The Thomas Project: Evaluating a Web-Based Latin Research Project for Learners at Multiple Levels

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ABSTRACT
This article describes the author’s experience in fashioning a research experience for undergraduate Latin students and in evaluating the success of the project in its early stages. The author developed an on-line translation and commentary project for her students, using a medieval encyclopedia, Thomas Cantimpratensis’s *Liber de natura rerum*. After addressing the challenges of finding a text and creating the assignment, the article shows how reflecting on such a project can lead to concrete improvements in the student experience. The article outlines the areas of evaluation of the project—rubric, assignment, and student engagement—and summarizes the results of the evaluation to date.

As a professor at a liberal arts college with a senior thesis requirement, I have witnessed the impact that research components can have on students’ intellectual growth. For many years I have seen colleagues in the sciences, and social sciences mentor students in their labs and integrate them into their research. Students depart from these experiences not only more knowledgeable about their specific discipline but also more confident about their problem-solving abilities.1 While these kinds of research opportunities are frequently enjoyed by undergraduate students in the social and natural sciences, they are comparatively less common in the humanities.

1 Undergraduate research experiences in sciences and social sciences are a staple of many undergraduate programs today, and their efficacy is attested anecdotally (e.g., Braid) and by a systematic study of outcomes (e.g., Lopatto 2006 and 2010). The Council on Undergraduate Research (https://www.cur.org/who/organization/mission/) lists among the benefits of undergraduate research increased retention and the development of “critical thinking, creativity, problem solving and intellectual independence.” Moreover, a recent white paper published by CUR details the benefits further: “Research is the ultimate form of active learning. Students learn to conceptualize a problem, generate potential solutions, test them, and revise the question. Skills developed include perseverance, communication within groups, and ability to collaborate with others in ways that will help them work confidently with peers and supervisors in the workforce” (Altman, et al., 4).
One reason for this, in classics specifically, is that language proficiency (in Latin and Ancient Greek, as well as French, German and Italian) can create a barrier to original research. An advanced undergraduate, if she has begun language study in her first or second year of college, may gain sufficient proficiency to complete a major but may still lack the skill required to do original research as we typically conceive of it in classics. Despite this restriction, some professors, including many at liberal arts colleges, have embraced digital media as platforms that can enable students to engage in meaningful original scholarship, even if they possess limited language skills. These students also gain the added benefit of familiarity with digital technology.2

In this essay, I set forth my experience in fashioning The Thomas Project (http://blogs.kzoo.edu/thomasproject/), a digitally based long-term research project for my students, and the results of my evaluation of the project to date. The project allows students to translate portions of a medieval encyclopedia, which has no English translation, and to provide vocabulary and basic notes to aid others in reading the text. Students not only gain experience working with an unfamiliar prose text but also have opportunities to develop research and collaborative skills. In addition, they are contributing to the field by creating new knowledge that can benefit and be used by others. In the course of this essay, I consider the challenges I faced in finding an appropriate text, identifying an affordable digital platform, and writing an effective prompt. I also detail my evaluation of the project. When I first decided to reflect on the project, I considered what I wanted to know about its efficacy. The following questions guided my process:

• Do students gain tangible and meaningful research experience from the project?
• Is the assignment clear to students?
• Does it feel achievable?
• Is the completed product of sufficiently high quality to call it “original research”?
• How might I improve the project?

Finally, I explore the concrete gains that students make when doing this kind of research. Students not only improved their Latin reading abilities, but they also had a greater sense

2 Projects such as Homer Multitext (https://www.homermultitext.org/), the Herculaneum Graffiti Project (http://ancientgraffiti.wlu.edu/hgp/), Dickinson College Commentaries (http://dcc.dickinson.edu/student-contributors-0), and the World of Roman Women (https://www2.cnr.edu/home/sas/araia/worlds.html) are examples of digitally-based projects that have provided (in varying ways) undergraduate research experiences for students. On the possible added benefits of digitally-based projects, see Kolowich.
that their translation work was meaningful and that knowledge of Latin was valuable.\(^3\) I believe that this kind of project is scalable to nearly any level (beyond Latin 1) and could be effectively used with secondary school or college students. The engagement that I see in students at lower levels, who are not already committed to continuing their study of Latin, has persuaded me that this kind of project motivates and engages early learners and may encourage them to continue their study of Latin.

**THE PROJECT**

The initial question that motivated my project is this: how do I, as a specialist in ancient languages, create opportunities for my Latin students at all levels to engage in meaningful original research? One might well question whether this in and of itself is a goal worth pursuing. Let me be clear—I acknowledge that a first-year Latin student is not going to be able to conduct the kind of independent research in classics that a senior major, or a graduate student, or an instructor can do. Nor should that be the goal. However, research suggests that students who see themselves as participants in an intellectual conversation and perceive their work as valuable often demonstrate greater investment in the discipline they are studying.\(^4\) Finding opportunities where students are producers of knowledge can help them hone their Latin skills, while at the same time encourage their collaborative and problem-solving skills, build a sense of resilience in the face of intellectual challenges, and foster a sense of satisfaction when they reach a high bar in their work. The challenge, of course, is to find areas in which students can work toward these skills in a meaningful project, one which is appropriately scaffolded and where all of them can achieve success.

**DESIGNING THE PROJECT**

Several years ago, I learned about the Homer Multitext Project, which professors at Furman University and the College of the Holy Cross use to engage students in meaningful original research (Blackwell and Martin). Christopher Blackwell and Thomas Martin assert (and demonstrate) that this is possible for classics students, and that technological

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3 There are numerous ways in which this assignment, especially since it is scalable to various levels of ability, can help build the skills for interpretive reading, articulated in the American Classical League’s Standards for Classical Language Learning (9-12).

