

Object-based learning in higher education: The pedagogical power of museums

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Abstract

Following a special conference focused on object-based learning in higher education at University College London (UCL), this paper provides the overview for a series of subsequent papers which explore the value of object-based learning, including the pedagogical framework for museum learning in the university classroom and practice led examples from a range of disciplines. Object-based learning in higher education draws on many of the learning strategies already known to inform students, including active learning and experiential learning; this collection of papers draws together examples of object-based learning pioneered at UCL and seeks to encourage enhanced use of university collections in new, pedagogically powerful, modes.

Introduction

Museum collections afford a valuable opportunity to provide a focal point for acquiring subject specific knowledge – imagine teaching about the difference between sedimentary and igneous rocks without ever looking at a geological specimen. Objects can also be used to inspire discussion, group work and lateral thinking – all essential key, transferable, skills in higher education. University collections comprise a wealth of information, documenting the historic rise of disciplines and representing cultural and natural diversity from across the globe. University collections were pioneers in object-based learning and most university collections were formed as teaching collections. Object-based learning was an integral part of the student experience in 19th and early 20th centuries; but many universities, including UCL faced a downturn in favor and use in the later 20th century. This paper introduces a series of papers exploring object-based learning in the 21st century within the higher education sector, offering examples of best practice from university teachers, plus papers drawing on learning theory to contextualize object-based learning within a pedagogical framework.

In April 2009 University College London (UCL) hosted a special study day devoted to object-based learning (OBL) in higher education. Organized by UCL Museums & Collections (M&C) the day attracted 70 delegates from across UCL and the wider higher education and museum sectors. The purpose of the event was to showcase the varied OBL activities and resources developed at UCL in recent years, based around UCL's outstanding museums and collections. One of the key aims was to promote UCL M&C as providers of top-class higher education learning opportunities and resources to academics in the region. Through case-studies and theory-based participative and traditional conference sessions, the desired outcome of the gathering was to encourage an increased use of university collections in teaching.

Background: OBL and UCL Museums & Collections

Museums, and the collections they house, are fascinating places – home to amazing artifacts, beautiful artworks and fascinating specimens. UCL is home to 3 public museums, the Petrie Museum of Egyptian Archaeology, the Grant Museum of Zoology and the Strang Print Room, and around 15 departmental collections covering archaeology, anthropology, science and medicine (UCL MUSEUMS AND COLLECTIONS 2006). Totalling a third of a million objects UCL's collections comprise a wealth of information documenting the historic rise of various disciplines, such as chemistry, earth sciences, zoology and archaeology and representing cultural and natural diversity from across the globe. UCL's collections are used in teaching, research and public engagement.

The Petrie Museum is one of the greatest collections of Egyptian and Sudanese archaeology in the world. The museum was founded by Sir William Flinders Petrie who is often termed the father of Egyptian archaeology and who became the first professor of Egyptian archaeology at UCL. With over 80,000 objects, the museum boasts a series of firsts housing the earliest examples of metal and glazing from Egypt and the earliest pieces of linen from Egypt.

UCL Art Collections were started in 1847 with a gift of sculpture models from John Flaxman. The collection is continually growing as it houses the prize winning student artworks from the Slade School of Art including works by: Stanley Spencer, Augustus John and Gwen John.

The Grant Museum of Zoology includes over 50,000 skeletons, wet specimens, fossils and taxidermy animals. One of the few remaining zoology museums in London the collection is home to several rare and extinct specimens including dodo, quagga and Tasmanian tiger remains.

Departmental collections cover disciplines from pathology through to archaeology. The science collections (including disciplines such as physiology and chemistry) demonstrate the enormous contribution UCL has made to the advancement of science at a worldwide level, such as the first ever X-ray photograph that was used for clinical purposes.

Objects can be employed in a variety of ways to enhance and disseminate subject specific knowledge, to facilitate the acquisition of communication, team working, practical, observational and drawing skills, and for inspiration. Museums and the objects they house also afford a unique opportunity for cross disciplinary study with collections providing inspiration for students studying art, design, architecture, philosophy, languages, history and social sciences. The true pedagogical value of OBL is only recently being realized as museums enjoy somewhat of a renaissance in use for educational purposes.¹ But what is the value of OBL in higher education?

Through creative collaborations with academics within the university and innovative student-focused object-led projects (e.g. NOBLE & CHATTERJEE 2008; WERE 2008; CHATTERJEE & NOBLE 2009; CHATTERJEE 2009) a key strategic priority for UCL M&C has been the wider integration of OBL in UCL's rich and varied curricula.

OBL at UCL: What we offer and why

This volume includes papers from OBL users (including Dr Rachael Sparks, UCL's Institute of Archaeology; Dr Joe Cain, UCL Science and Technology; Guy Noble, University College London Hospital) and providers (such as Simon Gould, contemporary projects curator, UCL M&C) and interactive sessions covering PBL (problem-based learning), EBL (enquiry-based learning) and skills acquisition. Colleagues from UCL's Centre for the Advancement of Learning and Teaching (Drs Rosalind Duhs and Jenny Marie) discuss the role of OBL in the acquisition of key, transferable, skills and in enhancing student understanding of threshold concepts and troublesome knowledge; two projects they are working on with staff at UCL M&C following the award of CALT Academic Development grants to the author (HC). The papers include case studies, highlighting best practice in specific classroom scenarios from OBL advocates (e.g. Nobel & Cain) outside of the formal university museum staff, to essays exploring the underlying pedagogical power of OBL (e.g. Duhs & Marie). These papers demonstrate the wide potential of OBL to provide new ways for students to engage in their own learning, be it within disciplines, or across several disciplines, providing a source of inspiration within a framework of discovery, enjoyment and critical exploration.

¹ See Reading Museum's website for an example of best practice in a non-higher education setting: www.readingmuseum.org.uk/handson/learningandloans.htm (accessed August 15, 2009).

Conclusions

Objects have the power to inspire, inform, excite and educate; they can be used to acquire subject specific knowledge as well as more generic transferable skills such as communication and teamwork. This collection of papers offers a handful of examples of OBL in action and seeks to inspire enhanced use of the world's outstanding university collections in new and innovative ways. There are already numerous examples of good practice in OBL in other universities (see UMAC Journal 1/2009 for some excellent examples), but critically a key focus for the future must be to fully understand and articulate the value of OBL in higher education.

Literature cited

- CHATTERJEE, H. J. & G. NOBLE 2009. Object therapy: A student-selected component exploring the potential of museum object handling as an enrichment activity for patients in hospital. *Global Journal of Health Sciences* 1, 2: 42–49.
- CHATTERJEE, H. J. 2009. Staying essential: Articulating the value of object based learning. *University Museums and Collections Journal* 1: 37–42.
edoc.hu-berlin.de/umacj (accessed August 15, 2009).
- NOBLE, G. & H.J. CHATTERJEE 2008. Enrichment programs in hospitals: Using museum loan boxes in University College London Hospital. In: *Touch in museums: Policy and practice in object handling*, ed. H.J. CHATTERJEE (Oxford: Berg), 215–223.
- UCL MUSEUMS & COLLECTIONS 2006. *Inspire: Highlights of UCL's collections*. London: Grant Museum of Zoology, UCL.
- WERE, G. 2008. Out of touch? Digital technologies, ethnographic objects and sensory orders. In: *Touch in museums: Policy and practice in object handling*, ed. H.J. CHATTERJEE (Oxford: Berg), 127–131.

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