



**LEARNING AND LEGACY** THE ROLE OF EDUCATION IN CREATING HEALTHIER, HAPPIER CITIES  
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# E-Learning for Everyone



Pam Reynolds  
Sustainability Manager



# Blackpool and The Fylde College



Learning, Teaching  
and Research



Blackpool and The Fylde College (B&FC) is one of the UK's largest colleges, and is the third largest provider of HE in an FE College .

Facilities learners include 4 main campuses located across 17 miles of the Fylde Coast, all of which have recently undergone or are currently undergoing major redevelopment to deliver state-of-the-art teaching and learning resources.

20,000 students

1,300 staff

# In the beginning



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B&FC's Education for Sustainable Development (ESD) journey began with the College receiving a £10,000 grant from LSIS to embed sustainability across 4 curriculum areas back in 2011/12.

A total of 7 Schools are now working to embed ESD and have developed a range of curriculum specific:

- Schemes of work
- Tutorials
- Projects
- Activities/games
- Case studies

# E-Learning sustainability course

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The aim of the session is to provide delegates with a simple and interactive approach to each theme of the College's Sustainability Moodle course. This course is extremely flexible and can be used by all abilities of FE and HE students using a variety of text, imagery, video clips, case studies and quizzes.

# Introduction to the E- Learning Module



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In November 2015 the College launched its new Moodle sustainability E-learning course.

The course is made up of 8 key themes that can be used across all curriculum FE and HE areas:

- Business and Procurement
- Energy and Emissions
- Water
- Global Issues
- Community and Engagement
- Waste and Recycling
- Biodiversity
- Travel and Transport

# What does the course look like?



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Energy  
and  
Emissions



Water



Community  
and  
Engagement



Biodiversity



Business and  
Procurement



Global  
Issues



Recycling



Travel and  
Transport



# Take a look...



## Learning, Teaching and Research



### Ethics and Corporate Social Responsibility

Ethics and Corporate Social Responsibility refers to an ethical framework for businesses and organisations which have an obligation to act for the benefit of society at large.

Acting in an ethical way involves distinguishing between "right" and "wrong" and then making the "right" choice. It is relatively easy to identify unethical business practices. For example, companies should not use child labour, unlawfully use copyrighted materials and processes or engage in bribery.


However, it is not always easy to create similar hard-and-fast definitions of good ethical practice. A company must make a competitive return for its shareholders and treat its employees fairly. A company also has wider responsibilities. It should minimise any harm to the environment and work in ways that do not damage the communities in which it operates. This is known as corporate social responsibility.



### Good Citizenship

Most leading businesses also have their own statement of Business Principles which set out their core values and standards. In Anglo American's case, this is called "Good Citizenship".



 Anglo American's Good Citizenship




### Corporate Social Responsibility

Corporate social responsibility (CSR) is a term used to describe when businesses look beyond their initial duty to their staff and customers (or students in the case of a College), and acknowledge that their actions have a wider impact. Undertaking a program of CSR activities encourages businesses to operate in more

sustainable, ethical and charitable ways.

Click the link below to see a diagram on Corporate Social Responsibility.

 Areas businesses may try and improve as a result of CSR

### Ethics


A big business has a lot of power, which it can either use responsibly or selfishly. Many firms operate to meet the needs of owners. Ethical firms carefully consider the implications of what they are doing and the effect it might have on the community and the environment.



Ethics is about doing the right thing. Ethical behaviour requires firms to act in ways that stakeholders consider to be both fair and honest. Managers making ethical decisions take into account:

- Impact: who does my decision affect or harm?
- Fairness: will my decision be considered fair by those affected?

Click the link below for an example of unethical behaviour.

 An example of unethical behaviour



### The Scarecrow

Many owners believe that acting ethically increases costs and so reduces profits. For example, a business can cut costs by hiring child labour at very low wages in developing countries. Paying below average wages lowers the firm's total costs.

Watch "The Scarecrow" video below to see an animated account of poor Corporate Social Responsibility.

 The Scarecrow

# Take a look...



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## Population rise



Global population is the total number of humans living on the earth. According to a world population clock, current world population is estimated as **7,422,076,267**. The world population is growing at a rate of around 1.13% per year and the average population change is currently estimated at around 80 million per year. Annual growth rate reached its peak in the late 1960s, when it was at 2% and above. The rate of increase has therefore almost halved since its peak of 2.19 percent, which was reached in 1963.

That's a lot of people!

Population growth is determined by three key elements

- Water availability
- Availability of agricultural land
- Food availability

Three key elements of a sustainable future

- Climate Change
- Population growth
- Increased energy consumption

## Natural Resources. Where are they found?

There are a huge number and range of natural resources on the planet which provide energy and materials for a vast number of products and uses. Select the key natural resources book below to find out more about the World's natural resources and where they can be found.