4 See above, note 1, and Boyer Commission (especially 15-18).
developments have enhanced their ability to perform original, useful work for an “audience of more than one” (Blackwell and Martin). Since that time, I struggled to find a project that would suit my needs. My school has no special archives and limited support (financial and human) for any such venture. The technology needed to be something I could master easily and would not quickly become obsolete. In addition, I was interested in fashioning a long-term project that could be used by students in upper-level Latin classes, no matter the course topic—yet, it needed to be related to my spheres of knowledge. Consequently, I had real difficulty defining a project—if it related to poetry or the late republic/early principate (my interests), how could it work when I teach prose, the late empire, or things even more far-flung? Finding something sufficiently generic and adaptable, but not too far outside of my comfort zone proved to be my first major hurdle.

I had nearly given up, when fortuitously, in the course of my research during summer 2015, I stumbled upon a medieval encyclopedia of natural phenomena written in Latin, Thomas Cantimpratensis’s *Liber de natura rerum*. Between A.D. 1230 and 1245 Thomas, a priest in what is now Belgium, compiled an encyclopedia, following a model that had been handed down since antiquity. Divided by category (e.g., human anatomy, the soul, quadrupeds, insects, etc.), and drawing on prominent ancient and medieval scholars for its information, Thomas’s *Liber* attempted to categorize and define the natural world. It was the basis for some still later medieval encyclopedias and offered a view of 13th century Europe by detailing the confluence of history, science, and faith in entries that reflect what Thomas and his fellows knew or believed they knew about the world around them.

Though there exists a scholarly edition of the complete manuscript (edited by Helmut Boese and published in 1973) and a few translations of various portions into other languages (a section on human anatomy into Dutch, for example), there is no English translation of this work. This struck me as an opportunity: a translation of this text would fill a void in the scholarship. In addition, students would have opportunities to study and contextualize these entries by investigating confusing or obscure references. Moreover, while the Latin is quite straightforward and regular, the entries of the encyclopedia are sufficiently varied in topic, length, and complexity, so that I could find entries that would apply to whatever the course content (see below). Finally, students in our department

5 For example, in a course on Vergil’s Georgics, students translated entries on various plants that occur in the poem (e.g., *de platano, de salice, de tilia*). In a course on fairy tales, by contrast,
are required to do a junior seminar paper of significant length as well as a senior research project, in which they engage in higher-level research that requires them to synthesize and integrate knowledge. Thus, advanced students who work on the project in several classes over a period of years might find that the *Liber* itself leads to a provocative research topic for one of these assignments. By incorporating a unit on the *Liber* in each of my upper-level Latin classes, I believed that I could support a long-term, on-going research project for my students where they are contributing to the production of knowledge through the creation of original translations and commentary.⁶

Once I had identified a text for my students to translate, I had to decide how to structure the assignment so that they could reliably improve their Latin language skills, as well as produce a translation that would be useful to others. First, I looked for models: projects that were user-friendly, possible to replicate using the platforms supported at my institution (mainly *Wordpress*), and easy for the students to learn. Given how much work I was going to be asking them to do simply in working with the Latin, I did not want them also to have to learn to code, for example. Of the models I explored, Dickinson College Commentaries offers a format that looks clean and is easily navigable, using multiple tabs for vocabulary, notes, and media (http://dcc.dickinson.edu/). Since this was also replicable using a simple *Wordpress* template, and since it is a fairly straightforward platform for students to use, I structured the site initially as a series of posts where students could easily input data for each of the following tabs: Latin text, translation, vocabulary, and notes.

The next stage was to think about the assignment itself. I wanted to emphasize some critical aspects about process in addition to working on content. It was important to me that students recognize how much intellectual as well as tedious and painstaking labor goes students worked on fantastical creatures (e.g., *de chimera*, *de monocerote*, *de pegaso*).

⁶ My selection of the *Liber de natura rerum* was a complete accident, but I would recommend looking to the medieval world for texts that still await a translation, accessible commentary, or both. My interests in ancient agriculture and medicine make the *Liber* a great choice for me, and the variety of entries means that students in Latin 102 can complete a 5-line entry, whereas I might have an advanced class complete 30 lines. The Latin is standard, and many of the topics intriguing, which helps with student buy-in. However, there are all kinds of great texts that an instructor might build a project around: saints’ lives, fantastic voyages, historical narratives, and, of course, scientific treatises. Great places to start include *digilibLT* for late antique prose texts and the University of Chicago’s guide to medieval texts. White provides links to all sorts of useful sites related to her work on medieval bestiaries, as well as numerous other genres.
into creating a professional entry. Building opportunities for revision was also important since many students seem (for understandable reasons) to look only for the final correct or acceptable translation. However, scholars quickly learn the joy and pain of revisiting one’s work, and I also hoped to cultivate this habit. Finally, of course, I wanted the actual work they produced—typing out the Latin text, its translation, the notes, and vocabulary—to be accurate and thoughtfully done. Therefore, I initially crafted an assignment that allowed students to work in pairs on 25-30 lines of Latin text (see Appendix 1 for the most recent version). Students would need to write a draft of their translation, and then meet with me in person. At this meeting, we could go over stumbling blocks in the translation and identify places where a note or gloss might be particularly useful. Students could then revise and be assured that what they were posting to the site was largely accurate.

