“Digital Detectives”; the Use of Omeka as a Tool in Humanities Teaching

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Abstract

In this case study, we provide the details and assessment of our deployment of a new web-based tool Omeka – originally designed for museums to curate online exhibitions – in a first-year undergraduate course on the Graeco-Roman context for the Gospels. We chose the tool because of its focus on artefacts and contexts, and found that student experience was generally quite positive. In particular, students found that their work on the Omeka site helped them to develop a better critical understanding of an ancient context and to approach research as a creative process. In addition to highlighting several areas which helped to underwrite the success of this project we also recommend three ways that this use of interactive online learning can be more finely focussed and the student experience enhanced.

Key Words: omeka, curation, online learning, history, co-production, museum
Introduction

One of the crucial tasks facing teachers in the humanities is that of helping students to develop a critical method. Against the presumption that the past comes to us free of mediation or interpretation, we want to teach our students to develop an awareness of the texture or context which lies behind historical narratives and artefacts and the ways in which the transmission of stories from the past are mediated through intervening generations and present concerns. Learning to view the past in this way, we hope, will give our students a stronger apparatus for understanding themselves and for deeper learning. This concern drove our development of the “Digital Detectives” project to test whether a web-based tool could embed such a historically focussed teaching objective in a newly developed first-year undergraduate course at the University of Edinburgh, “Jesus and the Gospels.” Because a core concern for this course was to help students focus on the Jewish and Graeco-Roman contexts of the Christian gospels, we sought to find a tool which was fit to that purpose. The School of Divinity at the University of Edinburgh is perhaps somewhat unusual in that several courses already integrate technological enhancement with web-based tools (Kidwell, Paterson, & Northcott, 2012). Given that the goal for the Gospels course was to help students understand the contexts behind ancient texts, we settled on something rather different, an open-source web publishing tool called Omeka which was developed by the Roy Rosenzweig Center for History and New Media. Omeka has quickly become popular with museums and galleries and seemed a good fit for this artefactually focussed course. In this case study, we provide some critical reflection on the experience of students and academic staff using Omeka. In general, we found that the student experience was quite positive, particularly with regards to helping students to develop a better understanding of the ancient context and to
understand the task of research as a creative process. However, in completing the project, we have also identified a number of ways in which this sort of digital teaching enhancement can be more finely focussed and the student experience enhanced. For the sake of other digital educators who may be interested in using digital tools in a similar teaching context, in this article, we provide a detailed case study which outlines our project and unpacks some of its assessed outcomes.

**Introduction to the Project and Omeka as a Teaching Tool**

**Project Concept and Course Design**

“Jesus and the Gospels” is a new undergraduate course in the University of Edinburgh’s School of Divinity, designed as an introduction to the historical Jesus and early Christian gospels. It runs for an 11-week semester, with three lectures and one tutorial a week, and is managed and taught by Dr Helen Bond. In its first year (2013/14) it attracted just short of 40 students. In keeping with the Scottish degree system, this introductory course attracted both first and second year students, and although the majority were aiming for a degree in Theology, a significant minority (22%) were working towards degrees in other disciplines (from Anthropology to Neuroscience). One of the distinguishing elements of the course was an insistence on reading ancient texts within their historic context, both Jewish and Graeco-Roman, and much of the first two weeks was spent immersing students in the history and archaeology of first century Galilee and Judaea.

The web-based Omeka software platform was fully embedded in the course, and allowed small groups of students (up to five in each group) to choose one artefact which would illustrate some aspect of the biblical context. These artefacts would become “exhibits” in a digital exhibition (or “gallery”) of ancient artefacts “curated” by the class as a whole. In their introduction to the project, students were told that their “exhibit” was expected to have three
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pages: (1) an introduction to the artefact (shown in figure 2 below), (2) a page unique to that exhibit (which they were free to design as they felt appropriate, see figure 3 below for an example), and (3) a section explaining the relevance of the artefact to the New Testament (figure 4 below). Examples of artefacts (“exhibits”) include:

- **The Arch of Titus in Rome**: e.g. a photograph of the arch along with links to detailed analyses of the designs, first century Roman and Jewish literary descriptions of the arch and the Flavian emperors’ triumph in Rome, information on Titus, Roman propaganda, etc.

- **Tyrian shekels**: e.g. a photograph of the coins themselves, along with links to fuller discussions of their designs and inscriptions, biblical laws relating to the Jewish Temple tax, information on money in the Roman period more generally, etc.

