# introducing sustainable development:
# an outline for unit writing teams

This leaflet shows how you might think about and promote sustainable development when you are developing qualifications. It outlines what the key policies mean, and provides a few simple suggestions on how to include sustainable development in your writing.

## The key strands of sustainable development

There are three main interconnected strands to sustainable development. Each can be addressed in learning processes.

**Social:** This strand is about quality of life. Think about educational impacts in terms of citizenship, the ability of groups of people to work together, the impacts of cultural integration, or improving security through crime reduction.

**Economic:** This strand is about infrastructure. The costs and benefits of sustainability are becoming more prominent for all professions, with many groups now considering the impact of current and future environmental directives. Students are going to be affected by changes in working practices as a consequence of the implementation of these directives.

**Ecological:** Animals and plants become endangered or extinct; pollution and emissions are changing the natural systems we all rely on for clean air, water and food. In this strand, the genetic resources, and the systems for food and timber production are considered side by side with metal ore sources, fresh water and clean air. Sustainability recognises that people, and all other living things, depend on these resources being maintained rather than depleted or destroyed.

It is important to recognise that these three strands are not independent of each other, but that they should be viewed as an integrated whole. What is critical to the concept of sustainability is the understanding that all aspects of our lives depend on everything else that exists on the Earth: be this people, social systems, earth systems, living things or non-living things. What happens in one place at one time can affect what happens somewhere else immediately or in the future.

Embedding sustainable development in qualifications means looking for the opportunities within the course for the learner to engage with the principles of sustainable development. It should be an integral part of the Unit. It does not mean having a statement at the end saying 'please consider'. Unit writers have a role here of encouraging the student and practitioner to understand the issues and to help them see the consequenses of their behaviour.

Some examples might be:

- Review buying policies: where materials come from, where they go to.

- Show awareness of different alternatives for materials or services.

- Consider working practices: ranging from electronic media to deliver courses to teleconferencing instead of meetings.

- Set a good example within the learning instruction or how the course is run.

- Develop their own strategies for ensuring their working practices are environmentally sensitive.

- Provide sources of information about good practice, such as existing environmental, social, economic and community projects around Scotland. Identify where the links are obvious or more easy to use. Don't make them tortuous or difficult to follow.

- Keep up to date with the policies, strategies and recommendations from trade or professional bodies.

Many workplaces already have working practices that are sustainable — such as listing cleaning products that are eco-friendly, or using fair-trade products, using sustainable forest timber or reducing energy and waste bills.

The next step is to develop these in your unit writing. Remember, this is important, not just because of policy and legislation, and not just because it can save money, stimulate ideas and involve students; but also because it creates informed people — the people who will be reading and working through the units you are writing.

**ideas to consider when you're writing**

It is important for you to think about likely focuses for sustainable development ideas and activities.

**The core focus of the Unit:** Think about the links between the Unit and sustainable development issues. You might include current environmental legislation and directives, including industrial directives, from trade and professional bodies. This is the environmental equivalent of keeping up with health and safety requirements.

**Students:** Many young people are well aware of sustainability issues. Asking them to apply their concerns and ideas to practical and real life situations can have real benefits. They will also have views on how best to implement sustainability initiatives that need to be put into the context of their education.

**Assessment and evidence:** This could be the critical place for you to develop ways for students and practitioners to make the link to sustainable development ideas. Use of portfolios or action planning with reflective practice may provide opportunities to develop skills and build capacity for joined-up thinking. Sustainable development in assessment can range from simple acknowledgement through to an analysis of the social or economic impact of a product or service on the environment. An example might be selecting

eco-friendly (sustainable) products; investigating the impact of regimes on social unrest; or looking at the impact of social change in a country on the environmental, social and economic quality of life there.

**Business and community considerations:** How do social enterprises, current business developments or technological developments affect or involve sustainable development? These issues will be often cited in current trade and professional journals, the places where you can detect that future directives are about to be enacted in some way — a recent example would be directives on handling electronic waste (the WEEE Directive). A student might need to be aware of these requirements to help solve the problem with current thinking as they enter the workplace. For example, directives linked to recycling and waste reduction, Clean Technologies, or the role of international development on sex education, HIV/Aids reduction and Healthy Living agendas.

You have seen that we've not started by stressing the role of groups who work in the field of sustainable development. We do suggest that you could consult these, though, as sources of background information. The following principles for including sustainable development ideas should indicate why we want to start with the people in your field of expertise who are considering environmental principles in the workplace.

**Core Skills**
The basic skills such as reading, writing, speaking, numeracy, IT, problem solving and working with others remain the same. Problem solving and working with others are key to building skills for sustainable development.

**areas to focus on**

## The context for delivery

Some organisations and institutions have done a lot of work on setting the right example in terms of buying policies, resources use, energy saving or waste minimisation. Use of case studies can provide a good context for delivery. Use of e-learning and open learning through new media can improve the impact of the course on paper usage and can be used to develop new methods of communication.

