

UMAC-01/02: Developing teaching and learning based on University Museum and Collections

The University Museums and Collections (UMAC), including the internationally renowned collection of objects and archives at The Museum of English Rural Life, are an under-utilised asset with enormous potential to contribute to teaching and learning, including the development of autonomous learning and transferable skills. Prior to this project, collections-based teaching has been relying on the efforts of individuals and has not been embedded into university practice. This project contributes to the integration of UMAC into the University by funding an Undergraduate Learning Officer to develop collections-based teaching at Reading University.

To date, three new generic museum and material culture modules have been developed, successfully attracting students from a wide range of disciplines. In addition, the processes necessary for the quality assurance of new modules have been put in place.

The next phase will see the development of two further new modules, which should provide the FTE's necessary to make the post of Undergraduate Learning Officer sustainable once CETL funding ceases.



MC1AM students discussing a display at the Museum of Reading during a study trip

Project Code: UMAC-01/2 Discipline: University Museums & Collections Project Title: Developing teaching and learning based on University Museum and Collections
Description: The University Museums and Collections (UMAC), including the internationally renowned collection of objects and archives at The Museum of English Rural Life, are an under-utilised asset with enormous potential to contribute to teaching and learning including the development of autonomous learning and transferable skills. Prior to this project, collections-based teaching has been relying on the efforts of individuals and has not been embedded into university practice. This project contributes to the integration of UMAC into the University by funding an Undergraduate Learning Officer to develop collections-based teaching at Reading University.

<p style="text-align: center;">A</p> <p style="text-align: center;">What is the perceived problem or challenge?</p>	<p style="text-align: center;">B</p> <p style="text-align: center;">Enabling Factors</p> <p>What resources will facilitate the project?</p>	<p style="text-align: center;">C</p> <p style="text-align: center;">Processes</p> <p>How is this project going to be achieved?</p>	<p style="text-align: center;">D</p> <p style="text-align: center;">Objectives</p> <p>What is the end product or result of the project?</p>	<p style="text-align: center;">E</p> <p style="text-align: center;">Evaluation Data</p> <p>What methods can be used to demonstrate the success or impact of this project?</p>	<p style="text-align: center;">F</p> <p style="text-align: center;">Unintended consequences</p> <p>What have been the unintended consequences of enacting this project?</p>
<p>National Agenda: Collections-based learning has great potential for developing students' skills. However, University Collections across the country are not being fully exploited for their original purpose of teaching and research.</p> <p>Institutional perspective: a) The University has put a large amount of money into supporting MERL's move to its new facilities and wants these facilities to be used by the staff and students. In the past any teaching at MERL has not been sustainable as resources from FTE's have not been received by the museum. b) UMAC has unexploited synergies within the University, such as with the Agriculture department whose students could benefit from the new modules.</p> <p>Student perspective: Students have not previously had the opportunity to work with primary materials to undertake research. Many students are unaware of the resources on offer.</p>	<p>Funding: a) Capital funds expenditure will equip MERL with flexible teaching and learning space and has extended its library stock. b) The Planning Support Office will create a system for UMAC to be credited with resources for the teaching it provides.</p> <p>Staffing: The appointment of an Undergraduate Learning Officer will promote, develop and deliver the use of UMAC in undergraduate teaching across the University.</p>	<p>a) Consultation with staff across the university in the design, marketing, and evaluation of a variety of modules. b) The first phase (2005-06) will involve the development of three generic museum and material culture studies modules aimed at appealing across the humanities and social sciences. c) The second phase (2006-07) will include the development of a Science for Public Understanding module to expand our appeal outside of the humanities and social sciences. d) The major aim of the second phase (2006-7) is to play to the strengths of this internationally recognised collection by developing subject specific modules (the first of these in conjunction with the Agriculture department) e) The Archaeology department will provide quality assurance for modules sharing FTE's with MERL.</p>	<p>The student perspective: Modules will provide students with the opportunity to work with primary source materials Allow students to conduct original research using primary source materials Enable students to work with undergraduates from other disciplines</p> <p>The staff/ institutional perspective: Increase the degree to which UMAC assets are utilised by students and staff Embed the usage of UMAC assets into the University Increase the amount of student research being carried out on the collections Raise awareness within the University of the role that collections can play in undergraduate learning Attract students from a range of disciplines</p> <p>National Agenda: Raise awareness of the potential of university collections for teaching and research. Encourage students' long-term engagement with research.</p>	<p>All individual modules will be evaluated by students using standard feedback sheets Objective measurement of the research skills acquired by students as a result of individual modules Record the amount of student research being carried out on the collections Measure student attitudes towards the collections and to collections-based learning at Reading. Map the range of programmes from which students are coming Track the growth of FTEs delivered by UMAC teaching Record the number of staff and students utilising the museum and reading room Gauge the degree of interest generated in the national and international community of university museums via dissemination at conferences Record relevant partnerships with other institutions.</p>	<p>Many of the students undertaking modules are engaging with the museum in other ways e.g. volunteering, bringing family to events. Engagement of increased number of staff (especially at MERL) in collections-based learning through supporting student research, planned seminar series, etc. Student research can be fed back into collections management and display. Publication opportunities Course materials from new modules are being used by the 'Skills Opportunities at Reading' (SOAR) skills enhancement website. Links with HEA CETL liaison on developing teaching aids for new lecturers working with collections.</p>