- **The Pilate inscription**: e.g., a main photograph might link to reconstructions of the text, an account of the finding of the inscription, discussion of the term “prefect,” the role of provincial governors such as Pontius Pilate, etc.

Each team was given a limited choice of which artefact to work with and were instructed to focus their content creation work around that artefact throughout the semester by planning an “exhibit” as a group. The final stage involved the group uploading pictures and text which might further illuminate the historical context and material significance of their object. The aim throughout was to encourage student-produced co-learning within a multi-disciplinary framework. In effect, students became “Digital Detectives,” researching and curating a unique gallery which would provide a context for them to enhance their understanding of the first century Jewish and Graeco-Roman contexts of emerging Christianity. The final class of the course was entirely devoted to a “visit to the museum,” at which each small group had five minutes to present its “exhibit” to the rest of the class; the museum feel was enhanced
through the serving of refreshments. In order to ensure full student participation, each group was also awarded a small assessment mark (we decided on 5%).

A further feature of the project was that the “gallery” of exhibits, pending review by the course manager, might serve as the basis for a public exhibit by the subsequent uploading of material onto one of the School’s research centres (the Centre for the Study of Christian Origins). From the first, students were encouraged to develop content which would serve as a public resource, which had the potential to remain indefinitely (thus they were encouraged to take into consideration issues surrounding writing for the web and copyright). Looking to the future, it is envisaged that students in successive years would add new artefacts, thus providing an ever-expanding library of resources.

**Omeka**

Omeka has a number of features which scaled well to the teaching objectives of our course. As the project page suggests, “Omeka is designed with non-IT specialists in mind, allowing users to focus on content and interpretation rather than programming” (Omeka: Project, 2014). This platform was developed primarily in an academic and curatorial context and has been used by a wide array of high-profile foundations and museums to provide an enhanced web-based experience which may accompany a physical visit to a museum or to enable users who cannot afford to travel and experience the “real thing” to experience some of the wonders held in a physical collection via the internet. The Omeka website provides an extensive list of these projects, listed on their “Showcase” (http://omeka.org/showcase). A quick look at a website developed on the Omeka platform may give the deceptive impression that the platform is quite simple. Behind these online exhibitions lie a sophisticated engine which can record and present metadata for each “Item” which is exhibited within a digital Collection and Exhibit. We suspected that by allowing students to curate their own digital
exhibit within our “Gospels Museum” they might develop an enhanced awareness of the difference between an “item” and the actual historical artefact. We also hoped that this sense of distance might bring students into a new context of critical interpretation wherein they might begin to recognise the layers of mediation that make up a person’s understanding of a historical artefact.

While there is a substantial body of research devoted to the use of blogs in teaching, Omeka is still something of a new arrival and as several recent studies have noted, use in higher education contexts of newer web-based tools has lagged far behind their mainstream availability. Yet, as Harrison and Barthel note in one such study, “The popularity of Web 2.0 applications demonstrates that, regardless of their levels of technical expertise, users can wield technologies in more active ways than had been apparent previously to traditional media producers and technology innovators” (Harrison & Barthel 2009). Because these tools can be highly immersive, they offer a particularly interesting option for developing a more engaging learning experiences (Deng & Yuen 2012; Berlanga et al 2010; Lim et al 2010). There are a few studies which have detailed the deployment of Omeka in other learning contexts (Marsh 2013; Brink et al 2012; McClurken 2011; Kucsma et al 2010). In particular, with regard to teaching history, Brink et al break down the array of learning activities which go into the seemingly simple task of content development for a digital exhibit: “[students] research that topic in the Archives, prepare or obtain digital surrogates of selected primary materials, and then construct a project analyzing and synthesizing those materials for web publication” (Brink et al 2012, 163). Our project followed a similar model and thus had a similarly composite array of learning experiences which interfaced with work on the Omeka platform. We hoped that bringing an online platform into this teaching context could provide an opportunity to observe how students would interact with this new platform and what unexpected learning engagements might result.
Installation and Project Mechanics

The Omeka platform was installed on one of our University web servers running Linux and Apache and placed behind a firewall so that content was only visible to local users (i.e. students in the course). As Omeka is designed to serve a variety of functions, some customization was necessary in order to accommodate students with limited technical skills while at the same time providing a platform that could facilitate creative expression of research. For this purpose, the project also funded work by a PhD student with some experience in web publishing as project technician, customising the site post-installation to suit the needs of the course and developing training tools for students. As designed, our Omeka site, “Jesus and the Gospels: Online Museum” has a main page that displays each completed student exhibit. Figure 1 (below) shows the main page with four of the class’s active projects.
Each of the images shown above is also a clickable hyperlink to the individual exhibit stated in its title. Figures 2-4 below show each of the three pages of a completed exhibit as described above. The subject in this case is the Alexamenos Graffito. Each page represents research roughly equivalent to an undergraduate level term paper/class essay expressed by the creative integration of prepared written text and modern media (pictures, video, links to other helpful websites, etc.).

