
C-change in GEES: Open licensing of climate change and sustainability resources in the Geography, Earth and Environmental Sciences

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The Geography Earth and Environmental Sciences (GEES) Subject Centre is pleased to announce that we have been successful in a bid to receive funding of £245,000 from JISC/HEA as part of the Open Educational Resources (OER) Programme. The "C-change" project will explore the open licensing of educational resources in the GEES disciplines through a themed approach focusing on "climate change and sustainability".

The OER Programme, funded by the Higher Education Funding Council for England (HEFCE) and run by the Higher Education Academy and the Joint Information Systems Committee (JISC), aims to make a wide range of learning resources created by academics freely available, easily discovered and routinely re-used by both educators and learners. OER can include course materials such as websites, PowerPoint presentations, reading lists, virtual fieldwork exercises, photos, movies, audio files and assessments.

Following expressions of interest from the GEES community in January 2009, the C-change project consortium was formed. The consortium consists of 3 professional bodies and 7 partner institutions, with the GEES Subject Centre as lead partner.

C-change resources will be developed by our academic partners based at the following institutions:

- University of Exeter: Department of Geography
- Keele University: School of Physical and Geographical Sciences
- University of Liverpool: Department of Earth & Ocean Sciences
- Open University: Department of Earth and Environmental Sciences
- University of Wales, Newport: Centre of Excellence in Learning and Teaching
- University of Southampton: School of Ocean and Earth Science

The project is further supported by:

- The GEES Subject Centre
- The Royal Geographical Society with the Institute of British Geographers (RGS-IBG)

- The Geological Society
- The Institution of Environmental Sciences (IES)
- University of Plymouth (UoP): Directorate of Teaching and Learning
- University of Plymouth: Higher Education Learning Partnerships (HELP) CETL

During this project it is hoped that we can build capacity for, and engender cultural change towards, OER in the GEES disciplines and at the same time establish a freely available collection of educational resources that focuses on climate change and sustainability: themes that are core to the GEES curricula.

The broad aims of the C-change Project are:

- To encourage cultural change towards open licensing of educational resources within the GEES disciplines
- To build capacity for continued release of OER in the GEES disciplines beyond the funded life of the project
- To enhance the profile of the themes of climate change and sustainability within both GEES and the broader stakeholder community
- To enhance the profile of UK HE GEES learning and teaching both nationally and internationally

So why focus on climate change and sustainability? In a recent poll (October 2008) carried out by the Science, Technology, Engineering and Maths (STEM) Network¹ it was found that UK STEM professionals think the need to tackle climate change is the biggest single challenge facing the world in the coming decade. In addition to this important driver, the three UK HE Funding Bodies are keen to establish an element of Education for Sustainable Development (ESD) across all disciplines². In proposing "climate change and sustainability", we intend the project to encompass a broad spectrum of related areas including: earth system science; past-climate and environmental change; geoengineering; energy policy; human-environment interactions; and ethics.

In addition to the open licensing of resources, the project will develop case studies of practice,

example workflows, procedures and policies on the legal and technical aspects of OER to support colleagues in the open release of their own resources in the future.

One of the key mechanisms to capture and facilitate the sharing of practice and outputs from this project will be the establishment of a community of practice exploring the technical and legal issues of open licensing, along with the pedagogic and discipline aspects of the resources. It is hoped that this community of practice will encourage additional activity in the C-change project both during and after the life of the funding, by engaging with, informing and supporting other GEES colleagues who wish to explore open licensing of their educational materials.

For further information on the C-change project and how to get involved, please see the project website at www.c-changeproject.org.uk/ or contact Mike Sanders at the GEES Subject Centre.

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¹ www.stemnet.org.uk/Press_Office.cfm
(accessed May 2009)

² www.hefce.ac.uk/pubs/efce/2009/09_03; www.sfc.ac.uk/information_learning/sustainable_development.htm;
www.hefcw.ac.uk/Publications/circulars_5071.htm
(accessed May 2009)