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1. Project Progress and Timeline

1.1 Timeline

Done	Project stage post	planned end	actual date date
	Start	October 2005	
<input checked="" type="checkbox"/>	Design <i>material culture</i> and <i>museum studies</i> modules	Oct 06	Oct 06
<input checked="" type="checkbox"/>	Complete first delivery of <i>material culture</i> and <i>museum studies</i> modules	Jun 07	
<input type="checkbox"/>	Design additional subject specific module to appeal to Agriculture students	Sept 07	
<input type="checkbox"/>	Design module for scientists focussing on communication skills	Sept 07	
<input type="checkbox"/>	Complete first delivery of all of above modules	Jun 07	
<input type="checkbox"/>	Draw up plan for next stage of development	Jan 08	

1.2 Enabling Factors: State the resources used in this L&T-enhancement project

Primarily CETL-AURS has funded the post of *Undergraduate Learning Officer* in order to develop and deliver teaching at the Museum of English Rural Life (FTE 1.0 minus a few hours spent on volunteer development: see other document). The intention is to fund this post on CETL resources until the number of FTEs delivered by the post are sufficient for it to become self-sustaining through the University's normal mechanisms for justifying teaching posts.

As the Museum of English Rural Life was being relocated in a refurbished building, CETL contributed £17,000 to ensure that two new teaching spaces had appropriate furniture and audiovisual facilities.

The development of this project has also been facilitated by the purchase of capital equipment (c. £27,000 on digital cameras, library books, smartboard, furniture for education studio and gallery) to furnish MERL with the resources to support new teaching provision.

Capital expenditure of approximately £9,000, in addition to that outlined above, has been made in the Ure Museum of Greek Archaeology, enhancing audiovisual resources so that teaching can take place in the main gallery, and improving the back-office space where students undertake project work.

1.3 Processes: What were the key challenges in delivering this project?

Delivering new modules from within the University's museums and collections, and capitalising on the multi-million pound building programme in the Museum of English Rural Life, was very challenging. It required finding someone with enough passion and knowledge about museum collections and practices, who was also an able communicator, and a credible academic. They would have to consult with staff across the university to

design and market a variety of modules attracting a variety of students, and then go on to deliver these. Unlike academic departments, the University Museums and Collections had no students of its own enrolled on programmes. Students could and would only enrol if they found the modules attractive, and if academic staff within Schools promoted them.

Appointment of staff: Rhi Smith was appointed to the post of *Undergraduate Learning Officer*, and proved to be an exceptional post-holder in terms of developing team-spirit, persuading others, enthusiasm, and now, with student feedback, appreciation for how she has helped them learn and develop new skills.

consultation with staff across the university in the design, marketing, and evaluation of a variety of modules:

Consultation: Academic Staff were overwhelmingly positive. There had been a desire amongst them to make greater use of the University's collections, but lack of time or resource had prevented such modules being developed. Now staff were being offered something that they could offer to potential or current students in addition to their existing programme. The University Museums and Collections were seen to be supplementing the teaching provision of a range of departments rather than encroaching on other people's territory or students.

