

## Teaching guidance

This guidance note has been designed to outline the importance to the University of delivering sustainability considerations through our curriculum. By sustainability considerations we mean the environmental, social and economic impacts, both positive and negative related to the course content and/or the way the course is delivered. It outlines an approach that provides some practical steps to support our teaching staff to integrate sustainability in their own curriculum areas.

Sustainability and social responsibility have become increasingly important for The University of Manchester and we have clear commitments in place at the highest strategic level. Embedding sustainability into the curriculum provides a huge opportunity to maximise our contribution to society through the graduates we send out into the wider world. As a learning organisation the curriculum is a key part of our core business. If we are to realise our ambition of becoming a socially responsible organisation, then sustainability considerations in the curriculum are essential.

### What will this guidance help you achieve?

There are many approaches and techniques for curriculum development in relation to sustainability and you may wish to employ something you are already familiar with. This guidance is offered to provide a consistent starting point if this is a new area to you. It is a simple, practical approach that can help embed sustainability into the curriculum with only a small amount of time and resource required to get started.

### What exactly is a sustainability impact analysis?

A sustainability impact analysis is a simple methodology for understanding sustainability and allowing you to practically apply it to a course, module or curriculum area. It is an exercise best completed with colleagues.

It is a simple three step process

#### Step 1 Describe the course and how it is delivered

The purpose of this activity is to help reflect on current practice.

- Discuss the content of the course (sometimes environmental, social and economic considerations are already included)
- Consider how the course is delivered, face to face, placement, group activities etc.
- Highlight anything unique or unusual about the course (e.g. mainly mature students, entirely distance learning etc.)

#### Step 2 Undertake the sustainability impact analysis

During this step we are going to systematically identify the environmental, social and economic impacts associated with the course content *and* the way the course is delivered – both positive and negative.

	Negative	Positive
Environmental		
Social		
Economic		

### Key things to remember when undertaking an impact assessment

- What we are trying to identify is *how* and *where* the curriculum can explore sustainability considerations (social, environmental, economic, positive or negative)
- Working through the grid systematically should enable you to identify opportunities. The sustainability impact analysis is best carried out in partnership with colleagues

A worked example of an impact assessment can be seen on the next page.

## Worked Example, Step 2 Undertaking a Sustainability Impact Analysis (Completed at The University of Manchester, 2014)

	Positive	Negative
Environmental	<ul style="list-style-type: none"> <li>• Students receive an iPad containing a repository of teaching material in the form of videos, papers, staff authored eBooks etc. This has led to a significant reduction in the proportion of the School's paper-based teaching material.</li> <li>• In Manchester Leadership Programme (MLP) social and global challenges are highlighted e.g. climate change.</li> </ul>	<ul style="list-style-type: none"> <li>• Travel Emissions (kit, goods and students to outreach appointments).</li> <li>• Energy consumption in the labs and clinics.</li> <li>• Production of products and disposables.</li> <li>• Clinical waste – both in hospital and outreach.</li> <li>• Hazardous waste.</li> <li>• Packaging waste.</li> <li>• Paper.</li> </ul>
Social	<ul style="list-style-type: none"> <li>• Emphasis on highest quality patient care, based on evidence and prevention.</li> <li>• Outreach activity in socially deprived communities.</li> <li>• School programme - students give talks to children in local schools.</li> <li>• Enquiry based learning approach - students develop a wide variety of skills.</li> <li>• Softer skills around communicating to</li> <li>• o people from different backgrounds and the development of empathy.</li> <li>• Voluntary work in the community through MLP.</li> <li>• A lot of peer-to-peer learning, discussion and collaboration.</li> <li>• Collaborative learning with other universities.</li> <li>• Taster days and career talks delivered by staff and students.</li> <li>• Overall partnership, team based ethos.</li> <li>• Broad spectrum of student culture.</li> <li>• Support students to do volunteer work in low income countries over their summer vacation.</li> </ul>	<ul style="list-style-type: none"> <li>• Long course.</li> <li>• Longer terms than other courses.</li> <li>• Less holidays than other courses due to workload and structure of the programme.</li> <li>• Not locally sourced products – lot of the materials and equipment comes from overseas.</li> </ul>
Economic	<ul style="list-style-type: none"> <li>• Course is oversubscribed.</li> <li>• Very high employment rate post-graduation.</li> <li>• A lot of overseas student bring income into the University and local economy.</li> <li>• Students are encouraged to consider research in their future careers.</li> </ul>	<ul style="list-style-type: none"> <li>• Cost to student – travel is not always funded.</li> <li>• Materials to buy e.g. books.</li> <li>• Graduation costs.</li> <li>• The course uses a lot of materials.</li> </ul>

## Step 3 Identifying opportunities

When you have completed the impact analysis the following question needs to be asked:

