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# Education for Sustainability: shaping future HE experiences



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# Graduate Attributes

Transformation is a deliberate function of our university learning communities...

Through collective practice we aim to develop citizens who are:

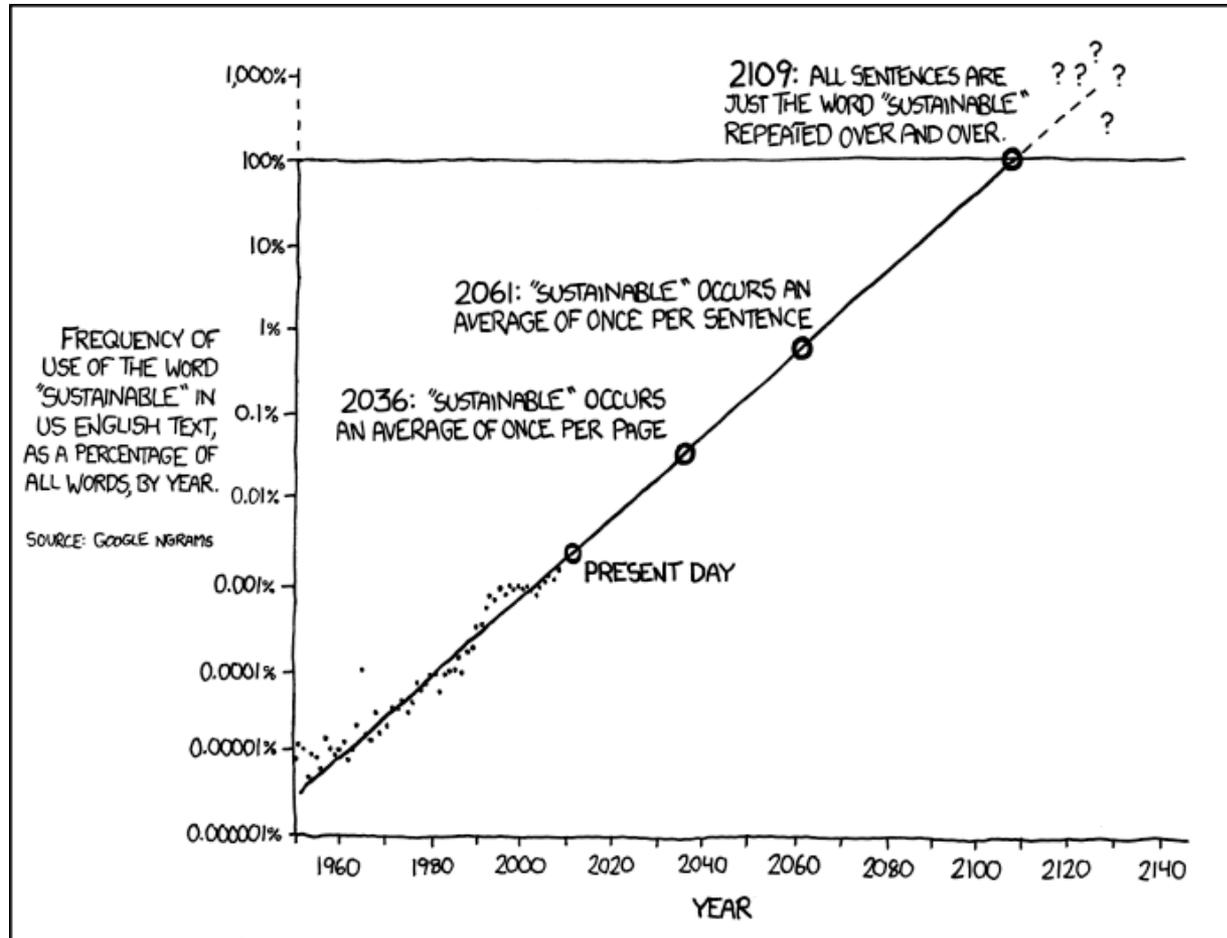
» Engaged	» Enquiring	» Empowered	» Empathetic	» Ethical
<ul style="list-style-type: none"><li>• are confident in their individual potential and able to seize opportunities</li><li>• are able to make a positive contribution to the world</li><li>• are active partners in generating knowledge and learning</li><li>• are aware of how to collaborate effectively</li><li>• take responsibility for their personal and professional development</li><li>• know how to engage with stakeholders to achieve constructive change</li><li>• apply learning to develop rewarding lives and/or careers.</li></ul>	<ul style="list-style-type: none"><li>• are able to utilise scholarship in order to make discoveries and solve problems</li><li>• are able to make assessments on the basis of evidence and recognise alternative perspectives and possibilities</li><li>• become active, supportive and trusted members of a learning community</li><li>• engage in critically reflective practice and professional development</li><li>• know how to question existing ideas and challenge ingrained assumptions</li><li>• understand how to apply learning to real-world issues.</li></ul>	<ul style="list-style-type: none"><li>• are capable of leading, or contributing to, beneficial change</li><li>• are able to imagine alternatives, plan and follow through to achievement</li><li>• have the confidence and communication skills to inspire and positively influence others</li><li>• have the desire to identify and tackle complex concerns</li><li>• develop resilience and flexibility</li><li>• develop the skills and understanding to become the person they want to be.</li></ul>	<ul style="list-style-type: none"><li>• are able to understand and appreciate different values, norms and ideas</li><li>• are able to recognise the origins and bias of their own assumptions and beliefs</li><li>• have the ability to engage respectfully in challenging dialogues</li><li>• act in ways that are inclusive and fair</li><li>• understand the value of different philosophical and/or religious standpoints</li><li>• value and develop multiple ways of knowing.</li></ul>	<ul style="list-style-type: none"><li>• have a considered framework of principles and values that inform decisions</li><li>• are confident in promoting social justice and diversity</li><li>• take a considered position on the 'big questions' of the twenty-first century</li><li>• develop an understanding of our dependence on a healthy planet for our life and work</li><li>• are equipped with the skills to make a positive contribution to our world</li><li>• are able to think across systems and to connect people and planet</li><li>• demonstrate capabilities to help reconcile local and global issues and needs</li></ul>