Marketing: There were some problems with marketing due to there being a number of complicated and often contradictory structures involved in communicating option choices to students. The major lesson learnt in the first year was to speak to everybody in person and to make sure that everybody knew what was going on, i.e. there was no benefit if the Head of Department/Division agreed to market the modules to their students if the administrative staff who advertised them were not made aware of this decision.

Development and delivery of the first set of modules for delivery in AY2006/7: the first phase (2005-6) involved the development of three generic museum and material culture studies modules aimed at appealing across the humanities and social sciences. This proved fairly straightforward and we have found that there is significant student interest in this subject area. As the *Undergraduate Learning Officer* was new to academic teaching the creation of three new modules in the space of a year was a steep learning curve. However, it was decided that she should undertake a Post-graduate Certificate in Academic Practice. This additional CPD meant that there was a great deal of theory and practice underlying the design and delivery of these modules. Significant advice was also provided by Anne Crook (who is both the CETL Innovation Manager and works for the Centre for the Development of Teaching and Learning).

The key to the successful development of these modules was the idea that they should sit within a wider framework of museum learning, and not simply be lectures in a museum or lectures with objects. The creation of these types of modules created a whole range of problems that a standard lecture and exam structure would not have encountered. Students were intimidated by the freedom given within the research assignments and needed a much higher level of support than with a standard assessment technique. Support was provided via the Skills Opportunities at Reading (SOAR) website and subject specific resources on Blackboard. Preliminary student feedback suggests that this type of learning can be extremely stressful, however they also found it extremely rewarding.

Each module was also developed within the framework of 'Outcomes Based Planning' in which assessment and teaching methods are designed in such a way that they facilitate the actualisation of a series of clearly defined learning objectives. For example, each module had at least one learning objective with a specific research skills component and the nature of the teaching (student-led hands-on sessions) and assessment (research projects using primary evidence) was designed with this in mind.

The design and delivery of the modules has been extremely labour intensive and emotionally challenging in the first year. The next phase should be made easier by the fact that that we have now created various models of best practise and are aware of the potential pitfalls.

The modules developed are as follows:

MC1AM: Analysing Museum Collections

Students undertake a research project analysing a museum display of their choice through observation, recording of design and analysis in relation to theory, practise and personal experience.

MC3MT: Museum Theory, History and Ethics

Students undertake a research project on any subject within museum theory and practise using a specific museum as a case study. They conduct their research through networking with the museum in question and accessing their archival records. A number of students have also undertaken extensive interviewing as part of this project which has meant that an ethics procedure has had to have been put in place.

MC3OA: Object Analysis and Museum Interpretation

Students use archival documents, our specialist library and comparative objects to analyse an object from our store and create a catalogue entry and label for it (justifying their decisions through reference to theory and practise). They also investigate the different strands of interpretation for a single object in the permanent exhibition (using the library, archives and specific object files) and discuss possible alternative methods of interpretation.



Students analysing a mystery object from the collections in an MC3OA workshop

Development and delivery of an additional set of modules for delivery in AY2007/8: with three modules developed and in progress, it was important to increase further FTEs and to diversify the range of programmes from which students were coming, to ensure

sustainability of the post. The second development phase (during 2006-7) includes the development of two new modules.

The development of a Science for Public Understanding module was an explicit attempt to expand our appeal outside of the humanities and social sciences. The *Module Description Form* for this module has been approved and we will be starting the design over the next few months. Consultancy has taken place with external and internal staff experts and they will also be involved in a design steering group when resources are being designed for this module. This module will involve group work to develop interpretive resources based around science subjects for the university museums thus developing a range of transferable skills in the students involved.

