

Small Grant ESD Interdisciplinary Project Report 2010/11

# **ESD** and the Professional Curriculum

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## ABSTRACT

Many degree programmes are shaped by the need to meet the requirements of external bodies. This project utilised the wide range of professionally accredited undergraduate degrees within one university, the University of Dundee, to explore the ways in which awareness of sustainability issues is encouraged by, can be accommodated within, or is obstructed by, the demands of meeting professional requirements. It found that few professional, statutory and regulatory bodies make explicit reference to sustainability issues, but that there is scope for staff to use a variety of methods to ensure that some regard for sustainable development is incorporated into the curriculum.

## **Executive Summary**

### Background

Many degree programmes are shaped by the need to meet the formal accreditation criteria of a range of professional, statutory and regulatory bodies (PSRBs), but this constraint on curriculum design and teaching coverage has tended to be overlooked in discussions of Education for Sustainable Development (ESD). The University of Dundee has a wide range of undergraduate programmes subject to external accreditation and offers the opportunity to explore across many disciplines the place of ESD both in the external criteria and in the teaching practice that takes place within the context set by such criteria.

### Aims

The overall purpose of the project was to explore the extent to which ESD is part of, or can be accommodated within, or is squeezed out by the formal accreditation criteria of PSRBs.

The first specific aim was to discover how far and in what ways accreditation criteria incorporated references to sustainable development (SD).

The second aim was then to discover how, and how far, staff incorporate elements of ESD into their practice, whether in fulfilment of the external requirements or despite silence on the topic.

The project thus aimed to identify the requirements for, obstacles to, and opportunities for the development of ESD across disciplines and to share good practice.

#### Methods

The project involved an examination of the published accreditation criteria of almost 40 PSRBs accrediting undergraduate programmes at the University of Dundee to see how far concern for SD was reflected in these. This was followed by interviews with staff in many Schools across the University to discuss their own practice in dealing with sustainability issues, whether in fulfilment of the external criteria or despite silence on the issue. An internal symposium for staff was held to exchange views and then an open conference with presentations from the project team, professional bodies, employers, teachers, students and the Higher Education Academy. The symposium was also used as the focus for the development of an internal sustainability network, marked by the launch of an institutional sustainability website linking teaching issues with research and energy, waste, travel and related matters.

#### Results

The review of accreditation criteria found that there are a few PSRBs that include strong references to SD within their formal criteria. A second group includes weaker references to such issues, while a third includes general references to the wider social context, which can be used as a basis for incorporating such concerns. Other bodies make no reference to the issue at all. Even where a body's other activities show that it is concerned with sustainability, and at least some relevant employers see awareness of this as a desirable attribute of graduates, this may not be reflected in its formal criteria.

In terms of teaching practice, sustainability issues are incorporated in several ways – embedded within all modules, as a separate optional module, as a topic within modules or as providing a theme or examples within modules whose main purpose is to satisfy core requirements. The need to meet accreditation criteria is a significant constraint, restricting the space available for considering sustainability. If ESD is not incorporated into core coverage, it risks being viewed by students as unimportant and irrelevant.

### Conclusions

The accreditation criteria reveal a range of approaches, with few making explicit reference to SD. Fulfilling these criteria is a dominant element in curriculum design such that the absence of such references militates against a strong role for ESD in the relevant disciplines. Nevertheless where there is staff interested in ESD, there are ways of incorporating this, even within the core elements of teaching in a discipline where ESD is not explicitly mentioned.

### Recommendations

 PSRBs should be encouraged to review their accreditation criteria to consider inclusion of stronger references to the relevance of SD, both the contribution to be made by the profession and the impact of sustainability issues on their work. As a pilot, the HEA might consider contacting one PSRB which does not currently make explicit reference to ESD in its accreditation criteria, to explore whether this should be changed to benefit both the PSRB and the graduates entering that profession.

