LEARNING AND ENQUIRY VIA COLLECTIONS IN REAL AND VIRTUAL WORLDS

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Abstract - This paper will explore the issues raised by current research underway at the University of Manchester. The ‘Values & Worth’ project began as a means of developing an Enquiry Based Learning (EBL) approach to encountering and constructing collections in both the real and the virtual world. It involves the digital capture of objects held within the University’s collections as a way to introduce school students to the reflective learning essential at the University level via a generative learning object (GLO)

INTRODUCTION
This project has been a considerable length of time in gestation with initial discussions commencing in 2001 when work began on researching determiners of value; viewing constructs and so forth for workshops/seminars to be undertaken in The Manchester Museum and/or The Whitworth Art Gallery. The paper is presented from the various perspectives of the authors.

The impetus for a virtual version came in 2004 in the then Department of Art History and Archaeology at The University of Manchester; funding was received for a digitisation project that was a consequence of the acquisition by the John Rylands University Library of an Image Management System (IMS), Luna. Luna presented the opportunity to move around images, present details, compare and contrast multiple images on screen and to provide textual information and references linked to the images. Copyright proved to be a stumbling block; image rights to one art work having been retained by the previous owner. The main limiting factor however concerned pedagogy; whilst it was possible to input material attached to the image the result was essentially didactic in that information was provided, or at best, questions were posed and then answered. There still did not seem to be a way of enabling students to access information as a result of questions they raised. However it was now possible to offer the workshops outside the Museum/Art Gallery and an archaeology PhD student, Jolene Debert was commissioned to develop and deliver such a workshop.
CENTRE FOR EXCELLENCE IN ENQUIRY BASED LEARNING (CEEBL): SMALL PROJECT AWARD

In early 2007 an application for funding was successfully submitted on behalf of the Faculty of Humanities Widening Participation team with the aim of producing a reusable learning object (RLO) based on EBL principles; this would encourage a reflective and investigative approach to collections in museum, art gallery and other environments in a real and virtual setting and provide a ‘research mode’ framework for the construction of new, individual or team collections which may also be virtual or real. The RLO was to be based around the notions of ‘value’ and ‘worth’ and these concepts explored and examined in terms of what makes an object valuable (determiners of value); how an object is viewed in a collection (art, artefact, object or commodity); who decides what is valuable (professionals, connoisseurs, consumers, academics, general public) and finally some of the problems with ascribing value. The objectives were to produce a template for enquiry that could be used in any collection visiting context; provide a virtual workshop based on objects in University of Manchester collections and to produce the template in such a way that it could be used by students to construct their own collections.

Details of the bid were forwarded to Dr Karina Croucher, one of the original PhD students in 2001, now working at Liverpool University and the academic coordinator for archaeology in the Higher Education Academy Subject Centre for History Classics Archaeology (HCA-HEA); she facilitated the contact with Cary MacMahon, then E-learning project officer at HCA-HEA and now project coordinator, TechDis and Dr. Eleanor OKell, University of Durham and project officer for Classics in HCA-HEA who were working on a similar project with the RLO-CETL, the Centre for Excellence for the design, development and use of learning objects. The CETL is hosted by London Metropolitan University and partner institutions are the University of Cambridge and the University of Nottingham; MacMahon and OKell had already begun to articulate some of the issues with respect to pedagogy [1] [2].

Samantha Lackey, curatorial research fellow at the Whitworth Art Gallery and Jolene Debert were recruited to the project at this stage.