A module is being developed that explicitly uses the Museum of English Rural Life's rich and internationally recognised collections to benefit and draw in Agriculture students. Although this is going well, a major issue is the teaching provision. The *Undergraduate Learning Officer* is not a specialist in this area and will need support in design and delivery from experts both in MERL and the School of Agriculture. We are currently consulting with staff around the university to create a steering group for the design of this module and to find suitable teaching provision.

The Archaeology department will provide quality assurance for modules sharing FTE's with MERL: creating a mechanism to ensure that all the teaching sits within the University's QA regime is naturally important. Since Roy Brigden, the Curator of MERL, was once an honorary Lecturer in Archaeology and delivered for them a module on Museum Studies, it was felt that this was an appropriate route through which to ensure QA was achieved. The Archaeology department were very supportive of the proposed modules and very helpful in the administration of teaching. Archaeology would take a proportion of FTEs (the internal unit of currency) for providing this support. Some negotiation took place over the exact level of FTE's to be shared as there was no real precedent for this kind of arrangement. There were concerns over the fact that new modules might draw students away from Archaeology modules so it was important that modules receive enough students from other departments for this arrangement to benefit the Archaeology department.

In the first year this worked effectively, though the modules developed in the first year were all of a type that Archaeology students might wish to take. As more diverse modules, such as *Science Communication*, are considered, aiming at students on programmes where contact-hour expectations and traditions are very different to those in humanities-type subjects, there are concerns about modules having such varying contact hours. The design of the module is very different to that normally offered by Archaeology and this has caused some concern in the department. This has been resolved through the decision that this module will not be offered to Archaeology students; only accredited by the department.

As mentioned above, there have been some issues negotiating the quality assurance of non Archaeology modules through the Archaeology department. As these modules are slightly unusual in terms of their assessment (i.e. primary research projects) the first year has involved consultation between the Undergraduate Learning Officer and Archaeology Department on methods for devising a marking criteria for a diverse range of student projects and the methods of assessing skills through examinations.

2. Outputs and Evaluation

2.1 List the evaluation evidence/data collected

Date	Quantitative or qualitative?	Evaluation by	Description / Method
Sept 06	quantitative	Number of FTE's	RISIS report
Sept-06	quantitative	Range of departments	RISIS report on home departments of students
June 07	both	Module evaluation	Student feedback on modules
Jun-07	both	Skills evaluation	Student self-evaluation of skills developed through modules

2.2 Summarise the key results from your data

Qualitative student feedback from the module evaluation forms shows that students enjoy working in a museum environment and undertaking independent research using objects and archives. It also suggests that this kind of work was not without its difficulties. In class and in feedback students showed a level of concern about their research project not usually seen with essay-based assessment. Students requested that they be 'bullied' into doing work at the right time, thus suggesting that time management was a major issue. The skills self-evaluation forms showed that students lacked a range of key research and transferable skills. For example, some third year students claimed not to know how to use databases and one had never given an oral presentation. The forms did explain where information could be found on these skills and analysis of use of web resources alongside qualitative feedback suggests that students would use resources to develop their skills when they were made aware of an issue and where they could see its applicability to a specific piece of assessment.

Students tended to score their skills at identifying a research question quite poorly and this finding was supported by discussions in research focussed classes. Most arts and humanities assignments at Reading involve picking an essay question with a bibliography from a lecturer-created list. When faced with even the simple task of picking one object to research students reported to be daunted by the experience. However, informal feedback also suggests that this had inspired them and the sense of ownership of their research project may explain why a number of students achieved very high scores on this part of the assessment.

In terms of sustainability, from a starting point of 0, c.9.5FTE were delivered in the first year and approximately 26FTEs are required by 2010 to make the post self-sustaining. There were problems in advertising in the first year, and there was no word-of-mouth student-to-student promotion of these modules, which student feedback shows to have proven popular. We think that the combination of better promotion and additional modules should raise the FTE load over the next few years to a sustainable level.