Upon designing the assignment, I also developed a rubric to assess how well they achieved the goals of the project: an accurate copy of the Latin text, an accurate and elegant translation of the passage into English, an appropriate set of vocabulary to assist a reader of the Latin text, and a set of notes to answer possible questions about the places, individuals, and events referred to in the text (see Appendix 2). I designed the rubric after examining several sites that are recognized as on-line peer-reviewed publication venues for classical texts and commentaries, such as Dickinson College Commentaries, The Online Companion to The Worlds of Roman Women, and Suda On Line. I also explored other models created by professional classicists or informational technologists, such as the collaborative Vergil Project, James J. O’Donnell’s commentaries on Apuleius’s Apology, and The Confessions of Augustine. The rubric categories reflect what I saw to be the salient aspects of these online edited or peer-reviewed venues. Thus, the rubric allowed me to evaluate the extent to which the students achieved a professional, publication-worthy entry with the plurality of points weighted toward an accurate and elegant translation. I distribute the rubric to students along with the assignment, so they can see the breakdown of the project, clearly understand the kinds of work required, and allot their efforts accordingly. It also aids the ease and consistency with which I grade the project.

7 My resources for rubric-based grading were primarily Blumberg, and Stevens and Levi. I used Barkley and Howell Major to think through the use of a rubric, as well as assessment design more generally. The AAC&U offers several excellent publications on rubric construction and use (as well as examples), including a new substantive publication and excellent starting point, We Have a Rubric for That (McConnell, et al.).
EVALUATION OF THE PROJECT

To date, I have used the project in six Latin courses: four upper-level, one intermediate, and one beginner. Over the first four iterations, I tweaked the assignment in various ways, since I was trying to respond to the needs of each class. Although students in each cohort appeared to enjoy the project, I was unsure whether they were deriving the kinds of benefits from it that I had intended, and those which independent research ideally promotes. As a result, I applied for and was awarded a grant from my institution to assess the success of the project during the summer of 2017, allowing me to revisit these first four iterations of the project. Some basic questions that I hoped to answer about the project included (as stated above):

• Do students gain tangible and meaningful research experience from it?
• Is the assignment clear to students?
• Does it feel achievable?
• Is the completed product of sufficiently high quality to call it “original research”?
• How might I improve the project?

After looking at both qualitative and quantitative measures, I posited that I could discern some basic information about the value of the project for my students. Two documents that shape the experience are under my control: the assignment and the rubric. Therefore, part of my work was to evaluate these against models judged to be successful by professionals who engage in digitally-based translation work, and education specialists who promote and design assessment rubrics. The other piece would be to try to judge the student experience of the project. This would take the form of gleaning specific comments about the project from course evaluations, a survey given to all students who had participated in the project (a quantitative survey, but with a place for qualitative comments after each section), and analyzing the scores for all classes in each iteration of the assignment, while recognizing that my sample is still so small, it is not likely to yield statistically significant results.

8 While I originally conceived of this project as one that I would use solely in upper-level Latin classes, it went so well when I piloted it in winter 2016 with an advanced Latin class that I decided to use it again in spring 2016 with my intermediate Latin students.

9 Although all scores have been high, since I want work of publishable quality, I desire scores as close to 100 as possible.
My hypothesis prior to evaluating the project was that the rubric would require significant revision. I have developed and used rubrics for a handful of classroom projects and departmental student requirements, but I believed that the nature of the project and the likelihood of unanticipated pitfalls would require multiple and extensive reworkings of the rubric. On the other hand, drafting project assignments was something I have done almost every term, with—I thought—a fair amount of success. Therefore, I examined the rubric, using information culled from manuals on student assessment and rubric writing to gauge its ability to reflect student attainment accurately (AAC&U; Blumberg; Stevens and Levi). I also carefully looked at it against several student entries, to make sure that the elements that I thought essential to an entry of professional quality were reflected and were given appropriate weight.

The rubric divides student work into five categories: (1) the Latin text (accuracy of copy), (2) the translation (attention to grammar and syntax, accuracy, mechanics, and elegance), (3) vocabulary (inclusion of appropriate terms, accuracy of the entry and definition), (4) notes (judicious choice of information and accuracy) and (5) partnership (evidence of shared work and successful collaboration). Although the goal of creating a rubric was to be able to offer consistent evaluation of the quality and professionalism of the student work, anecdotal student comments suggest that it proved to be a useful guiding document for them as well. Since I give the rubric to the students when I distribute the assignment, it shapes their work, clearly showing my emphasis on accuracy and detail, especially in translation.

The assignment went through several iterations, based in part on the student population in each class. The first group comprised advanced students whom I divided into pairs. Because of the success of the first group and their enthusiasm for the project, the next term, I tried the assignment with a lower intermediate group. These students worked in teams of three and required more guidance and a more detailed assignment. Advanced students completed the next two sets of submissions, and so I reverted to a less detailed assignment and required fewer drafts and meetings (though I tweaked the assignment each time, either in length or more general guidelines). The final two groups, who completed it after the initial summer 2017 evaluation, were a beginner 2 and a high intermediate/advanced combined class.
Although the assignment changed each time, there were some carry-overs. In each version, I explain who Thomas Cantimpratensis is and the nature of the Liber in brief. I define the areas in which they will need to provide work. I cite dictionary resources that may aid them, especially for medieval terminology. Finally, I require at least one meeting with the group. While finding model assignments for this kind of project was not easy, I decided to evaluate this part of the project in two ways. First, I looked at it alongside a tried-and-true model for this kind of project: Ann R. Raia and Judith Lynn Sebesta’s Online Companion to the Worlds of Roman Women, also a web-based translation project. In addition, I calculated mean, median, and mode for the scores in each of the four initial iterations of the project, which I thought would at least tell me which set of students was best able to meet the professional-quality bar I set as a standard. I further considered that looking at the version of the assignment that the most successful cohort used might possibly give clues about which version of the assignment was most efficacious.

