

Why we are going to look at Sustainability as part of this course by Neil Ridley

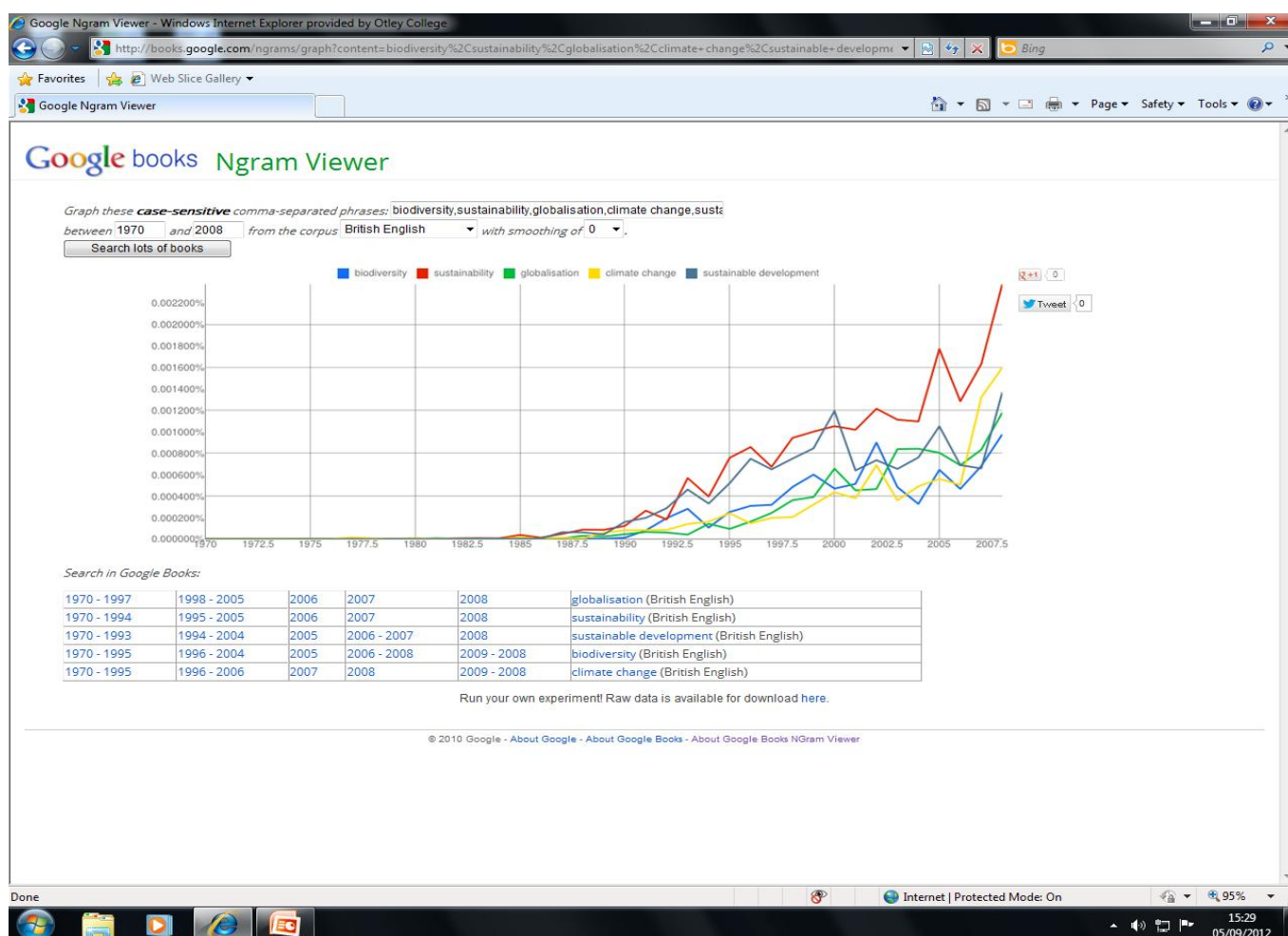
Course objectives

1. You will understand the use and misuse of the concept of sustainability
2. You will understand how to embed sustainability into your teaching
3. You will understand why sustainability is fundamental to resource use.

Sustainability is part of business life through reporting to shareholders; schools, colleges, have sustainability policy, and much is made of carbon footprints in retail and increasing water footprint is being considered. And even though definition and understanding sustainability is a challenge it is worth the effort to educate for the future because it is a philosophy that helps meet the task we have because at present we have hit a buffer in our traditional economic organisation. Economic growth and a raising GDP has been our benchmark, and remains so, but this has to be tempered through different ways that simple market solutions in resource allocation.

For centuries science has progressed, neither in a straight line, nor with people at the centre. Copernicus moved earth from the centre of the universe in 1542; Hutton opened the door to geological time in 1785, Darwin showed an origin of species that still causes conflict in 1858.

In our task of education we operate through language, words and the meaning of words. There is in our culture a word that is much used to reconcile the many actions of human activity today. This word is sustainability. Words shape our culture and this can be illustrated with a tool from Google Ngram viewer. This tool enables us to track word use in the 5 million texts Google have made into digital text, and it is possible to observe from the screen shot the rise of the word sustainability.



We need to understand the social construct sustainability when looking to the future as we wrestle with use of resources such as water, energy, buildings, food and how we live with the impact on our lives of climate change and globalisation. We will consider sustainability and the importance attached to this concept in this course as we are looking at educating the rising generation and providing young people with the tools to go into the 21st century workplace. The present generation (born 1996 onwards) will be providing the backbone of the workforce in 2030 onwards. Indeed, those starting school this year will potentially be leaving to take their pensions in 2078. Sustainability is concerned with inter-generational justice, essentially is consideration of the ones yet to be born.

Sustainability is based on a systems thinking different to the reductionism found in the study of chemistry or physics. Sustainability is grounded in sciences of ecology and economics which take their roots from Greek *eco-* means home, *-ology* which means study and *-nomics* which means law. We have been working around the problem of environmental impacts of industrialisation for some time with environmental sciences becoming a more substantive area of study in the 1960's. Development of political association with this new knowledge led to the Brundtland commission in 1987 providing the most well know definition for sustainable development:

"Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs"

There was added impetus to what was now becoming known as sustainability with the Rio earth summit in 1992. Since this time there have been regular attempts to solve planetary problems coalescing around the climate change debate at UN earth summits, the last one at Copenhagen in 2008.

The momentum for environmental action was fostered by the image of earthrise in 1968, for that was the first time that man had become aware of being a 'blue marble against a black background'.



While this is a beautiful picture understanding and educating people about sustainability is a more challenging situation that we will address. Sustainability has become an ambiguous term due to politics. Our job in education is to make it unambiguous.

- <http://www.economist.com/node/6823506> article about oil