STUDENT ENGAGEMENT IN SUSTAINABILITY IN THE CURRICULUM

Dr Elaine Crawford
Student Engagement Officer



In the Beginning



'by 2014 people in Scotland will have developed the knowledge, understanding, skills and values to live more sustainable lives'

'there can be few more pressing and critical goals for the future of humankind than to ensure steady improvement in the quality of life for this and future generations, in a way that respects our common heritage – the planet we live on'



Education for Sustainable Development





SFC College Outcome Agreements 2018-19 to 2020-2021

Leadership in Environmental and Social Responsibility

- 124. The Climate Change (Scotland) Act 2009 set ambitious targets for carbon reduction in Scotland, and led to the requirement for Colleges / Universities to submit an annual Public Bodies Climate Change Duties (PBCCD) Report, detailing their compliance.
- 125. All Colleges to demonstrate leadership in addressing environmental and social sustainability challenges. Colleges must outline climate change and sustainability ambitions and targets in their Outcome Agreements, and demonstrate action through implementation of a dedicated Sustainability Strategy, or the embedding of environmental and social sustainability ambitions within corporate Strategic Plans.
- 126. We expect leadership in environmental and social sustainability to strengthen the competitiveness of Scottish tertiary education, supporting SFC priorities by minimising financial and reputational risks, offering innovative opportunities for growth, assisting in attracting and retaining talented staff, enhancing the learner experience, and ensuring students develop the understanding of environmental and social sustainability required for the workplaces of tomorrow.

Challenges / Barriers / Opportunities

- Perceived Relevance and Importance of Education for Sustainable Development (ESD)
- Strategic Leadership and Policy
- Lack of Resources
- 'Sustainability Champions' and ESD Practitioners
- ESD as an Employability Tool
- Community Engagement
- Students as Co-Constructors
- Quality Assurance, Enhancement and Assessment

How to Remove the Barriers

Strategic Leadership – Learning for Sustainability needs to be accorded priority from the centre and be driven and monitored by College Principals.

Policy and Practice – Effective policy has to be implemented. The colleges that show the greatest progress in ESD have strategic policy documents stating the importance of sustainability within the institution.

Students as Co-constructors – Students need to be involved in the learning for sustainability practice, both as co-constructors of what works in the classroom to link sustainability to their curriculum area, but also as a vital component for driving sustainability across the wider campus.

Timetabling Changes – There needs to be timetabled spaces in the curriculum for these other avenues to be explored. This may appear to be trivial but in the environment of the sector the timetable is a crucial instrument of learning.

Linking Campus, Curriculum and Community – These initiatives already exist, however again they need to be recognised as ESD initiatives, not only by staff driving them, but by students who partake in them also.

Quality Assurance and Enhancement – This needs to be strengthened in Scotland's Colleges. Education Scotland should make learning for sustainability a specific and ongoing priority for evaluation.

ESD for Employability – Learning for sustainability should be recognised and utilised as an important employability tool and effectively measured.

ESD Practitioners: beyond champions – ESD Practitioners with relevant experience need to be employed in the Scottish College sector.

Resources – The need for resources ought to be seen as paramount.

Methodology

A carbon footprint is the total set of GHG emissions caused by an individual, organisation, event or product (Carbon Trust, 2009).

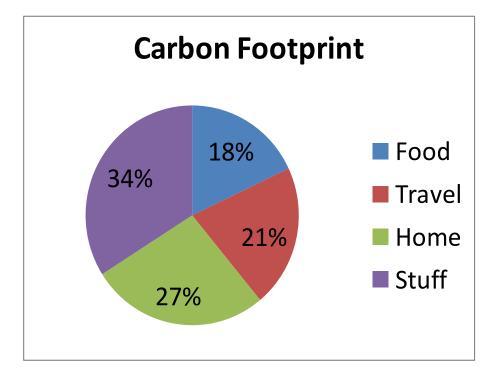
The areas of our lives that generate most of our individual GHG emissions are as a result of:

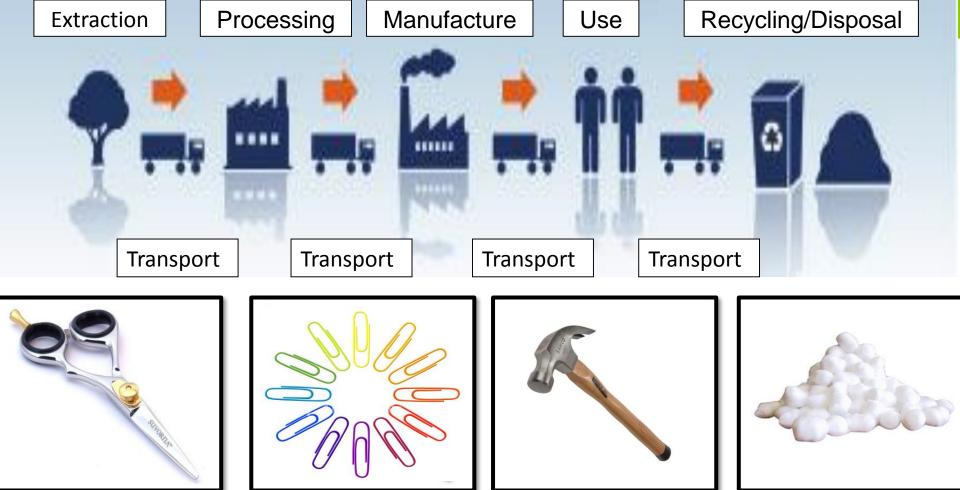
- Electricity use
- Travel
- Food production
- Buildings use
- Waste

http://footprint.wwf.org.uk/

Your footprint is 2.79 planets







- What are they made from?
- How are they made?
- What energy is used to make them?
- How long are they used for?
- What happens to them once their useful life is over?