I also wanted to evaluate the students’ experience of the project. Even if I could show by other measures that it is a worthwhile project, it would mean little if students were not invested in it. Thus, I sat down to analyze their perceptions as best I could. Some information I gleaned from student feedback on the course evaluation forms, although students did not consistently comment on the project, making it an imperfect tool for measurement. Instead, I created a survey of the project, so that students could respond to specific questions about their perceptions of the efficacy of the project in three distinct categories: (1) building their language skills, (2) building general academic skills, and (3) contributing to a body of knowledge (see Appendix 3). I developed this survey after the fourth iteration, and although the response rate was low, I now employ it after every class completes the project, as a required component.10

To summarize, my evaluation of the project took several steps. I looked at the most recent version of the rubric and examined it alongside models formulated by those who study assessment tools and techniques. I also evaluated the assignment in terms of student outcomes and alongside a model for a similar kind of project, which has had a long life and demonstrable success. Finally, I surveyed students to obtain both qualitative and quantitative measures of their experience of the project.

10 As more students participate in the project, response rates have risen (and my sample size has grown), making information about the impact of the project on students more accurate, and thereby more useful.
RESULTS

I want to emphasize that at this point, the evaluation of the project is still tentative. To date, I have had a small set of students participate in the project. Student responses to the survey are few, and the differences between the class averages are in no way statistically significant. Nevertheless, the process of systematically evaluating the project was incredibly useful to me and allowed me to craft a much more coherent assignment for my students.

The first piece I evaluated was the rubric, convinced that it was going to be the Achilles heel of this project. Instead, I was pleased to see that the effort I had put into its initial design and occasional revision had produced a tool that I found accurate and efficient in allowing me to evaluate aspects of the students’ work that I perceived as crucial, and that communicated to the students the aspects of the project that were essential for its success. Not only did my rubric conform in its essentials to those that I had evaluated as models, but it also reflected an emphasis on task-based learning appropriate to the goals of this assignment. Thus, in various ways, the aspect of the project about which I felt most insecure was on the whole the least problematic part.

By contrast, as a long-time writer of paper-prompts, test questions, and group project assignments, I thought that the assignment prompt was likely the strength of my project. I could not have been more wrong. The chart below (Figure 1) details the student participation and raw outcomes for all six classes, including the first four sets, which were the subject of the summer 2017 study. As is evident, there were numerous variables in each set of students who participated in the project. Four sets comprised advanced level students, whereas individuals at the intermediate level were still learning the subjunctive and its uses, for example, while amid their work on the project, and the beginner 2 students had not yet learned it. In addition, there were far more intermediate students, and they were assigned to larger groups and worked with a comparatively small section of text. While the size of the advanced level classes was more or less consistent, the number of lines they translated, the amount of time they had to complete the assignment, and the percentage of their final grade that it comprised varied in each iteration.

11 For the period of the initial evaluation (the first four iterations), forty-three students participated. However, the number of distinct individual participants is somewhat lower (thirty-three), since several students participated in the project in two or three different courses. The number of participants is now up to fifty-nine (representing forty-six distinct individuals).
Figure 1: Project participation by term

<table>
<thead>
<tr>
<th>Term</th>
<th>Course Description</th>
<th>Number of Students</th>
<th>Lines Translated</th>
<th>Average Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Winter 2016</td>
<td>Latin 475 (Fairy Tales)</td>
<td>8 (2 per group)</td>
<td>30</td>
<td>92</td>
</tr>
<tr>
<td>Spring 2016</td>
<td>Latin 201 (Intermediate)</td>
<td>21 (3 per group)</td>
<td>7</td>
<td>93</td>
</tr>
<tr>
<td>Winter 2017</td>
<td>Latin 415 (Catullus)</td>
<td>7 (2 per group, 1 individual)</td>
<td>25-30</td>
<td>91</td>
</tr>
<tr>
<td>Spring 2017</td>
<td>Latin 425 (Vergil’s Georgics)</td>
<td>7 (two pairs, one trio)</td>
<td>25-30</td>
<td>91</td>
</tr>
<tr>
<td>Fall 2017</td>
<td>Latin 425 (Aulus Gellius)</td>
<td>7 (two pairs, one trio)</td>
<td>10</td>
<td>92</td>
</tr>
<tr>
<td>Winter 2018</td>
<td>Latin 102 (Beginner 2)</td>
<td>9 (3 per group)</td>
<td>5</td>
<td>94</td>
</tr>
</tbody>
</table>

One consolation was that overall, students performed very well on the assignment, generally meeting my expectations, with occasional understandable errors in translation, syntax or grammar (see Figure 1). However, what was most interesting to me—though not statistically significant—was that at the time of the initial study, the class that had performed best was the least experienced group. This was true even when compared with advanced students who also translated a seven-line section of text.