- 2. Where accreditation criteria impose no such requirement, some element of ESD can still be integrated into core elements of programmes. A small element of ESD in core modules is likely to be more effective than a larger element on a wholly optional basis, although a combination of the two is better still.
- 3. The sharing of good practice and appreciation of the opportunities to incorporate elements of ESD within professional curricula should be encouraged by:
  - a. multidisciplinary networks of staff interested in ESD within individual institutions; and
  - b. disciplinary networks which can explore the meaning, role and implications of SD in the specific disciplinary context and the opportunities for effectively introducing elements of ESD.

## Background

Although much has been said and written to promote Education for Sustainable Development (ESD), very little attention has been paid to the particular challenges faced in the context of externally accredited degrees. The formal requirements of professional, statutory and regulatory bodies (PSRBs), and/or the expectations of such bodies or discipline-centred teaching staff, may leave little space in the curriculum for modules or delivery outwith the disciplinary core. At the same time, the focus on the external requirements may result in the potential to develop sustainability literacy within professional modules being too little recognised or exploited.

Most of the initial work on ESD has been done in the context of academic study in general or of degree structures which readily allow the inclusion of dedicated modules on sustainability issues in a way that is not possible in crowded professional curricula. Earlier studies have made reference to the issue of matching ESD with the needs of individual disciplines and there has been more substantial work undertaken within the relevant Higher Education Academy Subject Centres (e.g., Engineering<sup>1</sup>) but the extent to which these link to the requirements of accreditation varies. For example, in Information and Computing Sciences, the case study by Gordon refers to the British Computer Society requirements, whereas that by Plant does not<sup>2</sup>. Similarly, studies such as *A New Sense of Purpose: Education for Sustainability in Law* (2007)<sup>3</sup> identify many of the features that might enable or obstruct an enhancement of ESD but express attention is not given to the role of the formal accreditation requirements in creating (genuine or perceived) obstacles to progress.

The strength of disciplinary loyalties, a particularly notable feature of professionally accredited disciplines, has been identified as a factor which can obscure, or even hinder, the development of more pervasive ideas, such as ESD and an interdisciplinary approach to them<sup>4</sup>. Previous studies, though, do not explore the

<sup>&</sup>lt;sup>1</sup>See: <u>http://www.engsc.ac.uk/er/sustainable/index.asp</u>

<sup>&</sup>lt;sup>2</sup> See: <u>http://www.ics.heacademy.ac.uk/resources/supp\_learning/esd/casestudies.shtml</u>

<sup>&</sup>lt;sup>3</sup> See: <u>http://www.ukcle.ac.uk/research/projects/esd3.html</u>

<sup>&</sup>lt;sup>4</sup> See Ryan, A. and C. Brooks (2007), *ESD Interdisciplinary Discussion Series*, HEA, p. 14:

http://www.heacademy.ac.uk/projects/detail/esd/esd\_interdisc\_series2007; Blake, J., S. Sterling, and

specific features of professionally accredited degrees, where the needs to satisfy the formal accreditation requirements, and to meet the perceived expectations of professional bodies and employers, play the dominant role in shaping the learning experience. Each discipline is different, but working within accreditation criteria, and the actual or perceived constraints that they impose, is a common feature of the subjects covered here and one which plays a major role in the curriculum design and pedagogy adopted. Likewise there are common features in the ways of responding to these constraints to overcome potential obstacles to ESD. Several disciplines seemed likely to share a cautious approach which may increase the opportunities for the development on an interdisciplinary basis – "the education for sustainable development (ESD) concept should be pervasive in the … programme but should not dominate, with 'exposure' rather than 'promotion' as the watchword" (from a case study in Law at University of Plymouth<sup>5</sup>).

The University of Dundee offers an excellent opportunity for such study in view of the large number of professionally accredited disciplines that are taught (several with more than one accreditation body). This enabled work to proceed across many disciplines while ensuring access to comparable documentation and eliminating the need to account for varying institutional structures and cultures in drawing comparisons. At the same time, though, the accreditation standards examined are of nationwide application enabling lessons that are relevant elsewhere to be identified. Moreover, several staff were known to have an active interest in ESD, and the Scottish Internship Graduate Certificate programme even offered an innovative means of providing an intern to undertake much of the work required.