# Session Plan

- 1. Scene-setting:** sustainability and higher education
- 2. Chat Show:** Education for Sustainability – real experiences
- 3. Basics:** EfS principles – key ideas and starting points
- 4. Digesting Time:** peer discussions and killer questions

# 1. Scene-setting: sustainability and higher education



THE WORD "SUSTAINABLE" IS UNSUSTAINABLE.

# *Learning to Change: why sustainability is fundamentally an educational challenge*



*'Progress towards sustainability is like going to a country we have never seen before... We do not know what the destinations will be like, we cannot tell how to get there'*  
(Prescott-Allen, 2001, p2)

*No country has worked out how to be sustainable. There is no proven recipe or magic bullet - we need to keep learning how to create it...*

# *The power of HE: how universities can influence prospects for sustainability*

IN A FLASH, PRESIDENT JONES KNEW WHAT THE UNIVERSITY'S STRATEGIC PLAN HAD TO BE.



*‘Those who contribute to exploiting poor communities and the earth’s ecosystems are those who have BAs, MBAs, MSCs and PhDs and not the ‘ignorant’ poor from the South’*

*(Orr, 2004, p7)*

*Universities hold the key to change for sustainability by educating future generations of leaders and decision-makers*

## *The aim of EfS: reimagining the university and the purpose of its academic activities*



*'You can't put a lettuce in the window  
of a butcher's shop and declare that  
you are now 'turning vegetarian'  
(Grant, 2009, p85)*

*Universities can best address  
sustainability in core business -  
by changing paradigms for  
education and research practice*

# Teaching Excellence - for 21<sup>st</sup> century educators

*Specialism in  
specific context*

*Specialism within  
holistic context*

*Focus on  
present*

Providing a context in which disciplinary mastery is achieved by students

Providing a context in which student learning is achieved (disciplinary mastery and generic attributes)

*Focus on  
future*

Students experience an education that enables fit-for-purpose entry to their chosen career or profession

Development of ways of being, doing and acting associated with life-wide career opportunities as well as appropriate economic, socio-cultural and ethical attitudes

Grid adapted from HE Academy commissioned review:

[Gunn, V. & Fisk, A. \(2013\) Considering Teaching Excellence in Higher Education 2007-2013](#)

# Co-creating new learning for sustainability

## *Tahira's 'academic challenge' needs...*



Her teaching development time is spent skilling up on new online delivery software and reviewing NSS scores, to improve student experiences...

Her ambition is to enable students to ask deeper questions about post-recession economics, 'green wash' in business, responsible supply chains and global workers rights – and to take a lead on these challenges...

## *Rory's 'value for money' needs...*



His course experience is giving him technical skills and knowledge of new digital advances, but not of how to influence the way technology is used...

His ambition is to minimise negative impacts of IT and increase positive benefits for people, successfully apply his own apps innovations for social change and become an entrepreneur who can shape wider systems...