PEDAGOGICAL ISSUES

RLOs which have been defined by the RLO-CETL as ‘web-based interactive chunks of e-learning designed to explain a stand-alone learning objective’ have been used as the basis for the development of what has been termed a Generative Learning Object (GLO). As Dawn Leeder, Wolfson e-Learning Fellowship Programme Director, RLO-CETL, University of Cambridge, has explained ‘with “traditional” RLOs, even though they are proven to be successful, the unit of reuse is the object as a whole, and there have been cases where tutors would have liked to be able to edit or adapt RLOs for their own specific purposes, but, being unable to, they have rejected them. Time and again in workshops, the same story emerges: asked what factors influence reusability the responses are that Los should be adaptable, editable, customisable. Clearly we should be providing our community with the flexibility they obviously want. So the move is now towards generative learning objects (GLOs), learning objects that can be adapted by tutors for local use. This means that they are much more inherently reusable and productivity is markedly increased as one “core” GLO can spawn multiple variants so they are truly scaleable.’ [3]
Our project is based on a core GLO that was initially termed *Guided Confusion* [1] and then, evaluating Multiple Interpretations (eMI) [2], a format that promotes the development of interpretive skills and encourages students to construct their own arguments based on their assessment of the varied views of others. Okell has expanded on the pedagogical underpinning in relation to HE students [4]. However the EBL approach that we sought to adopt meant that in a virtual environment we required something we initially termed ‘a pre-GLO’. We wished the students to come to their own awareness that objects are invested with ‘value’ and ‘worth’ and that contextual information might contribute to this; the eMI format would allow students to explore an object from different disciplinary perspectives but we required students to come to an understanding of the concepts of Value & Worth through EBL activity and initially we wanted students to consider more than one object. The RLO- CETL was enthusiastic about testing the GLO with EBL principles and generously provided the technical support, encouragement and inspiration to translate the pedagogical requirements into a virtual environment.

**Widening participation perspective**

Widening participation to HE is often discussed in terms of widening access but this is only half the issue and retention of all students is an increasingly important question across disciplines and institutions.

Events, activities and programmes designed to raise aspirations to HE and to increase attainment so that HE becomes a real possibility, should also be constructed in such a way as to facilitate students to succeed once there by fully preparing them for University teaching and learning methods, particularly at research intensive universities. It is for this reason that we wished to use the developments in teaching and learning in HE to inform activities produced for students in secondary education that promote HE as a preferred destination. The benefits of linking research with teaching and learning in this way have been documented by Jenkins, Healey and Zetter [5].

In addition the production of materials in e-format will enable outreach to schools beyond the daily travel area of the institution and contribute to the ‘concept of e-learning supporting a wider agenda of ‘social equality’. This is based on the notion that the task of academics (particularly in the Humanities) is not merely to ‘transfer knowledge’ to students, but also to foster and facilitate the creation of agents who are capable……of independent, reflective and critical thinking about, and hence engagement, with wider society’. [6]

**SELECTION OF OBJECTS**

Capture and digitalisation of objects within the museum/gallery context

In 2005 the Museum and Library Association published the pivotal document *Collections for the Future*. [7] The report was prompted by a number of concerns: that many UK museums no longer considered collecting an intrinsic part of their role; that the simple preservation of existing collections did little to engage with the public or make productive use of these cultural resources; that the types of knowledge associated with these collections often sustained a particular cultural and intellectual position that was perceived as exclusive and obsolete. One outcome of this paper was the suggestion that the use of collections could be significantly enhanced through digitalisation and the incorporation of these images onto publicly accessible databases. Another was to consider the ways in which physical collections could be made more accessible to the
public through open days and new storage facilities. Furthermore it was recommended
that the development of expertise and knowledge around collections should receive
particular attention with a focus on brokering new relationships within Higher
Education.

The three points of focus remarked upon constitute only parts (albeit highly
significant parts) of a much wider reaching strategy document. However, they do throw
into relief several of the pertinent debates into which the selection of objects for this
project entered. The ground between museum collections and the development of digital
technologies is one of contested territories. As has been pointed out by commentators
on the subject, the delay between the development of new technologies and their
introduction into the cultural heritage sector whether as collections management
systems, publicly accessible databases or tools for learning and interpretation has been
significant. Of course, underinvestment in the sector as a whole has been prohibitive in
this matter but there is also an outstanding debate over the object-ness of museum
collections and a concomitant value placed on the physical encounter. As Ross Parry
has clearly indicated the issue of authenticity, and authenticity of experience, has
remained central to discussions of the digitisation of collections resulting in an
‘apocalyptic discourse’ where ‘two futures for the museum were routinely presented:
one in which the museum, confronted with a tide of digitality, would witness the death of
the object and the visit; the other in which museums would be a refuge and sanctuary
for material things in an increasingly digital world’. [8] The nature of the EBL approach
in this instance reconciles these two positions; the real and the virtual workshops both
make use of the objects within the collections to encourage engagement with the
physical and virtual objects but crucially to develop ways of thinking that apply an
examination of the virtual object back onto the real collections of institutions (other than
those of The University of Manchester).