### Aims

The aims of the project divided into two main parts, one focusing on the accreditation criteria of the PSRBs and the other on how staff respond to these.

In relation to the former, specific aims were to analyse the formal accreditation criteria of PSRBs to identify:

- a. the extent to which they expressly require coverage of sustainability issues, and
- b. the place of sustainability within less precise criteria requiring attention to social context or ethical issues.

In relation to the second, specific aims were to explore:

- a. the current practice of including ESD within teaching on professionally accredited degrees;
- b. the extent to which the curricula designed to meet accreditation criteria do, and might have space for, coverage of sustainability issues, whether as separate modules, distinct topics or embedded within "core" teaching; and
- c. the opportunities for interdisciplinary collaboration to enhance ESD in accredited degrees.

F. Kagawa (2009), *Getting It Together: Interdisciplinarity and Sustainability in the Higher Education Institution* (Occasional Paper 3, Centre for Sustainable Futures, University of Plymouth), p.49: <a href="http://csf.plymouth.ac.uk/files/Getting\_it\_Together\_18.06.09.pdf">http://csf.plymouth.ac.uk/files/Getting\_it\_Together\_18.06.09.pdf</a> (PDF)

<sup>&</sup>lt;sup>5</sup> See: http://www.ukcle.ac.uk/resources/esd/cases/workbook.html

The views of students were also identified as being relevant since their perception of the role and value of ESD would also be a significant factor in its effective place in the curriculum.

The overall aims were thus both to identify the extent to which PSRB criteria promote or potentially obstruct the development of ESD and to identify good practice for staff wishing to promote ESD within the constraints of accredited curricula.

## Methods

The work of the project was largely undertaken by an intern, Nadeem Ali, appointed under the Scottish Internship Graduate Certificate scheme run by the Careers Service at the University of Dundee. This scheme is designed to equip recent graduates for future careers by combining a substantial internship with coursework that encourages students to think about career opportunities and structures, to develop their own employability, and to reflect on their experience.

Professor Colin T. Reid, Professor of Environmental Law, led the project, with an Advisory Board comprising:

Dr. Janet Hughes, Dean of the School of Computing;

Dr. Eric Monaghan, Assistant Secretary, Academic Affairs;

Ms. Lorna Stevenson, School of Business; and

Dr. Lorraine Walsh, Assistant Director, Library and Learning Centre.

Staff at the University's Library and Learning Centre offered substantial assistance in the organisation of the symposium and conference associated with this project, while the development of the website was supported by staff in Information and Communication Services. The assistance of the Director of Quality Assurance, Dr. Jonathan Weyers, is also gratefully acknowledged.

The first stage of the work involved analysis of the accreditation criteria relevant to the undergraduate degrees taught at the University of Dundee. Each of these was located and then read to extract the references to sustainable development (SD), categorised in terms of sustainability in general, then specifically environmental and social aspects, and then where there is an ethical dimension that extends beyond the narrowly focused issues of professional ethics to include elements which can be seen as encompassing issues of social justice, etc. The result of this work can be seen in Appendix 2.

The second stage of engaging with staff and others had four main elements. The first was the organisation of an internal symposium, held in January, to report on the initial findings of the first stage and to discuss the responses from staff, including a student perspective (see Appendix 1). This event also helped to launch an internal network for staff interested in sustainability issues and a reorganised website on such matters.

The second element was a series of interviews with staff in various Schools that teach accredited degrees. These semi-structured interviews covered the following areas:

- How do you define sustainability and which area(s) do you focus on?
- How is the importance of sustainability and the environment affected by the attitude and influence of the profession?
- Is there space and opportunity within the accreditation requirements to include sustainability?
- Are they helpful, lacking or hindering in promoting sustainability to students?
- Examples of sustainability and environmental teaching within the school
- Are there opportunities for interdisciplinary learning?
- How should sustainability be taught?
- Do teachers require more training on sustainability?
- What extra skills and benefits do the students of your School gain through the teaching of sustainability and environmental issues?
- Are employers showing evidence of enthusiasm towards sustainability modules?