# Education for Sustainability and future skills

## 4<sup>th</sup> Industrial Revolution and Sustainability

Issues of skills instability and curriculum relevance – while sustainability imperatives increase in profile:

- Environmental risks now 4 of top 10 most impactful risks (WEF 2018 Global Risks report)
- 78% of the 250 largest companies include CSR data into annual reports (KPMG 2017)



Insight Report

The Global Risks  
Report 2018  
13th Edition



### Example - Rethinking Economics 2018 report:

18 major financial sector employers said graduates lack:

- Ability to apply mathematical knowledge to real-world situations
- Communication of complex economic problems in non-specialist language
- Critical thinking and mental adaptability when using incomplete data



## Activity - Reviewing existing practice

**Get into groups of 2 or 3**

**Look at the anonymous examples of Education for Sustainability**

**Discuss which would be stronger and weaker experiences for students**

***Feed back your choice of strongest and weakest – and your reasoning***



## 2. Chat Show: Education for Sustainability – real experiences

### *Starring...*

**Clair Greenaway**  
Academic Course Lead  
Events Management

**Brian Frederick**  
Senior Lecturer  
Criminology

**Clare Harris**  
Senior Lecturer  
Early Years Education



*"Thank God! A panel of experts!"*



### 3. Basics:

## EfS core principles – key ideas and starting points

Frank and Ernest

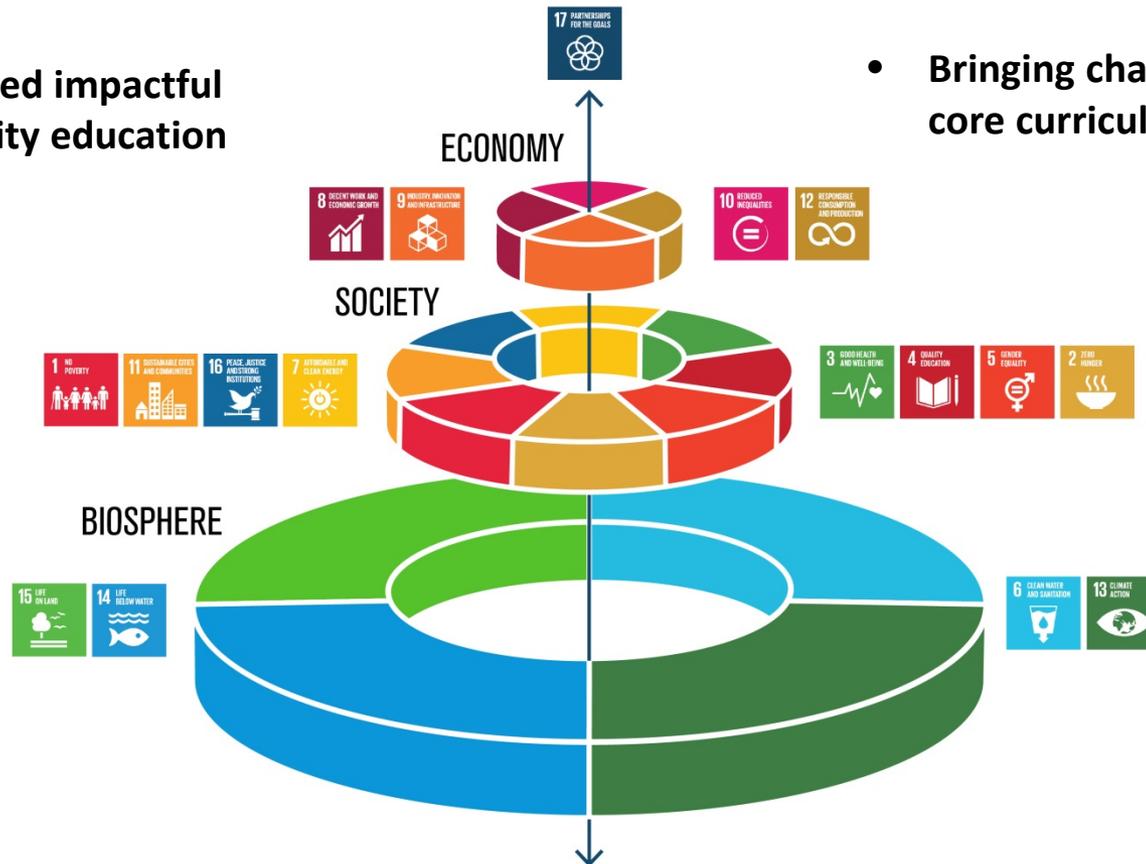


# An education 'for' sustainability



- Balancing instrumental and intrinsic aims of education
- Promoting applied impactful learning as quality education

- Supporting inter-disciplinary 'three pillars' systems thinking
- Bringing change capability into core curriculum experiences