Where are the key natural resources found on the planet?



Resource Recovery & Biodiversity

## New versus Recovered Resources

Resources used for the first time are called new resources. Collecting, extracting, processing and using these resources often requires a great deal of energy and can create pollution.

## Biodiversity

Select the link below to see a short video on biodiversity.



Why is biodiversity so important?





# Take a look...



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## Changing energy use in UK

The UK government has a target to reduce its carbon dioxide emissions. It also wants to increase the amount of energy generated from renewable sources.

By 2020 European Union targets state that 20% of energy must come from renewable sources. Each member state of the EU may have a different target, as 20% is an average figure for the EU.

The UK has a target of 15% of its energy consumption being sourced from renewable energy. (In 2009 only 3% of energy came from renewable sources in the UK). Sweden has a target of nearly 50% whereas Malta has a target of 10%.



## How much electricity are we using?

See how much electricity the UK is using today by visiting this will show you the breakdown of fossil fuels used, nuclear power contribution to the grid and renewable energy.

 UK electricity status

 French electricity status

## Reducing greenhouse gases

The EU also aims to reduce greenhouse gas emissions (GHG) by 80-95% below 1990 levels by 2050.

There are two ways the energy use can change in the UK:

- Reducing the demand for energy
- Increasing the supply of renewable energy

Select the page below to see how we can reduce the demand for energy and then complete the energy option activity

 Reducing energy demand




## What are Greenhouse gases?

Greenhouse gases are gases that contribute to the trapping of infrared radiation (heat) within the earth's atmosphere. If it were not for greenhouse gases trapping heat in the atmosphere, the Earth would be a very cold place. Greenhouse gases keep the Earth warm through a process called the greenhouse effect.



Click the links below for more information about the sources greenhouse gases.

 Main Sources of Greenhouse Gases

 DEFRA: Overview of greenhouse gases

 What are the main man-made greenhouse gases?

 The Greenhouse Effect

## Video

Not all greenhouse gases are bad! Watch the video below to learn more about greenhouse gasses, both natural as well as human emissions.



 What Is Greenhouse Gas?



## Greenhouse gas emissions data

View the resource below to view the greenhouse gas emissions data including a breakdown by source and country.

# Let's see it in action...



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Sustainability course demo\_70mp4

# Aim of the course



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- To provide a simple summary/overview to the main areas of sustainability
- To provide resources and case studies relevant to all curriculum areas
- To allow tutors and students to research/read around the subject area
- To provide an interesting and interactive bank of sustainability resources that are accessible to all staff and students
- To allow for the storyboards to be used and embedded into curriculum areas
- To be used as part of a lesson or as a conversation starter with students.

# Features of the course

## Video clips



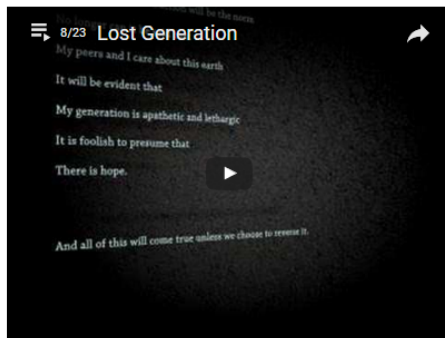
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moodle.blackpool.ac.uk/mod/page/view.php?id=279871&inpopup=1

### Global Issues

#### Lost generation



Last modified: Thursday, 7 April 2016, 2:05 PM

Restore

Import

Reset

Question bank

Switch role to...

My profile settings

#### NAVIGATION

My home

Site home

Site pages

### Sustainable development

#### What is sustainable development?

Sustainable development is about using resources efficiently in order for society to reduce its impact on the environment and the economy, whilst improving social impacts both locally and globally to ensure a fairer and more sustainable future.

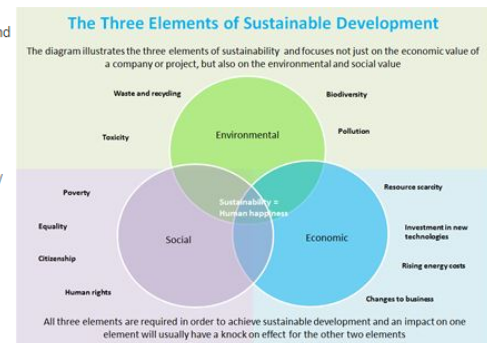
The most famous Sustainable Development quote:

'Development that meets the needs of the present without compromising the ability of future generations to meet their own needs.' (Brundtland 1987)

Three key elements of a sustainable future

The following three points will significantly impact the future of the global environment, economy and society as we currently know it. This is why it is important for individuals, communities and companies worldwide understand and act on the principles of sustainability now.