Interviews were held with staff in the Schools of Business (covering Accounting and Economics); Computing; Dentistry; Education, Social Work & Community Education (all three elements); Engineering, Physics & Mathematics (Engineering); Environment (Town and Regional Planning, Environmental Science and Geography); Law (Scots Law and English Law); Psychology; and e-mail discussions with Medicine.

The third main element was the organisation of a conference in April which involved a wider range of contributions (see Appendix 1). In particular, as well as presenting the findings of this project, contributions came from the teaching and student perspectives at Dundee, two PSRBs, employers, the HEA, and an expert on sustainability education from another institution.

A fourth element was the development of an internal network of staff interested in sustainability education and the linking of this to the University's wider actions in this area. Contacts with staff were made through the organisation of the symposium and conference and to integrate concerns across the range of the University's activities, a new institutional website was established with a focus on sustainability, linking teaching issues with research and energy, waste, travel and related matters<sup>6</sup>.

### Case context

As noted above, this project was carried out in the University of Dundee because of the wide range of professionally accredited programmes taught at the University. These cover the following subjects (some dealing with more than one PSRB): Accountancy, Architecture, Archives, Computing, Dentistry, Education, Engineering, Environmental Management, Finance, Law, Medicine, Nursing and Midwifery, Psychology, Social Work, and Town Planning. By working across disciplines but within the one institution, there was access to comparable documentation as required by the institutional framework for programme and module approval, specification and review, and for external accreditation. Furthermore, concentrating

<sup>&</sup>lt;sup>6</sup> See: <u>http://www.dundee.ac.uk/sustainability</u>

on one institution eliminated the need to account for varying institutional structures and cultures in drawing comparisons. Yet the criteria are of national application and impose pressures that must be accommodated in every relevant institution.

## **Evidence-based results**

The results of the first part of the project, the analysis of PSRB accreditation criteria, are given in Appendix 2. These can be divided into four rough categories. Firstly, a few bodies do make strong references to sustainability in their criteria, for example in Engineering, Planning and Architecture. At the other extreme, for many bodies, for example The Law Society in England and Wales, there is no reference at all to such issues. Between these positions, two further groups can be identified. The first does make some reference to the environmental and social context, which can be built upon, for example in accounting, while the second includes some consideration for the wider context within which the discipline sits, for example The Law Society of Scotland, which creates an opportunity for ESD elements to be incorporated as part of the core coverage, but does not demand this. Ethical issues feature strongly in many criteria but are limited to the narrow issue of professional ethics rather than encompassing the wider ethical questions raised by consideration of issues of sustainability, e.g., responsibilities to future generations.

In part, this variety reflects a variety of approaches to the setting of accreditation requirements, which vary greatly in length and detail. In some cases, these are limited to basic professional competences, and there is no reference to any wider considerations or attitudes at all (e.g., English Law Society). Others refer to external circumstances but only to the extent that they have a direct impact on the work that qualified professionals will be doing (e.g., Dentistry) and only those where there is a direct connection with the physical world seem to make strong explicit reference to environmental concerns (e.g., Architecture and Planning). It is not clear whether for some bodies this is a conscious choice to adopt a narrow focus or a sign of a lack of awareness of the impacts on and of their profession and the role it has to play in relation to SD. Anecdotally, the slow pace at which accreditation criteria are revised and concerns over how far those responsible reflect the needs and wishes of forward-looking practitioners may be further issues affecting the extent to which new perspectives are incorporated into the requirements.

The example of the Association of Chartered Certified Accountants (ACCA) as presented at the conference is interesting. The requirements in their own exam syllabus include some reference to issues such as the ability to "appraise the impact of environmental, social and ethical factors on performance measures" but their other activities have included significant publications on "Ecological Footprinting", "Sustainability Reporting" and "Carbon Accounting". This reveals a degree of interest in sustainability matters in excess of what is reflected at the qualification stage.