![The Alexamenos Graffito](image)

**Figure 2**
Graffiti in the Ancient World

We might think graffiti is a modern form of art or expression, but its origins are much older and can be found in the ancient world. Graffiti have been used for thousands of years, and they were not limited to expressing political views or messages of rebellion. Graffiti can be found in various forms, including those created with ink, chalk, or paint.

The earliest examples of graffiti can be found in ancient Egypt, where they were used to mark tombs and temples. In Rome, graffiti were used to express political messages, and in ancient Greece, they were used for humorous or satirical purposes.

Today, graffiti is still a popular form of expression, and it continues to evolve with new techniques and materials.
Figure 4

The Omeka platform uses two primary building components which are described in Omeka as “text” and “item(s)” (noted using labels above). Whereas “text” is self-explanatory, an “item” warrants further explanation. Because Omeka “items” can often be visual representations of an artefact, when designing the project, we sought to find ways to emphasise for students the difference between the real Alexamenos Graffito (an artefact which is housed in the Palatine antiquarium in Rome) and a picture of the Alexamenos Graffito which they were presenting as part of their exhibit. This emphasis proved important for students in developing a critical apparatus as part of their learning in the course, but is also important because of the mechanics of Omeka. In practice, there are a wide variety of documentation types that may serve in Omeka as “items”. In order to simplify the process for students we reduced their options for documenting items to four categories: still image, video, audio, and website, which students could upload to their Omeka exhibit. We
encouraged students to think of themselves as curating an exhibit, and in so doing, to offer an interpretation of their artefact both through their use of narrative and in their selection and presentation of these “items.” Figures 5-6 below show the dashboard that students used to upload items and arrange their exhibits:

![Dashboard](image-url)

**Figure 5**
At the start of the project, prior to the commencement of teaching, our project technician uploaded an example “exhibit” to the Omeka site. This provided the basis for subsequent training sessions for the Course Manager and three course tutors. Based on past experience integrating this type of digital tool into classroom teaching, we knew that it was crucial to have buy-in from all “stakeholders” in the course (i.e. students, tutors, admin staff), so we made sure that everyone involved in delivering the course was fully aware of what the technology could do, the importance of collaborative learning, and the aims and objective of the project. This had the added benefit of providing post-graduate tutors with a unique professional opportunity to develop advanced – and transferrable – pedagogical skills.
Multiple training sessions were arranged for students once the semester was underway. The first was held on the Friday of week 1. During this first hour-long session, the technician provided students with an overview of the Omeka tool, how it has been typically used, and how the class would use it. In addition to walking students through the technical details of Omeka (logging in, uploading items, ensuring that all items were tagged and titled correctly, arranging items into exhibits, and publishing the completed exhibit), the technician illustrated the process from beginning to end through a sample “exhibit.” Students were encouraged to ask questions and to make connections between course learning objectives and the digital tool. We were particularly mindful here of Marsh’s observation that students participating in an Omeka-based exhibition need “training on effective narration/curation/storytelling in an online exhibit” (Marsh 2013, 2). As this was a new way of learning, we were anxious that each student should feel supported at every step of the process, both as an individual and within his/her group.

Towards the end of the semester, we hosted two further sessions to help with any problems that might have arisen as the various teams moved towards finalising their “exhibit.” Once again, the technician explained how to use Omeka and encouraged specific questions. Throughout the course, the technician’s contact information was freely available to all students, and they were urged to contact him if they experienced any difficulties. Some did avail themselves of this opportunity, though this was very close to the final week, when teams were due to present their “exhibit.”

We monitored student experience of Omeka in three ways:

1) Direct and indirect feedback from students: In addition to a survey conducted by course tutors in week nine, we captured informal feedback given to the Course Manager and the technician throughout the semester, and ran two focus groups after the course had concluded to get more in-depth feedback.
2) The “virtual museum” event: We informally sought audience feedback after this event, which we sought to corroborate with timestamped web analytics on site usage we had already captured. We expect to continue this form of monitoring longer term after some student presentations are placed on a public website.