- Climate Change
- Population growth
- Increased energy consumption



The three elements of sustainable development

### Video

Watch the "Lost Generation" clip below to see a very clever reversing of sentences

Lost generation

### Sustainability quotes

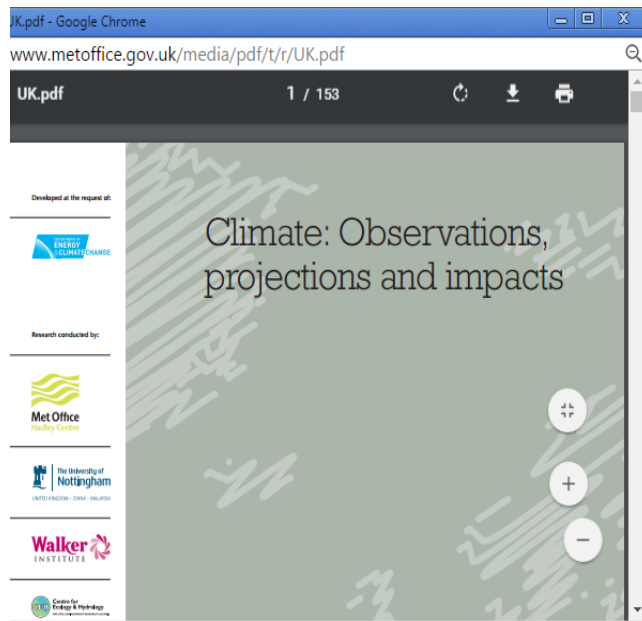
Select the page below to read some quotes on sustainability

Sustainability quotes

# Reports and newspaper articles



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► Health

► Poverty


► Fairtrade

► National resources and consumption

► My courses

## Sustainability quotes

Select the page below to read some quotes on sustainability

 Sustainability quotes



## Weather and climate change

When it comes to understanding the links between climate change and weather patterns, the links are very clear.

Geological and present weather and climate records show a direct correlation between global temperatures and weather patterns, in recent years there have been more frequent weather from extreme heat, drought, storms and fire.

Recent climate modelling results indicate that "extreme" weather events may become more common. Rising average temperatures produce a more variable climate system. The following list is what can we expect with weather changes:

- windstorms
- heat waves, droughts
- storms with extreme rain or snow, flooding
- dust storms



 Extreme weather events in the UK

## Video


The following video shows examples of severe weather events in the UK caused by climate change.

 Climate change 'To blame' for storms and UK flooding



## UK weather

Find out more about the effect of climate change on the UK with the report below and the Met Office maps which show the projected precipitation increase for the UK over the next 70 years.

 UK report on climate change

 Met Office maps





# Features of the course

## Video clips



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moodle.blackpool.ac.uk/mod/page/view.php?id=263273&inpopup=1

### Global Issues

#### Case Study: Cotton



Although world cotton production is dominated by China, India and the US, cotton is vital for the survival of many low income countries in Central and West Asia and Africa – it accounts, in value terms, for 26.4 per cent of Benin's exports and 58.7 per cent of Burkina Faso's.

Cotton farmers in developing countries, including leading producers like India and China, live in hardship. As many as 100 million households are directly engaged in cotton production and an estimated 300 million people work in

the cotton sector when family labour, farm labour and workers in ancillary services such as transportation, ginning, baling and storage are taken into account. For farmers, the challenges range from the impact of climate change, poor prices for seed cotton, through to competition from highly subsidised producers in rich countries and poor terms of trade. In particular, government subsidies for cotton farmers in rich countries, particularly the US, create a market with artificially low prices that small-scale farmers are unable to compete in.

Fairtrade cotton was launched to put the spotlight on these farmers who are often left invisible, neglected and poor at the end of a long and complex cotton supply chain. Through tools like the

Why does Fairtrade mean sustainable trade?

#### Foundations of sustainability

The foundations of sustainability include:

- Standard of living: income and food security, reduced risk and vulnerability
- Stronger organisations
- Decent work and protect workers' basic rights,
- Environmental protection and climate change adaptation

Market access and fairer trade

- Work towards gender equality
- Improved Productivity and quality
- Ensure access to basic services for farmers and the communities

The link below explains Fairtrade in more detail.

What fairtrade does

#### Fairtrade - cotton

Cotton is the world's oldest commercial crop and one of the most important fibre crops in the global textile industry.

Click the link below to see more about Cotton.

Case Study: Cotton

#### Fairtrade cotton briefing

Millions of small-scale farmers in developing countries depend on cotton for their livelihoods. The briefing below provides an industry overview, and explores why Fairtrade is needed.

