, values and incentives. ESD and employability links should be included in these issues or elsewhere in the programme. Creating some GDP content in the ‘facilitated learning group’ sessions is very important.

**Issues for UWE estates and operations**

• Involvement of courses, students and student groups with food and biodiversity on UWE estates, including allotments or growing food on campus. Development of teaching resources based on the development of UWE’s operational sustainability.

**What will assist us?**

Participants were asked what support or assistance would help in securing outcomes and carrying out some of the actions.

The immediate response was that support from the Deans is critical for success.

Participants also thought that a report from this study should go to the University committee responsible for the employability agenda. In terms of governance, they felt that the Sustainability Board needs to:

• develop strong links to the Volunteering and Careers service;

• take on the employability agenda as a named focus, developing the remit of representation on the Board for relevant members.

More information was also called for, in particular:

• clarifying what is on the agenda for professional accreditation bodies in terms of sustainability;

• using the employment destination survey to yield data in this area;

• providing more explicit links and examples within publications and e-learning resources, plus the opportunity for training or additional relevant learning resources for careers information and advisory staff.
**Additional project information:**

**Defining the Environmental Industries Sector**

This section serves as an outline briefing of the environmental industries sector. This sector could be said to merge into a much broader ‘sustainability’ industries sector. Knowledge and liaison with the local and national environmental industries sector would be an important element of linking UWE graduate sustainability literacy and employability.

The UK environmental goods and services industry is diverse, with its roots in some long established sectors, notably in the areas of drinking water supply, waste water treatment, and solid waste management. Today, these core ‘legacy’ operations are rapidly being augmented by new technologies in these sectors and the inclusion of new sectors such as:

- carbon trading,
- new energy capture technologies,
- transport,
- environmental knowledge management and training,
- energy efficiency and management, and
- environmental policy and standards development.

The Manufacturing, Materials and Environment Unit (MME) of the Department of Business Enterprise and Regulatory Reform’s Enterprise and Business Group deals with issues related to the Environmental Industries sector (BERR, 2008). According to this unit, the UK environmental industry is strong, well established and diverse, employing approximately 400,000 people in around 17,000 companies, with an estimated annual turnover of £25 billion.

The world market for environmental goods and services was valued at US$515 billion in 2000 and was forecast to increase to US$688 billion by 2010. In the last 10 years, the global markets for environmental goods and services have developed enormously and it is anticipated that the next 10 years will see even more substantial change.

> "This is a cross-cutting and emerging sector which includes both companies that have been created specifically to serve this market and companies sitting in more traditionally defined sectors (such as engineering) that are diversifying in response to this opportunity. There is no exact boundary around the sector. While some companies (e.g. environmental consultancy) will readily identify with an environmental industry sector, others may not see themselves as operating within this sector. The key point is that there is a sector with common issues arising from the nature of the market it is serving." (BERR, 2006)
The Environmental Industries Commission

The Environmental Industries Commission (EIC) is an association of over 330 companies in the environmental technologies and services sector. Its aims are to:

- promote the international competitiveness of the UK’s environmental technology and services industry;
- be the lead association promoting and supporting the development of a strong, competitive UK environmental technology and services industry with a sound home market from which to compete successfully worldwide.

A snapshot of some of this sector’s demands can be seen from the what the EIC working groups have defined as key issues. These issues map to UWE graduate knowledge, literacy and skill sets that would be valued.

*Key issues for the Environmental Industries Commission 14 Working Groups, (EIC, undated)*