3) Standard university course monitoring protocol. Upon course completion, students were asked to complete a formal survey assessing their experience with Omeka.

A breakdown of formal monitoring (point 3 above) is as follows. Of the 37 students registered for the course, 73% (27) provided formal feedback via the course monitoring form. In terms of demographics, 70% of students (19) were between the ages of 18-20, 11% (3) were between the ages of 21 and 25, 15% (4) were between the ages of 26 and 35, and 4% (1) was over thirty-five. Of those that reported back, 74% (20) were studying for degrees in the School of Divinity.

Overall, there were three areas in which the students reported positive experiences. First, a strong majority of students generally agreed that the project helped them to develop a better sense of the first century Jewish/Roman context of early Christianity (85%). Second, 72% of students felt that the project helped them to transform their research into a creative outlet. One responder noted “the finished website is more exciting than an essay,” another commented, “the project was less stressful and more fun than a typical paper assessment - really enjoyable.” Third, more than half of the students who responded (63%), agreed that their experience with Omeka helped them to develop independent research skills (only 16% disagreed). These strongly positive results led us to conclude that the core objectives of the project were met - that is, to help students to improve their knowledge of the Jewish/Graeco-Roman context of Christianity in a creative way.

To our surprise, the two areas which fared worst in student feedback were the group aspect of the project and ease of use. Students were asked to agree or disagree with the
statement, “the tool helped me work as part of a team.” From those who responded, only half agreed. Many students offered additional remarks here. One noted, “with a relatively large group for this task, it challenged my delegation and team-work skills greatly.” Focus group interviews provided some helpful context for this aspect of student feedback, as participants in the student focus group highlighted the challenges of group work with members across schools on a large campus. Along these lines, one student noted, “The process was difficult as team members were not all New College students and those who were were not available at the same time. Attempts were made to use email, however similar problems relating to communication were experienced.” Similarly, another noted, “Our group struggled to meet and largely worked independently due to competing timetables and commitments.” It should also be noted that there is likely some degree of student prejudice against group work, expressed succinctly by one student: “Don’t like team projects.”

Upon reflection, we were glad to have included a strong support component in the project, as these logistical challenges were compounded by a split in user experience in terms of ease-of-use of Omeka. Questionnaires returned reflected that only 20% of students found the tool “easy” to use with 38% reporting that they found it “difficult.” This stands in contrast with 66% students that reported in another course that they found Wordpress “easy” to use (Kidwell, Paterson, & Northcott, 2012). However, counter-intuitively, in focus group interviews, students who had used blogging platforms before noted that they actually found Omeka easier to use than the popular blogging platforms, specifically singling out Wordpress and Blogger. Those students who were the primary users of Omeka in each group found it elegant and easy to use, and others whose exposure was more superficial seemed to find it more intimidating.

In general, groups were satisfied with the process and with the final outcome. Although presenting technical challenges to some, Omeka proved to be an excellent way for
students to connect their research into the Graeco-Roman background of the New Testament to physical artefacts in the real world. This was one area where students proved to be unexpectedly resourceful, as students found pictures, videos, and online lectures to include on their Omeka pages and this led to a form of learning that was contextualized within a multitude of outlets. Some student groups even interviewed experts on the artefacts that they were researching and included their videos as part of the exhibition, and another student who travelled to Israel mid-semester for a holiday made a special effort to seek out of Ancient graffiti. In these ways, abstract research became grounded in the real world.

**Conclusions**

As we have summarised above, student experiences with the tool (as reported in written surveys, focus group interviews, and a mid-term oral survey), were broadly positive. In concluding this survey, we highlight several factors that underwrote the success of the project and then outline several areas which we intend to target for improvement for the next run of the course.

**Successes**

From past experience, we have found that student engagement with new technologies in teaching can prove to be volatile, particularly inasmuch as a discouraging experience for one student can suddenly undermine the success of a project. Even the hard work of a very enthusiastic PI can be quickly undermined by a cynical course tutor. In addressing this risk, we decided to include all staff involved in teaching the course (in any capacity) with some level of responsibility for the project. To this end, we set aside funding to pay a small honorarium to all of the tutors on the course to encourage a greater sense of “ownership,” and also included support for the Digital Detectives project in their job description. This
expectation was reinforced by special training sessions for tutors before the students engaged with the technology so that the tutors themselves could serve as another point of contact for concerned students. In assessing this project, we found that securing buy-in from the whole project team was vital in ensuring success of the project.

