Title of project: Lake District Online Pedagogy Prototype

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Part I – Reporting your project findings

1. During the project, did you do anything differently than planned in your final grant proposal? If yes, please describe and explain why.

My overall goal was to explore ways of teaching students to apply traditional English literary critical thinking and research methods in their engagement with newly available digital tools and methods. I approached this goal in the following ways: 1) I designed a digital humanities methodologies course that focused on using existing digital technologies to enhance student learning; 2) I used that course as the basis for creating a prototype of a unique pedagogical tool that could be implemented in the literature classroom in a variety of ways; 3) based on my experience and student feedback in the first course, I designed a second course to hone the aims of the project and to test the effectiveness of the pedagogy prototype in a pilot test.

The overall objectives and methods of the project remained consistent with my final grant proposal. However, there were two main changes: 1) development of the prototype took longer than originally anticipated due to technical complications; 2) I was severely injured in an accident at the start of the second course (fall 2015) and therefore was unable to teach. At the time of the accident, the course was complete and set to go, and an early version of the pedagogy prototype was ready for classroom testing. The course ran as scheduled, but with necessary modifications, including a new instructor. I remained in communication with the instructor and guest speakers and as an observer on Canvas, but I was unable to experience directly how the course unfolded in the classroom or to collect data from the students about the effectiveness of the pedagogy prototype and the course.

2. Organize your findings according to the question(s) from your grant proposal.

Phase 1: How can digital technology be used to facilitate student learning in the English classroom? What digital technologies can be used in the teaching of English 434w, “The Future of the Victorian Book”?

I broached the general problem expressed in the first question by investigating existing digital tools for literary analysis that might help take account of the material dimension of the literary text. This method enabled a tangible and applied approach to literature and further refinement of the question to: how does physical embodiment shape literary meaning, from the layout of words on a page to the design of the book apparatus?

Mass digitization of books currently underway by Google and others offers students a new opportunity to consider the very nature of the book, including the words between the covers, and to do so at a scale previously unimaginable. Given the changes currently underway in how we define a book, a central question of the course was: what is the future of the book? That question encourages a return to the past and especially the historical period of the course being used for this experiment (Engl 434: Topics in Victorian Studies); the question was thus further specified to: what is the future of the industrialized book?
The method of the course entailed a gradual movement from close study of individual books to larger scale forms of quantitative analysis. Students began by learning the basics of descriptive bibliography, which is the science of analyzing books as material artefacts. They then considered how the material structure of a book affects its textual contents. This portion of the course was conducted through hands-on study of SFU Library’s Lake District rare book collection, using the archive as a laboratory. With a heightened awareness of the book as object, students then studied how a change of physical format, from codex to digital, contributes to, and indeed transforms, the meaning of a specific book as well as the cultural idea or concept of the book. In the second portion of the course, I introduced students to a number of open source analytical tools.

In the end, I expected students to gain a better understanding of the following: how different physical formats affect literary meaning; how to use digital tools to conduct literary research, analysis, and interpretation; how to use digital tools to present literary research. These outcomes were achieved based on students’ participation, assignments, feedback, and satisfaction with the course as well as their desire to learn more. All students saw the value and usefulness of applying digital tools to literary analysis and many expressed a greater degree of comfort in using those tools by the end of the course. The quality of the presentations and final projects exceeded my expectations and students’ embrace of the digital learning practices I introduced into the classroom was extremely positive, indeed even courageous given that the majority had no prior technical training.

Phase 2: How can the knowledge gained in Phase 1 support the development of a stand-alone pedagogical tool?

One of the problems I encountered in Phase 1 was that English students needed more support in two ways: 1) technical support; 2) project management support. I addressed this in a limited way in the first course (Engl 434 discussed above) by settling on Wordpress as the main tool for presenting final projects, providing a workshop conducted by one of the graduate student RAs (who used her honours undergraduate project as a model), and developing clear and extensive new final project guidelines to meet the needs of the students. Despite its design limitations, Wordpress is sufficient for presenting basic student projects but is not appropriate for teaching more sophisticated analytical and technical skills. While I introduced tools for quantitative analysis, students were unwilling to experiment with them in their final projects because they needed a fuller understanding and more comprehensive technical support. This was frustrating from a pedagogical point of view because I didn’t know at the time how to get the technical support the students were seeking. Yet the analytical tools and the new perspectives they opened for literary studies fascinated students even as they seemed inaccessible.

What tool can be developed to engage students in critical digital practice?

After an exhaustive review of the field combined with my experience implementing existing tools in the course, I have determined that there is no tool that offers students an opportunity for practicing close interpretation of individual texts together with computational analysis of an entire corpus (or “distant reading” after Franco Moretti) in a single digital environment. The Lake District Online Pedagogy Prototype that I developed to fill this gap is a unique teaching tool that aims to address the exciting new avenues of inquiry as well as the challenges posed by the availability of digital tools and methods for studying literary culture. The project adapts the eXist database format to create a dynamic digital space in which students can engage new interpretive practices opened up by digitally assisted reading. The contents of the database derive from a sample of digitized books from the SFU Library’s Lake District Collection of 260 illustrated rare travel books, including many maps and historical specimens of ornate book bindings, illustrations, and photography. The collection spans roughly 300 years (1709-2000), with a concentration in the Victorian period. The database has the capacity to house the entire collection when digitization is complete.