2.3 How would you, as the PI, summarise the success of this project?

The key to this project was that the provision of optional modules taught at MERL with the MERL collections effectively 'forced' students through the doors in a way that other informal projects may not have done. Students said that the 'hands-on' learning and 'chance to work with a professional' were the best aspects of the modules. Despite their

initial fears about undertaking independent research students seemed to enjoy their research assignments. Informal feedback suggests that the self directed nature of the assessment engendered a sense of ownership of the research project and of the collections as a whole. Each student developed a real engagement with their topic or object evidenced by the sheer level of research they undertook and the fact that they would include friends and families on their projects. An additional unexpected outcome is that the standard of research has been so high that we are devising a system whereby students can give the museum permission to use their research findings in exhibitions and in future research.

3. Impact and Consequences

3.1 How many students (and at what level and in which programme areas) has this L&T enhancement project impacted on?

The breakdown of students in 2006/07 is as follows:

MC3OA – 26 students

MC3MT – 12 students

MC1AM – 19 students

From: Ancient History, Archaeology, Applied English Language Studies, Psychology, Classical Studies, and History of Art & Architecture, History, English Literature, Study Abroad (and several combinations of these).

3.2 Has this project positively contributed to the teaching environment and satisfaction of the academic staff delivering this provision?

The Heads of the Classics and History of Art departments both stated that they had identified the need to create opportunities for students to engage with collections and to undertake independent research, but that due to staffing structures they did not have the resources to provide this internally. The creation of the *Undergraduate Learning Officer* has enabled them to offer a wider range of modules to their students.

Members of staff at MERL (some new to teaching, others more experienced) were given the opportunity to be involved in classes and other staff reported that their work supporting student research (for example in the Reading Room) had been very rewarding. The Archaeology department has involved the *Undergraduate Learning Officer* in its Open days and is using the new modules as a marketing tool. Other departments are working on including something similar in their Open days over the next academic year.

On a personal level the *Undergraduate Learning Officer* through the PGCAP and the creation of these modules has developed her teaching style and a range of resources. The Undergraduate Learning Officer is currently exploring methods of disseminating findings via the Subject Centre Networks.

3.3 Summarise the unforeseen consequences of this project

Students have started using the museum in different ways e.g. volunteering, bringing friends and families to visit, requesting careers advice from staff. Alongside qualitative feedback this suggests that teaching the modules at MERL has achieved the aim of getting students to engage with the collections.

The research has also been of such a high standard that it ties back into our institutional knowledge of the collections. Thus the student work has not been a simple academic exercise but has aided the museum's wider aims of researching aspects of rural life in England and encouraging public engagement through our collections.

4. Dissemination

4.1 Log dissemination activities relating to this L&T Project

Date	Main Audience	Type	Dissemination activity
Jan 06	UoR Academics	Action	Meeting with heads of department to discuss collaboration
Mar-06	UoR Academics	Awareness	Article in 'Teaching Matters'
June 06	Museum Educators	Awareness	Joined group for Adult Education in Museums
Sept 06	International	Information	Paper at the ICOM UMAC conference in Mexico
Oct 06	International	Information	Paper from ICOM conference published on UMAC website
Oct 06	Students	Action	Freshers drop-in session at the Ure Museum
Nov 06	Staff	Awareness	Article in Bulletin on student research
Jan 06	Library Staff	Awareness	Talk at Staff Development Hour
Feb 06	Subject Centre	Action	Meeting to discuss dissemination of activities through HLST subject centre website (resource guides and case studies)
Feb 06	National museum staff	Action	Meeting with CETL for Learning Through Design representatives at the Victoria & Albert Museum
Ongoing	PGCE and BA ED students	Action	Involved in training workshops on teaching with artefacts

4.2 Beyond this evaluation, do you see any scope for pedagogic research in this area of learning?

The Undergraduate Learning Officer has been approached by the HEA Subject Centres for Classics, History and Archaeology and Hospitality, Leisure, Sport and Tourism who have both requested the creation of resources for other lecturers.

In the long term there is scope to undertake pedagogical research on the use of collections based learning with undergraduates.

Project Developer's names:

Rhianedd Smith, Undergraduate Learning Officer

Bekky Moran, UMACS Learning Manager

Kate Arnold-Forster, Head of UMACS

John Creighton, Director of CETL-AURS