Parallel to the concern noted above, we also assumed—given the novel nature of Omeka to our teaching context—that it would be important to provide quick and easily accessed technical support for students. Towards this end, we designed the project with a dedicated “technician,” a post filled by a doctoral student (and co-author of this article) who also served as a course tutor. The technician designed training materials and sessions, and also led site design for the Omeka website. This experience with setup provided the basis for later technical assistance and ongoing support for the project. Student reactions to the project indicated that having dedicated and accessible support was an important part of their positive experience with the technology. Training for the project included multiple training days for students in which they could come and ask any question they had about the project. There were three main training sessions, one at the beginning of the course and two more close to the time that the project was due. Typically, students asked basic questions that then allowed them to work out the rest for themselves. Although not every student required extensive training, its availability throughout the course was invaluable for many of the groups.

Finally, as noted above, students highlighted their appreciation of the “creative” aspect of their learning on the project. By designing towards a loose structure with an open-ended specification for content, students were left an opportunity to adapt the structure of their Omeka pages to the way they encountered the content, highlighting an expert interview in one case, while focussing closely on graffiti in the ancient world in another. In this way, Omeka was available to students as a tool for immersive self-generated content. We would recommend that other teachers seeking to deploy Omeka in a teaching context also resist the
temptation to provide overly realised guidance for content, but recognise the potential for Omeka to serve as a blank canvas and thus intensify learning.

Targeted Improvements

Alongside these areas of success, we note three areas which we plan to target for improvement in future implementations of the course. Strangely perhaps, and despite the constant use of gallery language, students were slow to grasp the idea of Omeka as a virtual museum. One student, who went on a field trip to Israel half-way through the semester, came back with a large number of photographs of her “exhibit” and enthusiastically shared them with the rest of her group. Actually seeing the objects *in situ*, deciding how to photograph them, and sharing her experiences gave her a strong sense of being connected to (and excited by) a set of archaeological remains. The sense of connection conveyed by this student left the project team with a strong desire to replicate this in some way in the classroom. This student experience was relatively unique, and thus intensifying student awareness of the “museum” concept serves as our first area for improvement.

Two strategies come to mind. First, the next time that the course is taught, there will already be a sizeable collection of Omeka “exhibits.” Right from the very beginning, students will have examples of we hope that they might produce and this should serve to heighten the “museum” feel. Second, within a short walk from our building is the National Museum of Scotland, which includes in its holdings a large number of first century Jewish coins, Roman lamps and pottery, inscriptions etc. We hope to enhance future course offerings with a visit to the Museum, so that students can actually handle a physical exhibits. Further, we hope to ask a curator to share about their experience conserving ancient objects and communicating their significance to the general public. Not only would this enhance the “museum” feel of Omeka, but it would provide an enjoyable excursion and provide students with useful transferable
skills, underlining the mediation of meaning which underpins much of student discovery in the course.

In seeking to address the two points of friction noted above (group work and ease-of-use), we plan to structure the group interaction with the tool more consistently next time. Rather than letting each group decide on their approach, we plan to ask each group to nominate one or two members to act as the primary point users of the Omeka platform. This was highlighted in the focus groups as a successful strategy, though some groups arrived at the arrangement quite late in the semester. These students will also receive more targeted technical training, while general training sessions will focus on the theoretical basis for their work as “Digital Detectives,” as noted in above.

Finally, for our third area of improvement, we mean to develop a more process oriented implementation of Omeka in the course. We found, as can often be the case with young undergraduates, that many groups saved all their technical work on Omeka until the final week (or days) of the course. In seeking more carefully to embed this work of “curation” into student learning in the course, we aim to break student work on their exhibit into several modules which will be spread out over the course of the semester, and to raise the assessment to 10% of the total grade. In this way, students will be required to think about their exhibit, artefact(s) and items in a variety of facilitated ways from the very beginning of the course until their final presentations. In particular, having a mandatory rough draft of material part-way through the course would help diffuse the work required for the project across more “due dates” and permit students to correct any technical issues they had well in advance of their final presentations. On balance, we were pleased to find that Omeka provided a platform for online student learning that was uniquely well-suited to the kind of critical historical learning we sought to facilitate in this course and look forward to our next Omeka project coming up in the next year.
Authors’ Bios

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References