The picture that emerged from the discussions with staff was equally varied. In terms of including ESD within teaching, at our conference ,Andrea Ross (School of Law) summarised the following options, all of which are demonstrated by teaching practice across the University:

- 1. Inclusion as a theme within a whole degree programme
- 2. Specialist core module dedicated to SD (level 1 or 2)
- 3. Use of SD as a theme in a core module
- 4. Use of SD as an example in a core module
- 5. Whole seminar in a related module dedicated to SD
- 6. Whole optional module dedicated to SD

The interviews supported this analysis of options and confirmed that, within the limited space available in the curriculum, the need to cover the required elements might remove the scope for dedicated modules. There is also a concern that if ESD elements are optional, as opposed to being integrated into the core, they risk being perceived as of less significance than the "more professional" elements. Where accreditation criteria do call for SD to be covered, it forms an integral part of the curriculum, embedded throughout the programme.

The student perspective was presented by Ewan McTurk (Engineering), who had consulted with colleagues in other Schools<sup>7</sup>. His work again showed a variety of attitudes, with some students showing enthusiasm and others indifference, while ESD was recognised as being central to some programmes, yet irrelevant or marginal to others. He also highlighted the issues of whether ESD should be addressed as a generic or discipline-specific issue, as a compulsory or optional element, and as an embedded or stand-alone element. The staff interviews again showed that these perceptions and analysis were well founded, with a preference for incorporating at least some element of ESD within the core coverage so that it was seen as an integral part of the discipline, not as an optional "add-on".

The accreditation criteria were universally acknowledged as the main driver for what was covered in the curriculum, so that the inclusion or absence of ESD in those criteria is of vital significance. Staff reported no strong student demand for coverage of sustainability issues in areas where these are not included in the accreditation criteria. In many disciplines, there was equally no sense that sustainability literacy was an attribute that was regarded as desirable (or even thought about at all) by most employers, although, where sustainability issues have a higher profile in accreditation criteria, the perception was that employers likewise placed higher value on this.

A further point raised during the interviews was confusion and uncertainty over what is meant by SD, with students and employers sometimes seeing only one narrow perspective, e.g., renewable energy, rather than appreciating the many-faceted nature of the issue. Even staff with an interest in the area were not sure of what might be included within this concept. There was a tendency within disciplines to focus only on some aspects of the subject and particularly on those which have a direct impact on the specific profession, e.g., the significance of environmental and social factors for public health, rather than wider concern for the many ways in which a profession's activities both affect and are affected by the different branches of

<sup>&</sup>lt;sup>7</sup> His presentation is available as a podcast: <u>http://www.dundee.ac.uk/sustainability/podcast/</u>

sustainability. In some disciplines "Environmental XYZ" is perceived as a separate subject, which may or may not be offered at an individual institution, rather than as a dimension of the standard treatment.

## Other outcomes

The work of this project was incorporated within the broader development of concern for sustainability at the University of Dundee. In collaboration with the University's Environmental Task Group and the Environment and Sustainability Officer, a website was created to integrate information on educational issues and research as well as more operational matters, such as energy use, waste and travel that have traditionally fallen within the ambit of Estates and Buildings<sup>8</sup>. It is hoped that the foundations laid during the project can be developed in future and the issue is to be discussed by the University's Environmental Task Group. Similarly, the symposium and conference have helped to establish a network of staff across the institution to take forward ideas on ESD, a development which fits well with the University's recent strategic review which identified the environment and sustainability as one of the strategic areas for the institution's future development.

## Issues arising

Although the key elements of the project have been achieved, a number of issues combined to make this project less successful than hoped for. Building works made it difficult to provide suitable accommodation for the intern. The original plan of using an office close to the project leader was thwarted by building work that required that office to be used as access to a temporary fire-exit. Space was found initially by sharing an office with one of the Advisory Panel and then in shared accommodation in the Careers Service. Although there were plenty of meetings to plan and discuss progress, this was not the same as the everyday contact initially planned. The work programme was also disrupted by the bad weather in early December, which meant that planned meetings and, especially, the organisation of the symposium were delayed, putting back the schedule for the whole project.