The greatest difference between the two classes was that I intentionally created a more detailed assignment for the intermediate students, one that required multiple drafts of pieces of the project (i.e., translation, notes, and vocabulary), multiple due dates for each piece, and two meetings with me to go over stumbling blocks and ensure their success. By scaffolding this assignment more deliberately, requiring separate due dates for each portion of the assignment, and having meetings at various points to help guide and correct their work, the end product was, unsurprisingly, of a higher quality than that of their more experienced peers, to whom I gave much less direction and for whom I required only one preliminary draft of the translation prior to the final submission.
When I set my assignment side-by-side with an example assignment for the Online Companion to the Worlds of Roman Women, I found that the latter had several advantages over mine in precisely these same ways. It required students to do a good deal of basic research upfront and complete multiple drafts of the work and emphasized that, as an edited work, the submissions need to be of superior, professional quality. I heavily relied on the initiative of my students, without offering them the kind of staged guidance that I offered to my intermediate students or that the Companion assignment required of collaborators.

The results of the survey were likewise not statistically significant (with only a 30% response rate in summer 2017, now up to 41%), yet the data offer some useful information (see Appendix 3). Students overwhelmingly agreed that the project helped them build their Latin skills in multiple ways (with scores on four questions pertaining to the utility of the project in Latin skill-building ranging from 3.9 to 4.8 out of 5). Students rated the project’s ability to improve their general academic skills somewhat lower overall (4.1 to 4.6 out of 5). In particular, students rated lowest the project’s assistance in building their research skills. Finally, in terms of their sense of the project as being a meaningful exercise in the building of new knowledge, student responses ranged from 3.9 to 4.6 out of 5.

Perhaps most illuminating were the individual comments. While most were overwhelmingly positive, the negative ones were of particular interest, as I wanted to remedy the deficits I had already observed in the assignment. The student comments here offered some guidance about what might be improved. One comment in the section on general academic skills stood out:

_I think the one thing that is difficult with this project is finding outside information about different names referenced in the text. It would be cool to study some of the names that come up in class, even if just for a little bit._

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12 I had the great good fortune to hear Ann Raia present a paper, “Students Teaching Students: Implementing Goals for Undergraduate Research, Active Learning, and Collaboration,” at the CAMWS annual meeting at Waterloo, Ontario in April 2017, just prior to evaluating my own project. Dr. Raia generously provided her audience with a sample assignment for the Companion, which I used in evaluating my own assignment (see above, n. 10).

13 Student averages from the summer 2017 evaluation are slightly different, but vary little from subsequent survey submissions, except that perceptions of their value of the work have improved.
And a comment on the section on personal impact also gave me pause:

Aside from other students at K, in our class and previous classes, I don't really comprehend the community of other students and schools working on this project. Perhaps more emphasis on this community would yield more positive results in this section. I valued this project for helping me grow as a student of Latin. Not much thought was given to the fact that this was my first publication and contribution to Latin scholarship and academia. Upon reflection, this element of the project is really inspiring, but while I was working on the project, these ideas weren't present in my mind.

It is evident from these comments that not all students understood what was at stake in completing this assignment, nor was I doing an adequate job contextualizing the project prior to students engaging in their group activities. Indeed, the comment above suggests that this particular student did not understand that students in other Latin classes contribute to this project, or perhaps thought that students at other institutions participate as well.

**REFLECTION**

Consequently, one of the concrete results of this review has been a much more detailed assignment (see Appendix 1). While the actual time that the assignment takes to complete has not substantially increased, I have spread the work over several weeks and made it a greater percentage of the overall course grade. We begin our study by devoting a substantial part of a class to background work—some of which they prepare ahead of class, and some of which I bring that day. This material varies depending on the sections of the *Liber* we will work on, but might include botanical information, examples of medieval bestiaries or star maps. This work frequently becomes the basis of contextual notes for the entries. I have built more and smaller pieces of the assignment to be due prior to the final submission, and students have two meetings with me and submit drafts at various points. During the meetings, I frequently assign other tasks, which are tailored to each group
and their selection. I may show students how to search through Lewis and Short, find the section on uses of the ablative in Allen and Greenough, or review conditional clauses. The work we do in the group meetings is tailored to the needs of the particular group, which will vary based on their skill level and the content of their Latin entry. Although this portion is individualized, I believe that it improves the quality of the submissions, helps students provide more detailed and relevant notes, and gives students a sense that they are building concrete skills and engaging in worthwhile work while doing it.\footnote{Anderson describes similar outcomes in group translation work that he assigned to intermediate-level students.}

In addition, I spend time in the early stages explaining the way that classicists and medievalists generate knowledge and the various kinds of gaps that still exist. I hope that, again, by doing more work upfront, I can show students early on why their work is new and potentially valuable, encouraging them to invest time and effort in the project.

Since the initial evaluation of this project, I have been able to use the project twice more: with a group of high intermediate students and with a Latin 102 class. Provided that the students have already learned indirect statement and relative clauses, I have found that they are well able to successfully complete the project (with, of course, careful selection of texts from the \textit{Liber} on my part). Students are generally excited to participate in the project and see their efforts as being valuable and contributing to a growing body of knowledge. Given that our school is very small, classics majors and minors often contribute to the project multiple times throughout their college careers, and now ask what portion they will translate in the current course. More advanced students can work on a lengthy portion of the \textit{Liber} and flex their Latin muscles. However, less experienced students are possibly more invested. Although they may only be fulfilling their language requirement and do not plan to read Latin ever again, they believe that the work they accomplish as part of this project is meaningful. Anecdotally, students perceived the project as giving significance to a class they otherwise saw merely as required.

If I revisit the questions I posed at the outset, I find that many of the goals I have for the project do seem to be achieved by my students: they largely feel the experience to be meaningful on multiple levels, and see themselves engaged in original research. Moreover, based on the application of the rubric to the entries, the submissions are largely
of high quality, requiring minimal editing on my part. The results have shown that if given an assignment with more intentional structure and smaller steps, students are likely to continue to see it as achievable. Also, I believe that students have found the new assignment even clearer, with logical and achievable steps that will lead them to a straightforward and successful result (as the scores of the two most recent classes attest).