This pioneering prototype enables students to study individual books closely as well as in the context of
an entire corpus too large to be read in a single course. Close reading is facilitated by a document viewer that presents a facsimile image of a page alongside a transcript of the text. Additional features that link literary close reading to the larger scale of big data analysis include automatic tagging of people, places, and organizations; searching, indexing, and n-grams; visualizations in the form of maps and graphs. In short, the space enables discovery of books and their contents through both words and numbers, from what they mean to how they add up statistically. (See screen shots; I will provide the link as it is ready.)

The purpose of this experiment in digital pedagogy is to model ways for students to learn what digital tools have to offer traditional forms of literary analysis based on close reading. At the same time, the prototype can also help students think about how the digital affects our understanding of the past by making accessible different tools and developing approaches for applying big data analysis to literary history. In so doing, the tool breaks new ground, enabling micro and macroanalytic pedagogical approaches in the same space. This distinct and coherent learning environment encourages students to ask what is at stake in translating cultural heritage, such as rare books, into digital form or in converting literature into data.

Through the process of hands-on learning, students can come to know through experience how the tools work and critique their effectiveness, while also pursuing new questions and perspectives opened up for literary, historical, and cultural study.

How effective is this tool in a pilot test?

An early iteration of this tool was tested in a second, revamped digital humanities methods course, Engl 484, Topics in Literature and Media. As part of this test, students performed some mark-up by hand and TEI-XML encoding exercises (see samples provided). A number of the students in the course implemented encoding in their final projects. Some experimented with quantitative analysis and visualization techniques. In collaboration with Alison Dean who took over from me, I am working on an article that analyses this course, including the pedagogical approach and student feedback, and will provide the citation on acceptance.

What revisions can be made based on the pilot test?

I have undertaken substantial revisions as a result of this preliminary test. These include overall site changes, such as: new home page; new about page; new books page (identical to the old home page, lists the books and some statistics); keywords page repaired and updated; new colocations page. Document viewer changes include: search and concordance tools in the viewer; named entity tags repaired; new word frequency page; updated map page. With further funding, future iterations of this prototype will enable students to annotate and mark up the text directly in the document viewer.

Can the tool be used by other English instructors and possibly in other disciplines?

After more testing in upcoming courses I plan to make the tool generally available. At this stage, I am still working out hosting arrangements. It must be emphasized that the tool is in the prototype phase; further technical development will require additional funding.

Part II – Implications and dissemination

3. Have you changed anything (or plan to change anything) in your teaching of particular courses or in general, because of your experiences in conducting this project? Please provide examples.

I plan to continue to trial the prototype in my upcoming courses over the next three teaching semesters. In addition, I plan to implement the digital humanities pedagogical methods explored through this project in upcoming courses. The methods and the tool together are highly effective means of teaching literary analysis.

4. We asked that you share information about your project with close colleagues either in a formal or informal way. How did you share your findings with colleagues?
I have discussed this project with my department chair and informally with colleagues. I have presented at conferences and am drafting an article on findings from the project for publication. I have also discussed this with colleagues in English and the field of digital humanities at other universities during conferences and via email.

5. Have you become involved in other activities or projects (e.g., departmental committees, curriculum projects, other grant projects) because of having conducted a grant project or because of the findings of your project?

As result of this project, I am a founding member of the COVE Collective, an international initiative to publish peer-reviewed scholarly material, including digital pedagogy tools (see http://covecollective.org/). Additionally, I am named as a potential partner on a CANARIE Grant application (headed by Professor Susan Brown, English, University of Guelph) to continue development of the CWRC-editor for encoding and annotating digitized texts; given that this editor is designed especially for pedagogical purposes, my eXist prototype presents an ideal environment for future collaboration.

6. If you have presented your project at a conference or have a publication about your project, please provide the citation. We would like to accurately record and promote the work of project grantees.

Presentation at North American Victorian Studies Association Conference (NAVSA), Hawaii, July 2015. In addition, I briefly refer to this project in the forthcoming article “Lake District Online: Studies in Book Ecology and Digital Migration,” Victorian Studies 58.2 (Winter 2016). I was scheduled to present on the prototype in a pedagogy roundtable at the Canadian Society for Eighteenth Century Studies (CSECS), Vancouver, October 2015 (see #1 for reasons of cancellation).

7. Do you have plans for future dissemination of your project?

The English curriculum currently has no digital humanities courses, as is obvious from the calendar titles of the courses under which I conducted this pedagogical project; therefore, drawing on experience from this project, I plan to initiate a departmental discussion on creating at least one new course in the field. As mentioned above (#2), I am currently drafting a collaborative article based on findings from the project, with expected submission early in the new year. I am invited to speak at a COVE workshop at Purdue in May, and will present on this project. Ultimately, this project’s primary mode of dissemination will be the pedagogical tool itself.