On reflection, the proposal was too ambitious. This project was an "extra" rather than something that contributed to what staff were already doing as part of their mainstream activity (income-generating teaching or research, or activity producing personal or departmental "credit"). For academic staff whose main focus is not on educational development or related research, funding such as this can play a vital role but more in supplementing existing activity, whether research or course development, rather than supporting wholly new projects.

## Thematic discussion

The project revealed shared concerns between disciplines rather than significant issues of interdisciplinarity. This appeared to be less the result of strong discipline loyalty than a consequence of the difficulty of making sense of such a potentially large and diffuse concept as SD and of the need to show its relevance in a

<sup>&</sup>lt;sup>8</sup> See: <u>http://www.dundee.ac.uk/sustainability/</u>

disciplinary context if it is not to be regarded as a marginal or unnecessary addition to the "really important" core coverage. Such concerns pull against a strong interdisciplinary approach even where it might appear that there are opportunities for such a path to be taken. The preferred approach of embedding elements of ESD within the professional "core" further militates against full interdisciplinary working.

Nevertheless, there is undoubtedly scope for staff within different disciplines to come together both to exchange good practice in incorporating ESD and to support each others' activities in this field, without stepping outside the disciplinary framework that is useful in emphasising the relevance of sustainability in every area. In the interviews, some staff indicated that they did not feel comfortable with tackling some aspects of sustainability, and stronger contact with staff in other disciplines would allow access to informal training (or often, we suspect, just reassurance) in areas where staff feel less confident, and access to guest lectures which can be incorporated into the teaching.

Similar dialogue between disciplines might usefully be promoted between PSRBs, where there is currently considerable variety in the extent to which the role of the profession in relation to SD is reflected in their accreditation criteria.

### Conclusions

Despite the importance of concern for SD in governmental and international policy, the accreditation criteria of PSRBs reveal a range of approaches, with few making explicit reference to SD. This is partly a result of a narrow function being seen for such criteria by bodies and there is scope for many of them to review the approach that they take.

Fulfilling the accreditation criteria is a dominant element in curriculum design so that the absence of such references militates against a strong role for ESD in the relevant disciplines. Nevertheless, where there are staff interested in ESD, there are ways of incorporating this, even within the core elements of teaching in a discipline where ESD is not explicitly mentioned.

Where the accreditation criteria do require attention to ESD, this is embedded throughout the curriculum and forms an essential element of the programme. Where there is no such explicit requirement, staff have to decide the way forward. Although a dedicated module might allow more in-depth coverage, there is a danger that, even if space for such a module could be found in the curriculum, it is likely to be competing with other optional modules and, by its very nature, risks being seen as marginal and of less importance than the "core" work. Embedding elements of ESD within core modules also shows the relevance within the specific discipline and is to be recommended as one element of the approach taken. On all such issues, staff can learn from each other, both across disciplines within a single institution, and within disciplines across different institutions.

## Recommendations

- 1. PSRBs should be encouraged to review their accreditation criteria to consider inclusion of stronger references to the relevance of SD, both the contribution to be made by the profession and its impact on their work. This work might be taken forward by the HEA through contacting one PSRB that does not currently make explicit reference to ESD in its accreditation criteria, to explore whether this should be changed to benefit both the PSRB and the graduates entering that PSRB. Existing students and graduates relevant to the PSRB should participate in the study, which might expand to consider the place of ESD in the continuing professional development requirements that are set.
- 2. Where accreditation criteria impose no such requirement, some element of ESD can still be integrated into core elements of programmes and the teaching staff should be alert to the opportunities to do so. A small element of ESD in core modules is likely to be more effective than a larger element on a wholly optional basis, although a combination of the two is better still.
- 3. The sharing of good practice and appreciation of the opportunities to incorporate elements of ESD within professional curricula should be encouraged by:
  - a. multidisciplinary networks of staff interested in ESD within individual institutions, and
  - b. disciplinary networks which can explore the meaning, role and implications of SD in the specific disciplinary context and how consideration of such issues can be incorporated into the curriculum.

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## **Appendix 1**

## Outcomes

## Publications

At this stage there are no published outcomes from the report, but the summary of accreditation criteria (Appendix 2) will be published on the Internet<sup>9</sup> and staff involved in the project are considering using this report as the basis for short articles for professional journals within their disciplines.