Moreover, the information I have gathered and will continue to gather can help me make further modifications that may help students find greater success. These data can help me refine more detailed aspects of the project, such as the ideal length for each passage, specific areas that may need focused refinement, and the amount of time students optimally need to complete the assignment. Moreover, other issues I have not yet thought of may come to light by continuing to evaluate the project and review the results.

Other aspects of the project are harder to capture, but comments from some of the students encourage me to think that this project may have even more far-reaching accomplishments. Most tantalizing are the impressions of students and myself about collaboration, an aspect of the project—like the assignment and the rubric—over which I have some control. Students remarked on the difficulty of the work, and the necessity to apply their skills in what felt like a high-stakes situation. Yet, it is also clear they largely felt supported in the process. One such student comment captures this best:

_I had been assigned group projects in the past, but none seemed like they were working toward a meaningful goal like this one was. Because we were both so interested in the project, my partner and I worked hard on scheduling time to work on it and working together instead of simply working on separate parts and sticking them together as most group projects turn out to be. It has made me dread group projects less, and has helped me with finding good ways to work with others on common goals other than the simple divide and conquer method._

Likewise, my own impression of the work is that although I call students into meetings with me, what we are actually engaging in is collaboration. We frequently pore over
definitions of words together, suggest possible translations back and forth, and discuss what a reference might mean. Since the topics of translation are often obscure and frequently fantastical, none of us may have an easy answer. What is the natural state of a unicorn? How are palm trees propagated? I may help them with an ablative of comparison, but if they have prepared well, they will know whether Thomas’s entry conforms to what we currently know about botany or astronomy (or cryptozoology). These small meetings are the places where we often start scouring reference books or Googling wildly. We debate the pros and cons of a translation, the value of a literal translation versus a more colloquial one. This is also a project that makes me vulnerable to my students in many ways, where I must acknowledge my academic deficits. Yet, this also opens space for my students to see themselves on par with me, and that the knowledge that they generate can be original and valuable.

In sum, the effort to engage in an evaluation of this project was not unlike the effort expended to set up the initial project. It required research, backward design, and analysis. Yet, the effort expended has been well worth it. The detailed (and on-going) feedback I receive from my students has permitted me to improve the project for them and prompts me to ask new questions of the project itself.15

WORKS CITED


15 I am exceptionally grateful to all those who helped me get this project off the ground and evaluate its effectiveness. I owe special thanks to Carolyn Zinn and Josh Moon who helped me with the technology, Charlene Boyer Lewis and Patrik Hultburg who encouraged me and supported my application for a Scholarship of Teaching and Learning Grant, and my colleagues at Kalamazoo College for their excellent comments and feedback when I presented my preliminary findings at the 2017 Teaching Colloquium. The perceptive comments of the two anonymous reviewers and editor John Gruber-Miller have made this a much better—and, I hope, useful—paper. Any errors and infelicities are, of course, my own. My most heartfelt appreciation goes to my students, who jumped into this project without reservation. I always learn so much from each of you and am so very grateful for the inspiration you give me and the community we create together.


McConnell, Kate, Terrel Rhodes, Erin Horan and Bethany Zimmerman. We Have a Rubric for That. Washington, DC: Association of American Colleges and Universities, 2019


Appendix 1: Assignment (Revised)

Translation Project: The Thomas Project

For our project you'll be dividing into teams to translate entries from Thomas Cantimpratensis' Liber de natura rerum, a medieval encyclopedia that has never been translated into English—until now! Your work will constitute a part of this large, ongoing and valuable enterprise. The work you do should be your very best, since it will be available for all the world to see and use.

The selections you will be working on come from a chapter “On Quadrupeds” (de Quadrupedibus). Your goal is to create a publishable entry—something as complete, correct and professional as the text we are using for class.

I include this project in my classes, so that student can achieve the following:

- improved translation skills, by translating with peers and revising your translations twice;
- improved understanding of Latin grammar and syntax, by problem solving as you translate;
- ability to consult a reference grammar, to identify tricky grammar and syntax;
- ability to consult a Latin dictionary, to identify pertinent definitions;
- improved research skills, by creating contextual notes;
- improved ability to collaborate successfully with a peer on a multi-stage project.

For your entries you will need to do a few things:

(1) First, you and your partners need a little background knowledge. Read about Thomas Cantimpratensis here:
   - [http://www.newadvent.org/cathen/14693c.htm](http://www.newadvent.org/cathen/14693c.htm)
   - [http://bestiary.ca/prisources/psdetail1798.htm](http://bestiary.ca/prisources/psdetail1798.htm)

(2) Find out what you can about:

   • Pliny the Elder*

   And take a look at a manuscript.
Take notes on what you learn. We will talk about all of this in class on **Friday, February 23rd**

(4) Your group will be required to meet with me at various stages and provide at that meeting completed assignments. This is to ensure that your work is moving in the right direction, that you are making progress at various stages in order to complete the work in a timely way. You should send me a preliminary translation by Monday, February 26th. We will meet early in the week to discuss any problems with your translation.

(5) When you go to enter your materials you will have four sections. You will be required to enter: (a) the Latin text, (b) an English translation, (c) vocabulary and (d) notes. For a model, please look at the entry on De monocerote. The format should be followed precisely.