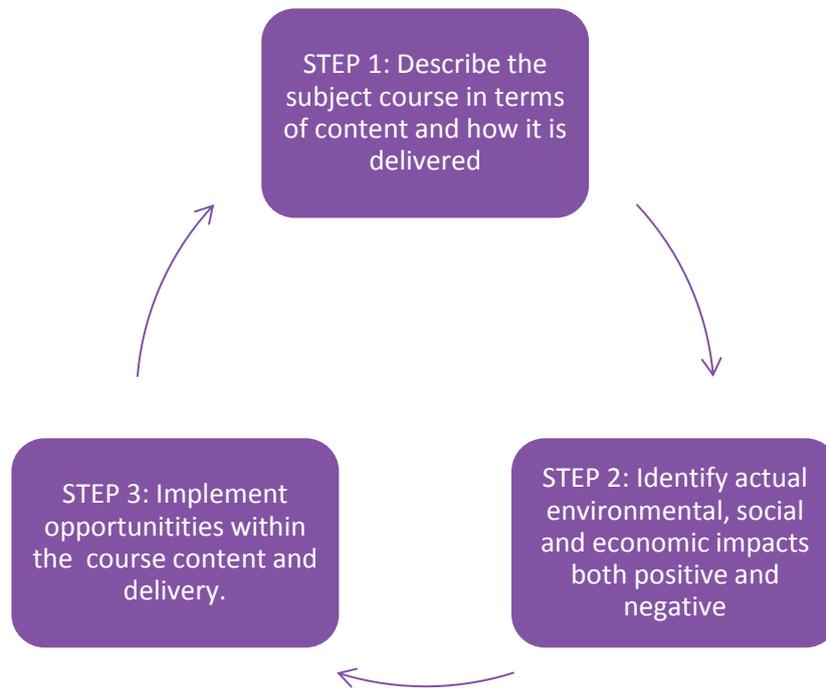
Where in the course content (or through the delivery mechanism) can we:

- Identify how sustainability is already part of what we teach.
  - This could be the fact that the course is already delivered on-line.
  - It could be that we teach Geography and the core of the content is about natural systems.
- Identify opportunities to adapt our teaching methods to offer opportunities to consider sustainability more fully.
  - Increasing the amount of group work to increase social interaction.
  - Minimising resource use and energy consumption.
- Identify how we could enhance course content to consider some of the opportunities we have identified.
  - Utilising environmental data for research purposes.
  - Take opportunities to integrate some core sustainability principles into the course.

Worked Example, Step 3 Identifying Opportunities (Completed at The University of Manchester, 2014)

Reduce negative environmental impact	Enhance positive social impact	Increase economic positive impact
<ul style="list-style-type: none"> <li>• Increase the number of postings on blackboard.</li> <li>• Decrease the number of handouts given to students.</li> <li>• Ensure students' work load is managed to reduce travel time to and from the University.</li> </ul>	<ul style="list-style-type: none"> <li>• Explore the possibility of organising an annual regional event to promote the course to the managers of potential students.</li> <li>• Re-examine any promotional material associated with the course and where appropriate improve.</li> <li>• Re- establish existing networks                             <ul style="list-style-type: none"> <li>○ Review alumni database.</li> <li>○ Initiate contact with alumni.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Stimulate interest in the programme from the 3rd Sector (identified as a growth area for the programme)                             <ul style="list-style-type: none"> <li>○ Contact large providers in the not for profit sector – hold meetings to develop a strong partnership approach.</li> </ul> </li> <li>• Stimulate interest in the programme amongst graduate students.                             <ul style="list-style-type: none"> <li>○ Lectures to internal students from existing students.</li> <li>○ Marketing materials for students.</li> </ul> </li> </ul>

## Process summary



### What are the benefits of this simple approach?

- It will allow you to identify the environmental, social and economic impacts and opportunities associated with a particular course.
- It can be carried out as part of the course review process.
- It will provide you with the confidence and evidence that you have systematically considered sustainability issues within the curriculum.
- It focuses on the positive impacts as well as the negative.

### Associated resources that support this guidance

Some further resources that may be useful are listed below. This is not intended to be comprehensive but offers a starting point for further exploration.

- UNESCO ESD Website  
<http://en.unesco.org/themes/education-sustainable-development>
- Guidance on the EAUC Website  
[http://www.eauc.org.uk/sorted/sustainable\\_development\\_in\\_the\\_curriculum](http://www.eauc.org.uk/sorted/sustainable_development_in_the_curriculum)
- Approach taken by Plymouth University  
[https://www.plymouth.ac.uk/uploads/production/document/path/3/3409/595997\\_261396\\_7\\_Steps\\_to\\_Embedding\\_Sustainability\\_into\\_Student\\_Learning\\_1214\\_BOLD.pdf](https://www.plymouth.ac.uk/uploads/production/document/path/3/3409/595997_261396_7_Steps_to_Embedding_Sustainability_into_Student_Learning_1214_BOLD.pdf)