## Events

Two events were held in the University of Dundee as part of this project, an internal symposium and an open conference. Details of these are given on the following pages.

<sup>&</sup>lt;sup>9</sup> See: <u>http://www.dundee.ac.uk/sustainability/</u>

## Internal Symposium Programme

#### Education for Sustainable Development in the Professional Curriculum

Friday 28 January, 2011 12.00-2.00 EduZone, Main Library

This event is part of a project funded by the Higher Education Academy to explore the role of Education for Sustainable Development (ESD) in the Professional Curriculum. The promotion of ESD in higher education is a policy at UN, EU and national levels, but virtually no consideration has been given of how this can fit with the constraints of professionally accredited curricula. This project is examining the extent to which ESD is part of, can be accommodated within or is squeezed out by the requirements of the formal accreditation criteria of the many statutory and professional bodies that approve programmes at the University of Dundee. This symposium is an opportunity to hear our initial findings and more importantly to exchange experience of finding a place for ESD within professional curricula. The event will mark the launch of an internal website with information on ESD and of an inter-disciplinary network to enable us to explore further and make the most of our shared experience.

#### Programme

12.00-12.15	Arrival and lunch
12.15-12.25	Welcome, Overview and Launch of Sustainability Website
	Prof. Colin T. Reid, School of Law
12.25-12.45	Survey of Accreditation Requirements
	Nadeem Ali, Project Intern
12.45-12.55	Employability
	Bill Lynch – School of the Environment
12.55-1.05	A Student Perspective
	Euan McTurk - School of Engineering, Physics and Mathematics
1.05-1.35	Discussion
	- What is current practice in including ESD in the curriculum?
	Distinct modules, distinct topics, optional or core topics, pervasive, ignored?
	<ul><li>How far do professional requirements shape and constrain what is done?</li><li>What would you want to do for ESD in your discipline?</li></ul>
	- How can this be supported?
	Background information, materials, shared teaching or guest lectures from other disciplines?
1.35-1.45	University Perspectives
1.45 -1.50	Next Stages
	Prof. Colin Reid
1.50	End

## ESD in the Professional Curriculum Conference Programme

#### Education for Sustainable Development in the Professional Curriculum

Wednesday 27 April, 2011 10.00-3.00 pm University of Dundee, Dalhousie Building

This conference is sponsored by the Higher Education Academy to explore the role of Education for Sustainable Development (ESD) in the Professional Curriculum. The promotion of ESD in higher education is a policy at UN, EU and national levels, but virtually no consideration has been given of how this can fit with the constraints of professionally accredited curricula.

This project is examining the extent to which ESD is part of, can be accommodated within or is squeezed out by the requirements of the formal accreditation criteria of the many statutory and professional bodies that approve programmes at the University of Dundee and beyond.

Programme

10.00-10.30am 10.30-10.35am	Registration and Refreshments <i>Welcome</i> Professor Colin Reid, School of Law
10.35-11.00am	ESD in the Professional Curriculum – project overview and findings Professor Colin Reid School of Law & Nadeem Ali Project Intern
11.00-11.20am	Accreditation Body Perspective I
11.20-11.40am	Accreditation Body Perspective2 Noel Tagoe, CIMA
11.40-12.15pm	Group Discussion: Should sustainability be an accreditation requirement?
12.15-12.30pm	Incorporating Sustainability into a Professional Degree Andrea Ross, School of Law
12.30-1.15pm	Lunch (Room 1S05)
1.15-1.30pm	A Student Perspective
1.30-1.45pm	Euan McTurk, School of Engineering, Physics & Mathematics Employer Perspective
1.45-2.00pm	Employability Skills
2.00-2.30pm	Group Discussion: How to incorporate sustainability in the curriculum
2.30-2.45pm	Coffee
2.45-3.00pm	Sustainability in Higher Education
3.00-3.15pm	Dr. Rehema White, St. Andrews HEA Perspectives
3.15pm	Alastair Kobertson, HEA Closing Remarks