(6) About vocabulary and notes: you will want to look at all the vocabulary you wrote down and any confusing constructions that you figured out, and enter that information for your readers.

- Vocabulary should be in alphabetical order (not in the order it appears), and should conform to a dictionary entry.
- Do not include vocabulary that appears in the DCC core vocabulary list, but do include everything else.
- Notes should show the potentially confusing construction in italics, followed by a colon and then an explanation of the construction, case, etc.
- There is currently no tab for images, but if you think we should have one, let me know. It is easy enough to add. For any images we put up we need to make sure we are not violating copyright, so they would need to be freely available.

(7) You are ready to enter your data! This will mean entering the Latin text, the English translation, vocabulary and notes. You will want to proofread this work more than once—it will be on the internet for all to see, with your name attached to it!

- To access the website you will use your K id.
- We will have a tutorial session next week, so that you can see what the site looks like, how to enter data, how the tabs work, etc.

That’s it! I will grade it by using the rubric I gave you, and determining how well you mastered the skills required to create a professional-quality entry.
Projects due Thursday, March 15th at 5 p.m.

Groups must meet the following requirements:

By Friday, February 23rd  Complete your initial research

By Monday, February 26th   Complete and submit to me an initial translation of your entry

By Friday, March 2nd    Meet with me as a group to go over your translation and discuss resources for further work

By Monday, March 5th   Complete and submit to me a revised translation of your entry, with notes and vocabulary

By Friday, March 9th   Meet with me as a group to go over your translation and discuss final revisions

By Tuesday, March 13th Submit draft of all work completed thus far (should include revised translation, vocabulary and notes)

Thursday, March 15th    Final submission on-line

Some helpful preliminary resources for you:

William Whitaker’s Words  http://www.archives.nd.edu/words.html
Logeion                     http://logeion.uchicago.edu/
Mediae Latinitas Lexicon Reference / 1st Floor (PA2890 .N54 2002)
Allen and Greenough (grammar) http://dcc.dickinson.edu/allen-greenough/
Gildersleeve and Lodge (grammar) On Reserve (PA2087 .G5 1997)

AND the –ae ending of the 1st declension often appears in our text as –e! Watch out for that!

*NB: the subjects for preliminary research vary depending on the entries I have chosen for them to work on.
## Appendix 2: Rubric

<table>
<thead>
<tr>
<th>Latin Text (5)</th>
<th>Excellent</th>
<th>Very Good</th>
<th>Good</th>
<th>Fair</th>
<th>Poor</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accuracy of the text</td>
<td>Latin text is typed with no discernable errors.</td>
<td>Latin text is typed with only a couple minor errors.</td>
<td>Latin text is typed with several errors, but they are of little significance.</td>
<td>Latin text is typed with multiple errors.</td>
<td>Latin text is unreadable because of the volume of errors.</td>
<td></td>
</tr>
<tr>
<td>Translation (50)</td>
<td>Translation accurately reflects the Latin grammar and syntax.</td>
<td>Translation has only a couple errors in conveying the Latin grammar and syntax.</td>
<td>Translation has only a several errors in conveying the Latin grammar and syntax, but is overall quite readable.</td>
<td>Translation has multiple errors in conveying the Latin grammar and syntax.</td>
<td>Translation has so many errors in conveying the Latin grammar and syntax, that it is hard to tell how it reflects the original.</td>
<td></td>
</tr>
<tr>
<td>Evidence of attention to grammar and syntax</td>
<td>Translation accurately reflects the meaning of the Latin.</td>
<td>Translation accurately reflects the meaning of the Latin except in a couple of instances.</td>
<td>Translation misses the meaning of the Latin in several places, but is overall quite readable.</td>
<td>Translation misses the meaning of the Latin in multiple places, making it difficult to read.</td>
<td>Translation misses the meaning of the Latin in so many ways, that it is hard to tell how it reflects the original.</td>
<td></td>
</tr>
<tr>
<td>Accuracy of translation</td>
<td>Translation is completely free of English mistakes in spelling, mechanics and grammar.</td>
<td>Translation is almost completely free of English mistakes in spelling, mechanics and grammar.</td>
<td>Translation has several English mistakes in spelling, mechanics and grammar, but is overall quite readable.</td>
<td>Translation has many English mistakes in spelling, mechanics and grammar, that hinder its readability.</td>
<td>Translation has so many English mistakes in spelling, mechanics and grammar, that it is virtually unreadable.</td>
<td></td>
</tr>
<tr>
<td>Accuracy of English mechanics</td>
<td>Vocabulary chosen reflects terms that students would find unfamiliar.</td>
<td>Vocabulary chosen mostly reflects terms that students would find unfamiliar.</td>
<td>Vocabulary chosen reflects some terms that students should know and misses a few other important ones.</td>
<td>Vocabulary is chosen in a random way that makes little sense.</td>
<td>Vocabulary is chosen in a random way that makes little sense, and very few words are glossed.</td>
<td></td>
</tr>
<tr>
<td>Accuracy of dictionary entry and definition</td>
<td>Definitions are in the standard format and reflect an accurate and appropriate meaning.</td>
<td>Definitions are mostly in the standard format and reflect an accurate and appropriate meaning.</td>
<td>Many definitions do not conform to the standard format and their meanings are inaccurate.</td>
<td>Definitions almost completely fail to reflect the standard format and meanings are nonsensical.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Notes (28)</td>
<td>Notes point to unusual features of the text and provide helpful additional information.</td>
<td>Notes mostly point to unusual features of the text and provide helpful additional information, but miss something crucial.</td>
<td>Most of the notes make little sense, are inaccurate or gloss items that require no explanation.</td>
<td>It is completely unclear why certain items are glossed and others are not. It feels random.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accuracy of information</td>
<td>The information provided in the notes is completely accurate and well documented.</td>
<td>The information provided in the notes is mostly accurate and well documented.</td>
<td>Much of the information provided in the notes is inaccurate and poorly documented.</td>
<td>The information provided in the notes is completely inaccurate, undocumented, and appears made up.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Partnership (5)</td>
<td>You and your partner both contributed equally to the project and fully collaborated.</td>
<td>You and your partner had a problem either in amount of work contributed or ability to collaborate well.</td>
<td>You and your partner had multiple problems either in amount of work contributed or ability to collaborate well.</td>
<td>You and your partner were unable to share any work or collaborate.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Total | | | | |

