Research Article

Coins in the Classroom – Teaching Group Work with Roman Coins

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It can be challenging to bring material culture to life in the classroom when the cultures that produced those materials are separated from the students by time and space. Students learning about Roman history and culture often find it difficult to work with and critically analyse non-literary sources as they rarely have the opportunity to engage with the material objects themselves. Depending on the size of the class, or materials available, it may be impossible to introduce such sources for the ancient world into classroom teaching.

In Dunedin, New Zealand, we are fortunate to have a wide range of Greek and Roman artifacts housed in the Otago Museum. In 2019, with the support of a University of Otago Teaching Development Grant, the curriculum for a third-year Classics course on the Julio-Claudian emperors (offered in translation) was re-developed to include both a digital learning component and group assessment. The purpose of the curriculum development was two-fold. First, this project aimed to enhance student engagement with the 89 coins dating from 42 BCE – 68 CE held within the Otago Museum's collection. This project explored the creation of authentic experiential learning opportunities in an environment where the physical objects were not necessarily readily accessible, as the collection is held in the museum's storage facility and, with few exceptions, is not on public display.[1] Instead, the students were able to interact with the digitised images of the coins, thereby creating both blended learning (Garrison & Kanuka, 2004) and e-learning opportunities (González, 2010). They did this both through targeted tutorials and through the creation of an online exhibition of five of those coins using the open-access Omeka.net web-publishing platform.

The second purpose for developing the curriculum was that the scope of the digital exhibition was larger and more work-intensive than a traditional essay, in terms both of research and the practical aspects. Students not only had to learn how to engage with an unfamiliar type of evidence, but also how to present their work through an online web-publishing platform. The most

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logical approach to this assignment was to introduce group work (Vassilakis, 2009/10). In order to facilitate the development of the group dynamic and cohesion, self-taught tutorials were designed to teach effective team-building as well as introduce students to the key terms, methods, and resources for the study of coins in preparation for the digital exhibition assessment.[2] The goal of this project was to explore strategies to support student engagement with material culture in the classroom. However, the methodology employed here and the curriculum framework detailed below could be adapted and applied to a number of other types of evidence or course content.

Building Groups

One does not have to look far to find articles, memos, opinion pieces, and blogs about the importance of collaboration in the 21st century. Nonetheless, many humanities disciplines still focus on independent study and research. We, the authors, had only limited experience working in groups as undergraduates and we wanted to ensure that 'group work' was a learning outcome and not just a chore associated with a particular assessment. Students built their team over time, learning to navigate group dynamics, troubleshoot problems, and form a group that developed into more than the sum of its parts. By following Tuckman's model of small group development - forming, storming, norming, and performing[3] - students were able to build their group and develop their skills before they started work on their exhibitions.

Tuckman's vision of groups can be divided into two components: group structure and task activity.[4] Group structure, the interpersonal relationships of the group, was built over the semester through the shifting of roles from each tutorial to the next. In their groups of five, students had to choose a leader, a scribe, and three researchers for each tutorial. The leader was responsible for organising the group, delegating tasks, and overseeing the completion of the tutorial assignment. The scribe compiled all the written work by the other group members, proof-read and checked the document for consistency, and submitted the assignment for grading. The researchers were responsible for finding information, compiling and referencing that information, and answering that tutorial's questions. With five tutorials over the semester, each student would

have the chance to take on each role. This gave students who were not naturally comfortable with particular roles a chance to learn about that role in a relatively low-stakes environment. The rotation of roles was also designed to help the group as a collective decide how roles would be allocated for the exhibition project by testing out different configurations to determine who naturally fitted into which roles.