## Assessment guidelines

These can be used to encourage people to provide evidence that is relevant to sustainable development. For example, including some form of assessment as part of a holistic portfolio, or some type of reflective account on environmentally sensitive products. The assessment process itself could also be thought about in terms of sustainable development principles, including the option of electronic submission, using electronic media for discussion groups, or recording conversations electronically rather than transcribing them.

## Student evidence

Students should be encouraged to seek widely to provide evidence of sustainable development practices as they relate to their vocational area. There are various places in the UK that consider how environmental practices both benefit and enhance business and skills, and these are often professional bodies. Trade journals and current case studies and polices also provide useful information. You could also suggest looking at local authorities as sources of community initiatives and ideas.

This example leads naturally into wider examples for evidence gathering. Students can be encouraged to look at publications from sustainable development or environmental groups, but it is important not to ignore other interesting sources of information, such as economic think tanks, development agencies, industrial councils, fair trade organisations and organisations that manage resources, such as the Marine Stewardship Council or any of the other fair trade or environmental labelling schemes.

## Support notes

These provide an opportunity to guide the lecturer who may not be familiar with sustainable development education. Uptake of sustainable and environmental principles can be encouraged by getting students to develop their own strategies and ideas, which can, if framed with good questions, provide interesting outcomes. You can encourage the use of environmental projects as a means to enrich the learning experience or life-long policies.

The support notes provided for students offer an interesting set of possibilities for building on this idea. Think about relating environmental actions to the core focus as an opportunity to develop skills, behaviours and attitudes that lead to more sustainable living. You can develop the support notes to include:

- knowledge of current policies and strategies at global, European, UK and Scottish levels

- understanding of current trade and environmental group perspectives

- critical analysis of the various suggestions — how you could make them practical

- suggesting ways of adapting the core focus of the Unit to include sustainable development considerations

So where does all this lead us?
Here are some guidelines on statements which promote sustainable development that might be included into units.

## conclusion – a thoughtful checklist

### Knowledge and understanding

Demonstrate and/or work with:

- an awareness of the evolving/changing nature of social change, economic development or ecological impacts;
- an awareness of legislation, directives or initiatives relevant to sustainable development;
- an understanding of the difference between explanations based in evidence and/or research and other forms of explanation;
- general knowledge of relevant environmental fact and theory based on sound science;
- relevant criteria for assessing a situation, service, process or product from a sustainable development perspective;
- a range of facts, ideas, properties, materials, terminology, practices, techniques about or associated with life-cycle analysis or environmental impact;
- knowledge about footprinting and the impact of behaviours

### Practice: applied knowledge and understanding

- Use some of the basic and routine professional skills, techniques, practices and/or materials associated with an awareness of the delivery of a service or product.
- Develop environmental action plans and practise these in both routine and non-routine contexts.

### Generic cognitive skills

- Present and evaluate arguments, information and ideas which show awareness of the environmental impact of a process or service.
- Use a range of approaches to address defined and/or routine problems and issues within familiar contexts illustrated with sustainable development concepts or ideas.

### Communication, ICT and numeracy skills

- Use a wide range of routine skills and some advanced skills associated with the subject/discipline – for example:
- Convey complex ideas in a well-structured and coherent form.
- Use a range of types of communication effectively in both familiar and new contexts.
- Use standard applications to process and obtain a variety of information and data.
- Use a range of numerical and graphical skills in combination.
- Use numerical and graphical data to measure progress and achieve environmental goals/targets.

### Autonomy, accountability and working with others

- Exercise initiative and independence in carrying out defined activities at a professional level.
- Seek supervision in less familiar areas of work such as life cycle analysis or waste disposal.

- Take responsibility for consulting with others and developing a sustainable development strategy.
- Manage and reduce the use of limited resources within defined areas of work.
- Take the lead in implementing agreed plans in familiar or defined contexts.
- Take account of your own and others' roles and responsibilities and opinions in carrying out and evaluating tasks.
- Work with others in support of current professional practice under guidance.

Here are some ideas of sources of information:

### Knowledge and understanding

Current statutory information about sustainability in Scotland:

- Professional development and sustainability
- UK-wide initiatives and guidance from DEFRA
- www.scottishexecutive.gov.uk/topics/ sustainabledevelopment
- www.un.org
- www.unece.org/env/ SustainableDevelopment
- www.itscotland.org.uk/ sustainabledevelopment
- NGO action plans and recommendations
- recycled products websites
- websites about saving energy

### Practice: applied knowledge and understanding

- buying polices and guidance from DEFRA
- SQA environmentally-focused Units

The rest you are doing already.

### Generic cognitive skills

- SQA environmentally-focused Units

The rest you are doing already.

### Communication, ICT and numeracy skills

- development of paperless techniques
- look for evidence of video and teleconference meetings
- alternative transport and reworking practices

The rest you are doing already.

### Autonomy, accountability and working with others

You are doing this already.