# EfS – learning to change

## SHIFTING FROM...

Negative 'problem-solving' approaches to sustainability

Passing on expert knowledge and raising awareness of issues

Focus mainly on individual and personal change

Raising awareness and trying to change behaviour

Seeing people as the problem

Campaigning, preaching and messaging about sustainability

Teaching about ethics, attitudes and values

Focus on isolated changes/actions

Bolt-on additions to add to existing curriculum

## MOVING TOWARDS...

*Constructive creation of alternative futures* that increase sustainability

*Questioning current scenarios* and getting to the root causes of issues

More strategic focus on *professional and social change*

*Challenging frameworks and models* which influence decisions and actions

Seeing *people as change agents*

Opportunities for *reflection, negotiation and participation on sustainability*

*Clarification* of existing values and their *origins in experience*

Focus on continual *learning to change*

Innovation to *rethink curriculum outcomes and experiences*

# EfS - Doorways and Pedagogy

## Doorways - finding relevant entry points in course content:

Biological diversity

Intercultural understanding

Consumerism and ethical trade

Leadership and change management

Citizenship, democracy, governance

Ecosystems and ecological principles

Corporate social responsibility

Community resilience

Peace, security, conflict resolution

Accountability and reporting

Smart technology and globalisation

Natural resources management

Public health and wellbeing

Rural and urban development



INTERNATIONAL  
OLYMPIC  
COMMITTEE



*See example: Olympics sustainability principles applied to the subject area of Sport*

## Pedagogy – integrating transformative learning approaches and assessments:

- Futures thinking
- Systems thinking
- Critically reflective practice
- Decolonised learning
- Stakeholder engagement
- Learner empowerment



**TOUR OPERATORS INITIATIVE**  
FOR SUSTAINABLE TOURISM DEVELOPMENT

*See example: education for sustainability pedagogies in Tourism learning experiences*

# EfS – design principles

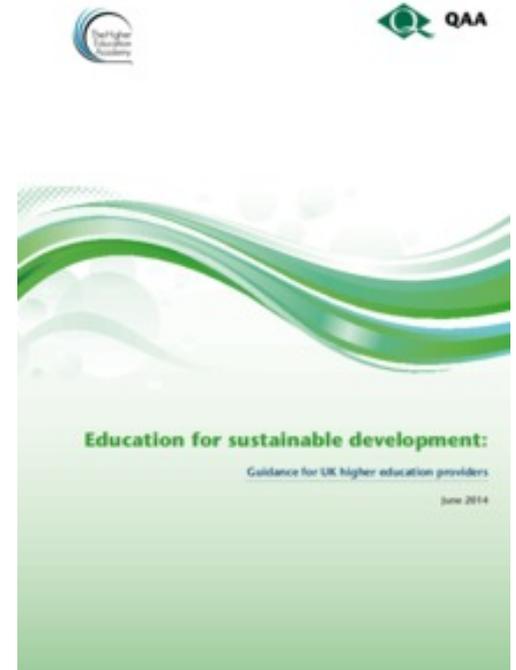
## FLIPCurric

<http://flipcurric.edu.au/>

*“Whenever we develop or review a learning program, we should give far more attention to confirming that its outcomes are relevant and desirable, that what graduates are capable of doing is of benefit to their professional work and the social, cultural, economic and environmental sustainability of our planet”*

### *Simple steps towards EfS:*

- Review programme outcomes in light of sustainability
- Make use of industry/professional frameworks
- Seek student input from and experiment with co-creation
- Integrate broad sustainability principles and specific issues
- Consider what capabilities to assess and new ways to assess them
- Look for opportunities to collaborate across courses



# EfS – what students are saying

**Global Shapers Survey 2017** - climate change and environment remain the top global concern for 82% of young people

**NUS Sustainability Skills Research 2018 – 12,000 students**

- 87% want action on sustainability from their university (past 3 years)
- 79% want sustainability incorporated into all courses (rise from 75%)

**NUS international online survey 2018 – 3,247 students**

- 91% of students want action on sustainability from their university
- 70% want sustainability incorporated into all courses



*75% of UK graduates would sacrifice £1000 salary to work for a company with a positive social and environmental record*

**UoG's 16-17 Annual Sustainability Report:**

National Union of Students Survey 2016-17	 Responses	"universities should actively promote sustainability"	"sustainability should be integrated into all courses"	"my university takes action to limit negative impacts"
University of Gloucestershire results:	153	86%	80%	66%
National results across universities:	10,300	87%	76%	72%



## 4. Digesting Time: peer discussions and killer questions

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"OK, I'll take one more question and then  
I'll begin backpedaling."



## Activity – Reflection on your Practice

**In pairs/clusters, take turns to ask questions that help to reflect on:**

- **Whether you see it in relevant industries your students will work in**
- **If sustainability is in your professional or academic benchmarks**
- **How you might be able to connect some dots for students**
- **What the typical pedagogical methods are used in your discipline**
- **Where you could use transformative pedagogies in your teaching**

# Want to have a go with support?



## Learning Innovation for Tomorrow – teaching development fund



**Outline Bids Closing Date:**

**Monday 24<sup>th</sup> September**

- ✓ Up to £4,000 per project
- ✓ Peer-to-peer mentoring
- ✓ EfS workshops & seminars
- ✓ Advice, contacts, resources

<https://sustainability.glos.ac.uk/staff/academic-practice/learning-innovation-for-tomorrow/>