Notes point to unusual features of the text and provide helpful additional information. With one or two exceptions, definitions are in the standard format and reflect an accurate and appropriate meaning. Definitions mostly in the standard format and reflect an accurate and appropriate meaning. Many definitions do not conform to the standard format and their meanings are inaccurate. Definitions almost completely fail to reflect the standard format and meanings are nonsensical. It is completely unclear why certain items are glossed and others are not. It feels random.
Appendix 3: Survey Questions and Preliminary Results (From the first six iterations of the project)

**Latin Skills:**

This project improved my ability to read Latin.

<table>
<thead>
<tr>
<th>strongly disagree (1)</th>
<th>disagree (2)</th>
<th>neutral (3)</th>
<th>agree (4)</th>
<th>strongly agree (5)</th>
<th>Average</th>
</tr>
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<tbody>
<tr>
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<td>0</td>
<td>0</td>
<td>15</td>
<td>9</td>
<td>4.4</td>
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</table>

This project improved my ability to translate Latin.

<table>
<thead>
<tr>
<th>strongly disagree (1)</th>
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<th>neutral (3)</th>
<th>agree (4)</th>
<th>strongly agree (5)</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
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<td>0</td>
<td>0</td>
<td>4</td>
<td>20</td>
<td>4.8</td>
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</table>

This project improved my understanding of case usages.

<table>
<thead>
<tr>
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<th>neutral (3)</th>
<th>agree (4)</th>
<th>strongly agree (5)</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>1</td>
<td>12</td>
<td>11</td>
<td>4.4</td>
</tr>
</tbody>
</table>

This project improved my understanding of dependent clauses.

<table>
<thead>
<tr>
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<th>disagree (2)</th>
<th>neutral (3)</th>
<th>agree (4)</th>
<th>strongly agree (5)</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>4</td>
<td>18</td>
<td>2</td>
<td>3.9</td>
</tr>
</tbody>
</table>

Please share any comments about the impact of the project on your Latin skills.

**General Skills**

This project improved my problem-solving skills.

<table>
<thead>
<tr>
<th>strongly disagree (1)</th>
<th>disagree (2)</th>
<th>neutral (3)</th>
<th>agree (4)</th>
<th>strongly agree (5)</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>1</td>
<td>7</td>
<td>16</td>
<td>4.6</td>
</tr>
</tbody>
</table>

This project improved my collaborative skills.

<table>
<thead>
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<th>neutral (3)</th>
<th>agree (4)</th>
<th>strongly agree (5)</th>
<th>Average</th>
</tr>
</thead>
<tbody>
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<td>0</td>
<td>0</td>
<td>12</td>
<td>12</td>
<td>4.5</td>
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</tbody>
</table>
This project improved my research skills.

<table>
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<th>agree (4)</th>
<th>strongly agree (5)</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
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<td>0</td>
<td>6</td>
<td>9</td>
<td>9</td>
<td>4.1</td>
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</table>

This project improved my critical thinking skills.

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<th>agree (4)</th>
<th>strongly agree (5)</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>4</td>
<td>6</td>
<td>4</td>
<td>4.4</td>
</tr>
</tbody>
</table>

Please share any comments about the impact of the project on your general skills.

Perceptions of the Work

I believe that I contributed to the creation of new knowledge.

<table>
<thead>
<tr>
<th>strongly disagree (1)</th>
<th>disagree (2)</th>
<th>neutral (3)</th>
<th>agree (4)</th>
<th>strongly agree (5)</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>7</td>
<td>12</td>
<td>5</td>
<td>3.9</td>
</tr>
</tbody>
</table>

It is important that my work will be viewed by others.

<table>
<thead>
<tr>
<th>strongly disagree (1)</th>
<th>disagree (2)</th>
<th>neutral (3)</th>
<th>agree (4)</th>
<th>strongly agree (5)</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>4</td>
<td>10</td>
<td>10</td>
<td>4.3</td>
</tr>
</tbody>
</table>

I worked hard because I viewed this work as a publication.

<table>
<thead>
<tr>
<th>strongly disagree (1)</th>
<th>disagree (2)</th>
<th>neutral (3)</th>
<th>agree (4)</th>
<th>strongly agree (5)</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>3</td>
<td>3</td>
<td>18</td>
<td>4.6</td>
</tr>
</tbody>
</table>

I am glad I had the chance to do original scholarship.

<table>
<thead>
<tr>
<th>strongly disagree (1)</th>
<th>disagree (2)</th>
<th>neutral (3)</th>
<th>agree (4)</th>
<th>strongly agree (5)</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>2</td>
<td>5</td>
<td>17</td>
<td>4.6</td>
</tr>
</tbody>
</table>

Please share any comments about your perceptions about your work on the project.