The sharing of the roles was an important aspect of the group work activity, as a way to ensure equity and that no one group member was left to take on the majority of the work, a major concern among students when participating in group projects.[5] Although we tried to foresee and mitigate issues, there are a few things we will change the next time we offer this course. From our experience, we would suggest that some consideration should be given for students who may have a disability which impacts their ability to fulfil the requirements of a particular role. An example of this may include the role of scribe, which might be challenging for students who have dyslexia, dysgraphia, or a similar learning difference. While some students decided to disclose concerns they had when taking on a role and completing a task, not all were comfortable in doing so. As a way of ensuring inclusiveness in this activity, the instructor could ask all participating students to think about creative ways in which to approach their different roles. For example, a scribe might be encouraged to record meetings on their phone or another device, or try other methods beyond the traditional taking notes by hand or on a computer. This approach ensures that no students are unnecessarily signalled out as being 'different' from their peers, all students are able to try different strategies for data collection and presentation, and students who would benefit from extra processing time, or would normally use a reader-writer service or voice-to-text software, are able to do so (perhaps later independently) without being required to disclose this to their group members. We had not fully considered some of the barriers and challenges that would manifest in such a collaborative environment and these suggestions would likely help mitigate some of these issues.

Additionally, students were asked to complete a survey for the Course Coordinator when they were initially placed in their groups. The types of questions asked could help encourage students to discuss their concerns about the group roles or other aspects of collaborative learning if they would like to. These questionnaires present an opportunity to discuss some strategies to address this with the student at an early stage, learn what level of disclosure a student is comfortable with, and help all students to participate fully in the project. The authors found that students appreciated the open lines of communication as well as the collaborative learning and teaching environment.[6]

The content of each tutorial (task activity) was designed to help students to familiarise themselves with numismatic conventions and the various online resources for the study of Roman coins. The tutorials began with questions about legends, dating, and context and were designed to give each member of the group a discrete task. For the first two tutorials there were three case studies (i.e. coins) which were easily allocated (one coin to each researcher). This meant that in the early stages, group members could work independently and compile their work at the end. The later tutorials only had one task (identify a coin based solely on its image; write a museum display information card for a particular coin) and the group had to decide how to divide up that task. As the semester progressed, it was expected that the groups would approach tasks collectively rather than individually and reach the 'performing' stage of Tuckman's model.

Due to their busy and often conflicting schedules, students were given the flexibility to choose when (if at all) their groups would meet in person to complete their tutorial assignments. Online resources through the e-learning platform *Blackboard* were used to facilitate groups who chose to complete these assignments remotely.[7] Groups who chose to work remotely did complete the tasks and submit their exhibition, but the groups who met in person were more successful and performed better, which suggests that their in person contact led to better outcomes.[8] We are offering this course again in 2020, and have incorporated more classroom time to the group work to help facilitate group cohesion and functionality.

Many of our students had only limited (and usually negative) experience with group work. From their feedback at the end of the course, it is our impression that this process changed their perceptions of group work and gave them the skills to negotiate group work in the future. The process of building the group dynamic over time ensured accountability amongst members. Many students also commented on how being a part of a group and striving for higher grades, because of that accountability to their peers, was a great motivator. Although there were minor issues in some groups, the overall feedback from the process was extremely positive. Students rose to this challenge. They came together, engaged with material outside of their comfort zones, taught and supported each other through the learning process, and created some excellent online exhibitions. Students in one group commented that they continued to study and work together even after the project was completed.

Working with Omeka

Omeka is a flexible and open-source web-publishing platform and was chosen for this project for several reasons. First and foremost, the free-trial version of omeka.net provided enough structure to allow students to create an exhibition with no subscription costs. This is a key factor when considering the sustainability of digital, open-access projects and incorporating these kinds of projects into classroom teaching.[9] Although the free version is limited in functionality and storage,[10] these limits benefited our students as they spent most of their time working on writing and presenting the content of the exhibitions rather than having to build or customise a site.

One of the main reasons for choosing this site is that there are a number of open-access resources for both students and instructors for Omeka. These resources can be divided into two categories. Omeka itself provides a number of tutorials on how to use the various functions available through their site (https://info.omeka.net/build-a-website/) and also hosts an active tech support forum, where questions regarding specific issues can be posted (https://forum.omeka.org/). The online learning community of practitioners provides excellent resources for lesson plans, example sites, and support for both instructors and students. The University of California (Santa Cruz) provides a support page for using Omeka for assignments (https://guides.library.ucsc.edu/c.php?g = 214447&p = 1449478). The *Programming Historian* blog provides peer-reviewed tutorials and open-source resources. Miriam Posner's 'Up and Running with Omeka.net' (https://programminghistorian.org/en/lessons/up-and-running-with-omeka) and Miriam Posner and Megan R. Brett's 'Creating an Omeka Exhibit' (https://programminghistorian.org/en/lessons/creating-an-omeka-exhibit) were especially helpful for our purposes.