<table>
<thead>
<tr>
<th>Working group</th>
<th>Key issue</th>
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<tbody>
<tr>
<td>Industrial Air Pollution</td>
<td>The European Commission’s proposals for revising the IPPC Directive.</td>
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<td>Defra proposals to deregulate processes from the LAPPCC pollution control regime.</td>
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<td>Extending the Pollution Inventory to LAPPCC.</td>
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<td>Inputting into LAPPCC and IPPCC technical guidance documents.</td>
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<td>Water Pollution Control</td>
<td>Implementation of the Water Framework and Priority Substances Directives.</td>
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<td>Reform of review of water pricing to smooth out boom and bust and encourage innovation.</td>
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<td></td>
<td>Barriers to SUDS technology.</td>
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<td></td>
<td>A more scientific approach to setting discharge consents.</td>
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<td>Contaminated Land</td>
<td>Resolving problems with remediation licensing and the definition of waste.</td>
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<td></td>
<td>Lobbying for improved technical guidance (e.g. CLEA).</td>
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<tr>
<td>Scottish</td>
<td>Resolving problems with remediation licensing and the definition of waste.</td>
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<td></td>
<td>Lobbying for improvements in application of CLEA in Scotland.</td>
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<td></td>
<td>Pressing Scottish Executive to take more account of remediation issues in regeneration policy.</td>
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<td></td>
<td>Barriers to recycling and reuse created by definition of waste.</td>
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<td></td>
<td>Promoting resource efficiency.</td>
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<td>Carbon Trading</td>
<td>Phase III of the EU Emissions Trading Scheme</td>
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<td>Carbon Trading PR</td>
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<td>Carbon Reduction Commitment</td>
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<tr>
<td>Environmental Laboratories</td>
<td>Introduction of MCERTS for chemical testing of soils (including EA/UKAS/EIC Steering Group).</td>
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<td>MCERTS for Water Testing</td>
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<td>Waste Acceptance Criteria implementation.</td>
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<td>REACH proposals for chemical testing and control.</td>
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<td>Oil and Marine Pollution Control</td>
<td>Proposals for an ‘MOT’ scheme for oil tanks.</td>
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<td>Review of the Oil Storage Regulations</td>
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<td>Better controls on on-shore oil storage and oil spill response.</td>
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<td>Dealing with hydrocarbon wastes.</td>
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<td>Sustainable Buildings &amp; Energy Efficiency</td>
<td>Better protection of the marine environment.</td>
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<td></td>
<td>Public sector building projects</td>
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<td>Zero carbon development – new homes and new non-domestic buildings.</td>
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<td></td>
<td>Existing buildings.</td>
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<td>Improvements to the ECA scheme.</td>
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<td>Transport Pollution</td>
<td>Government support on retrofitting pollution control equipment to vehicles.</td>
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<td>The development of low emission zones to control air pollution.</td>
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<td>Action on non-road vehicle pollution.</td>
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<td>Renewable Transport Fuels</td>
<td>Renewable Transport Fuel Obligation.</td>
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<td></td>
<td>Sustainability and Carbon issues.</td>
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<td>EU Fuel Quality Directive.</td>
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<tr>
<td>Sustainable Development &amp; Management</td>
<td>Promoting Government action on resource productivity.</td>
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<td>Action on greening public procurement.</td>
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<td></td>
<td>Influencing key environmental management standards.</td>
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<tr>
<td>Business &amp; Innovation</td>
<td>Tackling regulatory barriers to innovation.</td>
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<td></td>
<td>Government support for environmental technology and services R&amp;D.</td>
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<td></td>
<td>Proposal for a web based ‘portal’ on public sources of R&amp;D funding.</td>
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<tr>
<td>International Business</td>
<td>Government support for environmental exporters.</td>
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<td>Business Link support for environmental exporters.</td>
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<td>UK Trade and Investment focus on environmental exporters</td>
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**Bristol Environmental Technologies and Services (BETS)**

The BETS project was set up in 2006 by Bristol City Council to support the growth of a vibrant Environmental Technologies and Services sector in the Bristol City Region. Its core objectives are to:

- encourage and facilitate networking and cooperation projects within the sector for business innovation and growth, including provision of better market intelligence; knowledge transfer; access to finance; training and marketing support, and appropriate sites and premises;

- harness the strengths and achievements of the sector for the wider marketing and promotion of Bristol for investment and regeneration; and

- raise the public profile and promote the products, services and benefits of the BETS sector on a local, national and international scale.

The project defines the sector very widely and is open to any business whose products or services provide an environmental benefit.
References


Wollenburg, A., Charities struggle to recruit volunteers because volunteering is seen as 'geeky' | Society | The Guardian. Available at: http://www.guardian.co.uk/society/2008/sep/10/voluntarysector.volunteering [Accessed January 5, 2009].