As an aside it is of interest to note an issue raised here by the involvement of the
RLO-CETL at London Metropolitan University. A member of the CETL team
suggested that it might be possible to actually achieve an enhanced experience of the
object rather than a degraded one. This would be possible through the technology’s
facility to make available an experience of the object that would not be available to the
student in a real environment. The ability to zoom in on a particular area of a canvas or
turn an object upside down or back to front in the virtual world would enable a far more
open interrogation of that object. This is something that we would hope to pursue
further as the workshop is developed.

Selection of objects within the collection of The Whitworth Art Gallery

The process of selection of objects from within The Whitworth Art Gallery’s
collection was directed by several factors: issues of copyright, accessibility to the
objects, their ability to represent different aspects of the collection, their relationship to
issues of value and worth and their physical qualities.

Copyright

While galleries and museums have been encouraged to digitalise their collections for
public use and dissemination over the WWW there is a growing concern that the
copyright implications of these projects have not been sufficiently thought through.
Although categories of fair use and educational use do allow a certain amount of
latitude for the inclusion of images the lack of clarity on this issue effectively resulted in
the decision to use works for which we knew there were no outstanding reproduction rights. This resulted in the dismissal of any works by contemporary artists – thus avoiding additional financial charges levied by artists and artists’ organisations such as Design and Artists Copyright Society (DACS).

Accessibility of Objects

The practical requirements of having relatively easy access to objects (for the real workshops), and for digital capture, resulted in a pragmatic limitation of objects for selection. The chosen objects could ideally be subjected to repeated flash photography (the technology for creating the three-dimensional imaging is dependent upon the repeated photography of the object from varied positions and rotated by 5 degrees on a turntable). They also needed to be available in the gallery for consistent use in workshops or for undergoing photography; for example, the use of William Blake’s Ancient of Days was vetoed, after its inclusion in the first workshop, due to its use in a display exhibition and its subsequent loan to an Italian gallery. Extremely large works such as hanging textiles or large sections of wall paper were also deemed unsuitable as they could neither be accessed by students, nor satisfactorily represented through photography.

The ability of selected objects to represent the collection of The Whitworth Art Gallery

The Gallery has three main strengths in its collection: it holds the strongest collection of prints in the North West of England and the most significant textile and wallpaper collections in England (next to the Victoria & Albert Museum). The Gallery and John Rylands Library also acquired the archive of the Victorian illustrator Walter Crane in 2005. The project aimed to show this range of objects – some of which would not traditionally be associated with a museum collection within the workshop. It was hoped that this range would encourage the students to think more widely about the role of collections and the objects within those collections. For example, the inclusion of an Iranian donkey girdle from the textile collection would encourage debate over the issues of value within the context of a gallery and within the original context.

The relationship of the objects to issues of Value and Worth

Wherever possible discussions were carried out with specific curators regarding the project as a whole and focusing on the issues of value and worth. The selection of objects by curators was often directed by their thinking on current projects and on the role of value in their collections. Therefore the historic fine art curator chose firstly one of the most financially valuable and recognisable works in the collection: William Blake’s Ancient of Days. However, when the inclusion of this object proved impractical she suggested a work that potentially engaged with the core subject in a more complex way: a painting entitled San Giorgio Maggiore from the Entrance to the Grand Canal. Considered as a Turner on its entry into the collection the work has recently come under scrutiny and it is thought that it was made by an imitator of Turner. As such its financial value has depreciated significantly. The inclusion of the leather embossed wallpaper arose out of the curator’s current research into gilt and its aesthetic and social significance within the decorative arts. In the case of the textile selections of a donkey girdle and Chinese shoes for bound feet the former was suggested because of its interesting incorporation of cowrie shells (at one point used as a form of currency).
while the shoes’ somewhat disheveled state indicated their lack of financial worth in opposition to the value as objects of cultural significance. The two works selected from the Walter Crane collection were considered in light of their position as integral parts of an archive and their use as research objects. In the case of the Muirhead Bone drawing it was the connection to a local and familiar area that may well hold sentimental and emotional value that encouraged its choice.