For our own project, and in order to help students through this process, William Richardson created a sample exhibition,

following the instructions of the assignment in a reduced capacity (only three coins were chosen instead of five, and the text descriptions were significantly shorter than the prescribed lengths). The purpose of this sample site was to show the students what was possible through the platform, while also providing a step-by-step guide, which also highlighted some of the challenges that students would face. One such challenge was that for the exhibition of both the obverse and reverse of the coin to be displayed correctly, two separate items for each of the coins had to be created; one for the obverse and one for the reverse of each coin. The reason for this is that within Omeka, when a particular item is linked within an exhibition page, only the first image of that item is displayed. For the presentation and discussion of a coin collection, this would be inadequate, as much of the discussion required the ability to present both sides of the coin.

Students valued the 'real world experience' which came with this type of assessment. Unlike many traditional university assessments, this project required students to write for a public audience (rather

Figure 1: Excerpt from William Richardson's Step-by-Step guide to Omeka

than the instructor/expert).[11] For example, one student noted how challenging it was to break away from long paragraphs and essay style. They recognised that long, complicated paragraphs do not lend themselves to the website medium. Another student commented on the difficulty of conveying the information they had learned: taking the technical and academic aspect of the study of coins to create an engaging and informative narrative. Most students reflected on how this process then helped them prepare for their future outside of the classroom.

> *This [class] not only taught me the course material, but I also learned and honed a lot of valuable skills that I can now apply elsewhere with a lot more confidence. I would say that more so than the information, it was the focus on skills and bettering yourself that was the best learning experience in this [class], and that was extremely valuable.*

Once the course was completed, we then compiled all the individual project sites into one site with different 'exhibitions'.[12] Part of this process was to edit and standardise the presentation of each of the seven exhibits. Although some of the individuality of the presentations was lost, this compiled site allows viewers to see how the same or similar groups of coins can be used to tell different narratives by focusing on particular aspects of each coin. This class was divided into seven groups and since each group chose five coins, it was expected that 35 of the 89 coins would become accessible online. Yet, when the projects were compiled, there were only 22 coins in the 'items' tab. Five of the groups had chosen RIC I² (Augustus) 253 and four groups had chosen RIC I² (Nero) 361. It is noteworthy that these were also two of the coins that the students were able to see (and touch) in-person, so it is likely that being able to see the actual coins influenced the choices they made for their digital exhibition. Regardless of the significant overlap in some of the topics and coin choices, no two exhibitions were the same. Certain students focused on the importance of the legends, others on particular symbols on either the obverse or the reverse of the coin.

As with physical museum displays, there is only so much information that can be presented to the viewer before it becomes overwhelming. Likewise, depending on how that item is displayed, it may be part of a larger narrative about daily life, politics, war, religion, etc. The flexibility of the online exhibition platform and the students' choice of theme allowed multiple narratives to be presented for very similar collections of coins. Through this process, students learned how to create an exhibit and reflect on the choices they made in their narratives. Not only did this opportunity encourage students to consider how to communicate their research to wider audiences beyond the university, but it also increased access to a local coin collection which is largely inaccessible to the public.
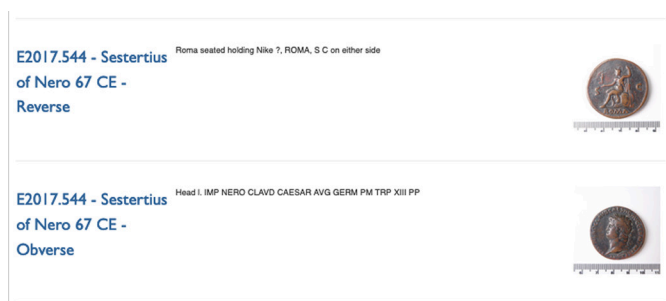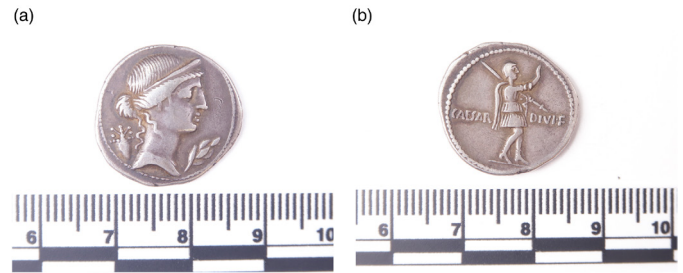