Fairtrade Cotton Briefing

# Further reading



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## Further reading

Click through using the links below to find out more.



Wrap Waste



Love food hate waste



Fishing supply chain



Global waste article

## Teaching resources

Below are some teaching resources.



Fairtrade Chocolate video



Interactive pasta unfair game



Chocolate trade presentation



Activity



Chocolate Trading game



Banana Split game

## Contributors to climate change

Select the videos below to see more about contributors to climate change.



[How does meat contribute to climate change?](#)



Impacts of deforestation for Palm oil



Palm Oil: What is Palm Oil and what's all the fuss about?



Asda case study



How can you make a difference?

# Quizzes



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[My home](#) ▶ [My courses](#) ▶ [Sustainability](#) ▶ [Global Issues](#) ▶ [Weather and climate change](#) ▶ [Weather](#) ▶ [Preview](#)

Question **1**

Correct

Mark 1.00 out of  
1.00

Flag question

Edit question

What is extreme weather?

Select one:

- ☐ a. When it snows in the UK
- ☐ b. When it doesn't rain for 5 days in a row in the UK
- ☒ c. When the weather event is significantly different from the average ✓

CHECK

[My home](#) ▶ [My courses](#) ▶ [Sustainability](#) ▶ [Global Issues](#) ▶ [Global food pressures and agriculture](#) ▶ [The Impact of Livestock](#) ▶ [Preview](#)

Question **4**

Not yet answered

Marked out of 1.00

Flag question

Edit question

1 meat free day saves enough water to fill how many baths?

Select one:

- ☒ a. 5
- ☐ b. 2
- ☐ c. 20

# Additional features



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## Glossary

The glossary below contains key terms for this unit.



Glossary



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### E

#### Energy

Power derived from the utilisation of physical or chemical resources, especially to provide light and heat or to work machines.

### F

#### Fossil fuels

Fossil fuels are stored energy in the remains of ancient animals and plants

### N

#### Non-renewable

Non-renewable energy resources are sources of power that will run out one day

### R

#### Renewable

**Renewable** energy resources are sources of power that quickly replenish themselves and can be used again and again

# Next Steps



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The course is promoted through Moodle

The screenshot shows a Moodle course interface. At the top, there is a 'DISCOVERY SEARCH' bar with a magnifying glass icon. Below it, a row of filters reads 'Limit Your Results: ☐ Full Text ☐ Available in LRC ☐ Peer Reviewed ☐ Catalog Only'. On the right, a user status bar says 'You are logged in as Pam Reynolds (Log out)'. The main navigation area has two tabs: 'USEFUL COURSES' and 'STAFF RESOURCES'. Under 'USEFUL COURSES', a dropdown menu is open, listing 'Sustainability', 'Academic and digital Sustainability', 'Maths', 'English', and 'IT Skills'. The 'Sustainability' option is highlighted. Below the menu, a breadcrumb trail shows 'Home > Sustainability > Sustainability'. To the right of the breadcrumbs is a red button that says 'TURN EDITING ON'. The main content area features a large banner image with the word 'Sustainability' in white text. The image depicts a person holding a globe, with a recycling symbol and a wind turbine in the background.



# Next Steps



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The course is promoted through the following across the College:

- Teaching and learning meetings
- Staff development events
- Tutor meetings
- Curriculum specific meetings
- Quality meetings
- Teaching and Innovation Program
- Staff weekly bulletins

# Case Study – Access to HE course

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This course is broken down into five possible pathways:

- Law and Criminology
- Humanities
- Science
- Social Science
- Health and Professional studies

The lecturer has selected subjects and activities from the sustainability course and tasked students to write their first essay. The aim of this exercise is for students to demonstrate their ability to research around a subject area.

# Discussion...



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The College aims to provide a quality online learning platform specific to all FE and HE courses.

- What E-learning platforms do your institutions use?
- Do you have curriculum/subject specific resources
- Do you have a sustainability resource bank for all tutors/lecturers to use?
- Are most of your resources produced by the curriculum?
- Does your institution currently promote local volunteer opportunities and community projects through E-learning
- How could your resources be improved?

# How to get started



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- Find out what's currently available
- Speak to the Head of IT/online learning
- Attend a head of faculty/Senior Management meeting and find out what's available and what's required
- Carry out a survey of where lecturers/tutors believe they are in terms of embedding sustainability and delivering online resources see attached
- Discuss the project with curriculum teams and collate resources and case studies
- Create an area to store resources

# Any further questions?



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Pam Reynolds  
Sustainability Manager



Tel: 01253 504288

Email: [Pam.reynolds@blackpool.ac.uk](mailto:Pam.reynolds@blackpool.ac.uk)