

## **NatSCA News**

Title: Inspiring Secondary Science Students

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## <u>Inspiring Secondary Science Students</u> Andrew Lee, the Natural History Museum, London

'Real World Science' is a partnership project funded by the Department for Culture, Media and Sport, and the Department for Education and Skills through their Strategic Commissioning Education programme. This Natural History Museum led partnership has been in place since April 2004 and includes the Manchester Museum, the Oxford University Museum of Natural History and the Hancock Museum (Tyne & Wear).

The partnership has developed a powerful and engaging learning programme for secondary science students. This age group was prioritised in order to address a significant gap in museum education provision for secondary science. The partners initiated the project in the conviction that high quality learning programmes at natural history museums could raise aspirations and counter the lack of science uptake post-16. A key aim of the partnership is to inspire students to continue their scientific studies to A-level and university, and further to take up scientific careers.

The programme has attracted 5,985 secondary science students in its first two years (April 2004 – March 2006) and is targeted to reach 8,750 students in the current project year (April 2006 – March 2007).

The key aims of the project are to:

- inspire secondary science students to continue their scientific study to AS/A2 Level, and further to undergraduate level, through vibrant and compelling museum-based activities, including encounters with world-class practising scientists
- enable students to understand the impact that science has on their lives and to make informed decisions based on analysis of scientific evidence
- increase the number of secondary science students and teachers using natural history museums to support their science teaching and learning.

The partnership has recently published the results of a consultation with science teachers undertaken in 2005; How can natural history museums support secondary science teaching and learning? The results of this research confirmed the partnership's conviction that the out-of-classroom learning experience of a structured visit to a natural history museum, including encounters with practising scientists and curators, was highly valued by secondary science teachers. The consultation report shows overwhelmingly that natural history museums can have a substantial role to play in supporting science curriculum delivery, particularly in hard to teach areas such as Taxonomy and Earth Science, and in bringing science and its applications to life. The teachers felt that the museums provide unparalleled resources that are rarely available in challenging school to support the teaching 0 f scientific concepts.

The top four themes to emerge from the research were that natural history museums can play a vital role in:

- providing opportunities for students to meet practising scientists who can positively influence attitudes to learning science, career choices and can support teaching the new science curricula
- offering fun and engaging workshops, debates and shows with a strong practical element
- engendering, through their collections and galleries, a sense of awe and wonder about the natural world
- supporting the course work elements of new GCSE's and AS/A2 exams such as Twenty First Century Science, Salters-Nuffield Advanced Biology and Perspectives on Science, all of which have an emphasis on the application of scientific research.

The next phase for the partnership is to build capacity in natural history museums and museums with natural history collection to use their resources to support secondary science students and inspire them to study science further.

If you would like to receive a copy of the report or would like further information on the 'Real World Science' project, please contact Andy Lee, Project Co-ordinator at <u>Andrew.Lee@nhm.ac.uk.</u>