Figure 2: Screen shot of Items list from Omeka

Figures 3a and b: Silver Denarius of Augustus. Otago Museum Collection. E2017.482

Figures 4a and b: Bronze Sestertius of Nero. Otago Museum Collection. E2017.544

Conclusion

This curriculum development project focused on teaching students about the Julio-Claudian emperors through hands-on learning with a coin collection. Over the course of the semester, students learned from each other through tutorials, which were designed to teach them both skills related to a task and skills related to building a team. In both cases they learned by doing. Students learned how to communicate what they had learned to public audiences and their exhibitions increased access to a collection that is largely inaccessible to the public. One of our greatest challenges in today's world is to communicate the value of the Humanities to a wider audience. This project helped to equip students with the skills and tools to communicate what they had learned beyond the walls of the university and, we hope, increase public awareness of the importance of local museum collections and the preservation of cultural heritage. This type of project can be replicated and we hope that our work encourages Classics teachers to develop their own types of experiential learning opportunities for students based on materials found in their own cities and institutions.

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Notes

1 For studies on authentic and experiential learning see Kolb (2014), and Stein, Isaacs, and Andrews (2006).

2 Our theoretical framework for this process was Tuckman's model of small group development (Tuckman (1965), revised in Tuckman and Jensen (1977)). For an excellent literature review and historical discussion of this model's importance as well as its limitations, see Bonebright (2010). Some other models for group development are Time, Interaction, and Performance Theory, and Punctuated Equilibrium Model. See Miller (2003) for further details and bibliography. Cassidy (2007) presents a model which shifts from Tuckman's behaviour outcome model, to a model which examines the concerns to be addressed – individual, group, purpose, work – and argues that Tuckman's model does not necessarily work outside of a therapeutic context (Cassidy, 2007, p. 416). See Feather (1999) for application of Johnson and Johnson's seven-stage model, expanded from Tuckman's.

3 Tuckman (1965). The 'forming' stage is when groups are first formed, establish relationships, and are oriented around a task. 'Storming' occurs as the group deals with intergroup conflict, both in relation to each other and the task set. 'Norming' progresses as the group develops cohesion, roles and norms for the group dynamic are established. 'Performing' showcases the group as a 'problem-solving instrument' which is flexible and functional and which approaches each task as a collective.

4 Runkel *et al.* (1971) examines these two components and tests Tuckman's model in classroom settings.

5 For a discussion and analysis of the negative perceptions of group work, see Pauli *et. al.* (2008).

6 One student commented how working with fellow students helped them to broaden their views of particular topics and evidence. For a discussion of peer learning and collaborative teaching and learning environments with bibliography, see Zhang and Bayley (2019).

7 *https://www.blackboard.com/teaching-learning/learning-management/blackboard-learn*

8 This is our general impression but as our sample size (seven groups) was so small and we have only taught this once, we do not have enough data for statis-

tical analysis and to examine other possible factors. One student commented that since they had already organized their schedules to meet in-person for an hour each week through the tutorial process, they found collaborating, editing each other's work, and sharing information and resources for the exhibition a logical extension of their previous tasks.

9 For a discussion of the challenges with creating sustainable Digital Humanities projects, see Gardner *et al.* (2017).

10 The Omeka 'trial' plan is limited to 500 MB storage, eight plugins, and two themes. (https://info.omeka.net/signup/)

11 For example, one student noted, 'The Omeka assignment was also helpful for improving my ability to communicate subject matter to a non-classics audience. As a result, I think the paper has improved my ability to discuss and communicate the subject matter to a range of people'.

12 https://julioclaudiancoinage2018.omeka.net/

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