Physical attributes of works

It had been hoped that larger sculptural objects could have been included in the workshop but the scale of the technology available meant that there was nothing readily available that was out of copyright and that could comfortably fit on the revolving turntable.

Future selections from the collections of The University of Manchester’s cultural assets (Manchester Museum, John Rylands Library, John Rylands Library Deansgate)

While limitations of time and resources have necessitated the confining of the selection of objects to those within The Whitworth Art Gallery’s collection it is intended that further works will be selected from the other collections of The University of Manchester. In particular we hope to include a danger pot from The Manchester Museum and a historically significant document from the collection at the John Rylands library.

DEVELOPMENT OF THE WORKSHOPS

The desired outcomes are linked to the subject matter of the workshop. The subject of value is intricately bound to worth in a capitalist society. Originally it was supposed that the young age groups with which we were engaged would not have a fully developed capitalist ideology however the separation of value and worth was not readily apparent to any group tested. The workshops or specific sections of planned workshops were trialled with ‘live’ participants before attempting to translate the live experience into a virtual format.

Aims of the workshop

There were four major concepts that the workshop was initially intended to convey; objects are invested with ‘value’; diverse types of value exist; different people will ascribe different values to the same object; value is not necessarily expressed in monetary terms.

Stage 1

As only one type of value (monetary) was apparent to students given the early workshop, the way the live presentation was given was adapted. The students were asked to ‘list other types of value that a given object might possess’. In the workshops this proved difficult. Therefore the question was modified to ‘what value might this object have to said person’ (art historian, museum curator, interior designer etc). This change brought about positive results in the live trials and was taken further; the idea that the worth of an object is different to different people was a productive way of having students engage with the object in a new way. When the workshop developed
from the original ‘real’ presentation to a virtual one (which was trialled in a real setting), this became a larger part of the workshop and this allowed the idea of different values to become apparent. An object’s worth regardless of the type or source of its value does not have to be or at times cannot be measured in monetary terms. This is a much harder concept as the different values were frequently expressed by students in terms of what a person was willing to pay. The term priceless is in common use however the definition does not necessarily mean beyond price as it is often expressed, but merely that no monetary value can be applied.

Stage 2

A map of the actual workshop, the pre-GLO, was developed:

- What do you expect to find in a gallery or museum?
  Enter 6 ideas in ‘notepad’
  Images of Six objects
  Rank these objects and say why chose this order
  Images of same six objects
  Select an object
  Chosen object displayed + information sources
  Select an information source (information sources = mixture of photos/titles/silhouette)
  Information supplied
  Would you like more information about this object or to choose another object?
  Object page reopens ← → Information sources
  Select new object ← → Select new source
  (Above choices repeated within a given time frame)
  Re- rank the objects and explain rankings
  Feed back given on choices e.g. you always chose experts/photos/titles etc
  2 ranked lists displayed
  Save/Print off this list
  Task: over the next day/week, find an additional source of information for one of your lower ranked objects
  Re rank objects taking into account the additional information and explain why

This map and a power point version of ‘Encountering Objects’ material was supplied to RLO-CETL who also undertook the digital capture of the objects. In addition links
between this section of the project and the eMI GLO ‘Values & Worth’ were developed. We used power point versions as a means of ‘story boarding’ in a format that could be emailed as an attachment between ourselves and the RLO-CETL. Some examples are shown in Figure 1; the text-heavy final example has been amended in the GLO to become three stages

A school was invited into the university to trial the virtual workshops in hyperlinked PowerPoint mode before the material was transferred to GLOs and it is intended that a school will be invited to test the GLOs at the University before they are made available more widely and in fully virtual form. During the metamorphosis of the workshops it was discovered that the students interacted with the materials equally well in real or virtual format.

CONCLUSION

At the time of writing the project is still a work in progress and conclusions have not yet been agreed and are more a series of preliminary findings. Issues of self-evaluation by learners in both the real and virtual environments are being addressed and adaptations to the models based on our experience and the findings of Caroline Daly published in May 2008 are underway. [9]

Information about the GLOs which will be demonstrated at the conference and other RLOs and GLOs is available at www.rlo-cel.ac.uk

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