You will need to consider all of the stages in the life cycle of a product which are:

- Extraction of raw materials
- Processing and manufacture
- Transport and distribution
- Retail storage
- Consumer use
- Disposal

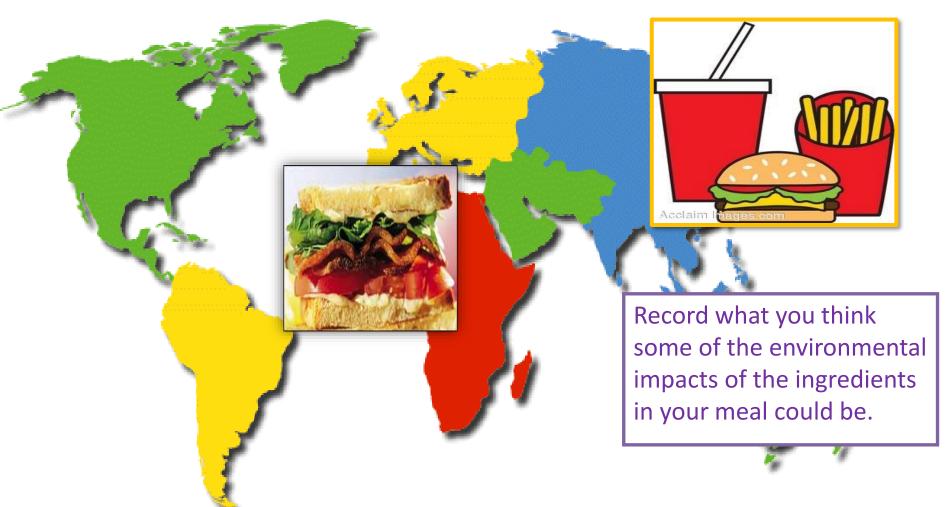
Taking account of each of these points, consider how you could class your product as 'environmentally friendly' and how you would market it as such.

Hairdryer	Number in salon	Total watts [W]	Hours on per year [hrs/year]	Kilowatt hours per year [kWh/year]
Turbodryer 2000 (1500W - usage = 2 hrs/day)	14	1500 x 14 = 21,000 watts	2 hours x 200 days = 400 hours	21,000 watts x 400 hours = 8,400,000 watt hours ÷ 1000 = 8,400 kWh/year
Babyliss Eco Dry (1000W – usage = 2 hrs / day)	14	1000 x 14 = 14,000 watts	2 hours x 200 days = 400 hours	14,000 watts x 400 hours = 5,600,000 watt hours ÷ 1000 = 5,600 kWh/year
	Savings	7,000 watts	Savings	2,800 kWh/year

Hint: (watts x hours per year) \div 1000 = kilowatt hours per year **Remember:** there are 200 college days in a year

Activity – Environmental Impacts of Food

Choose your favourite meal, for example burger and chips



Source: Adapted from Schools Global Footprint (WWF Scotland, 2006)

Environmental Justice is helpful because it makes people and justice a key concern for sustainability.

It elevates issues of inclusion, distribution and compensation for different communities.

Current debates try to distinguish between the distributive and procedural aspects of environmental justice.

Can it be extended from the local level to other relationships?
Between:

- rich and poor countries;
- present and future generations;
- human and non-human animals.

Climate justice has emerged as a new focus.

Activity – 'Ethical' Debate

Possible motions could be:

- Nuclear power is ethically better for the planet because it does not generate greenhouse gas emissions, which contribute to climate change.
- People in developed countries should decrease their carbon footprints so that people in developing countries can increase their standard of living.
- Animals should have the same rights as people.



SUSTAINABLE GEALS











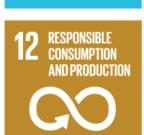


























Sustainability





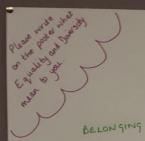
















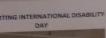




Protected Characteristics under the Equality Act 2010

- Age
- Pregnancy & maternity
- Disability
- Race
- Sex Marriage and civil
- partnership
 - Sexual orientation







SDAY THE STH OF DECEMBER

11:45-13:15 TO ALL STAFF AND ALL STUDENTS

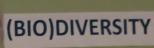
EE ENTRY, JUST COME ALONG!

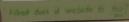




Equality does not mean we should treat everyone the same.









Progress to Date

Workbooks:

- Introduction to Sustainability (credit rated)
- Hairdressing
- Beauty
- Construction
- Health and Social Studies
- Hospitality / Food Manufacturing





http://www.sustainabilityexchange.ac.uk/college_education_in_sustainable_development_es

Materials to be added soon:

- Business
- Tourism
- Creative Industries





Thank You For Listening

Contact:

Dr Elaine Crawford – Student Engagement Officer

crawforde@dumgal.ac.uk

Dumfries and Galloway College

Ms Rebecca Petford

rpetford@eauc.org.uk

Environmental Association for Universities and Colleges



