Instructor Report for the WDI program

Course: CCT383 "The Interactive Society"

Instructor: Cosmin Munteanu

Term: Fall 2017

Q1) What did you do? What happened with regard to the project—i.e., what precisely did you do, what did your TAs do, etc.? Did you do what you planned to do, and if not, why not? Why? Did it change for reasons specific to this class/this year, or for reasons of general practicality given the context?

The initial proposal was for additional TA time, mainly to engage in two activities:

- 1) Additional time for marking and for providing feedback on assignments, due to the introduction of a "revise-and-resubmit" approach to the first 3 (of 5) writing assignments
- 2) The development of a small repository of "mock" writing assignments of several levels of quality (including marking feedback), provided to students

All activities as initially proposed were carried out to completion. No changes to the initial plan were needed.

Q2) How did it work (objective)? What do you know about the project's results with regard to the learning objectives from objective testimony (e.g., analysis of student writing produced)?

The objective data consisted of:

- 1) Student evaluations (official U of T)
- Instructor's own comparison with prior year when CCT383 was offered (grades and writing samples)
- 3) Analytics and reports from the WDI research

In aggregate the implementation of WDI in this course can be considered positive and beneficial to students. Student evaluations were fairly positive (albeit slightly polarized – more on this under Q4). Based on student evaluations, the instructor's own assessment of writing, and the analytics and reports from the WDI program, it seems that in particular the revise-resubmit approach to the writing assignment was successful in improving students' writing. The availability of mock assignments was rated very highly by students.

Further to the assessment provided by the WDI program (appended here), the mock assignments combined with the revise-resubmit cycle showed improvements in student writing in the following areas:

- Writing Quality
- Presentation & Organization of Argument

The analysis showed only a minimal improvement in the category of:

• Critical Engagement with Research

Based on the consultations conducted with the two TAs and based on student feedback and as evidenced by the surveys and analysis collected by the WDI program coordinators, the combination of mock assignments and revise-resubmit cycles are responsible for the improvements in Writing Quality and in Presentation & Organization of Argument.

With respect to the aspect of Critical Engagement with Research, the plausible explanation as emerging from these consultations and from the analysis provided by the WDI is that this is a more complex issue with which students had to engage. Some of the indicators point at a decline in student performance toward the end of the term – while improvements in writing are reflected in individual skills that could be applied even when a student writes an essay in a hurry (as often happening toward the end of the term), skills such as critical engagement require a more careful approach. Another very likely explanation is that repeatedly throughout the course students were advised not to let their personal beliefs and opinions influence how they research and write about a topic, which may have prompted them to err on the side of caution. We plan to address these through a slightly modified approach to the mock assignments and by adjusting some of the short (non-essay) assignments, as it is described under Q5.

Q3) How did it work (subjective)? What do you know about the project's results with regard to the learning objectives from subjective testimony, potentially including 1) instructor's assessment, 2) TA assessments, 3) student assessment?

The subjective impressions indicate that overall students enjoyed the course and the new writing initiatives, although in many cases they have initially found such new activities as daunting. This seemed to have been mostly a perception issue, as overall students performed adequately. The aim of the WDI-supported innovations were to improve the writing abilities of students and to help them acquire skills in formulating a problem statement and argument using researched facts. Based on discussions with students and reflection by the instructor and together with the TAs, these objectives were achieved, as demonstrated by the students' increase in confidence past A3 (after the "training wheels" of the revise-resubmit phase have been removed and the repository of mock marked assignments has been exhausted). Anecdotally, students did not abuse the revise-resubmit system as a way to "buy more time" (by submitting an incomplete draft), which was one of the instructor's initial concerns.

Q4) What have you learned? What worked best? What didn't work? What do you know now that you didn't know at the start of the year? How do you feel overall about the project? Did it accomplish the goals that motivated you to propose it?

Overall I consider the project to be a success, as evidenced not only by the direct feedback from students, but also by interest from the pedagogy research community – a research paper describing this course has been accepted for publication in the "Teaching with the Digital Humanities" collection (Indiana University Press), and the syllabus for the course has been solicited by several instructors worldwide.

The changes made possible by the WDI funding have enabled us to better prepare students with respect to writing about technology and to engage in writing tasks that incorporate research and evidence-based sources. My own analysis points at the revise-resubmit cycle and the mock assignment repository

as the key components that facilitated this. Additionally, previously-introduced innovations such as open-book hands-on midterm and exam helped students with practicing writing under time pressure.

In terms of aspects that did not work well, several areas have been identified (some expected, while others were not anticipated):

- Contact time (by TA and/or instructor) was still insufficient. This was expected to be an issue, especially for TAs. However, what was not anticipated was that students did not seek the instructor for 1-on-1 contact time very often, despite an average of 5 hours of office hours being offered weekly. Only a small subset of students attended office hours regularly, and in most cases, these were the students who already performed well in class.
- The course produced a slightly polarized response from students, which was to be expected, mostly due to the course offering an open-ended approach to finding the topics for the assignments, encouraging students' initiative. This worked well for students who prefer intellectual exploration.
- Consistency of marking was a challenge. This was an unexpected issue. Part of the WDI funding was aimed at increasing the amount of feedback students receive on their writing, which allowed for hiring 2 TAs. However, due to the TAs being full-time graduate students with several scheduling constraints, several assignments were marked by both TAs by splitting the submissions. Although efforts were spent to ensure consistency between the TAs, this may not have always been possible.
- Students were struggling to define their own problem statement and build an argument, which was expected and was the focus of the hands-on tutorial activities and office hours brainstorming. However, we did not anticipate that this challenge would extend to interpreting papers and other sources of information many students simply summarized such sources instead of offering a critical analysis. Part of this may be due to the instructor and the TAs emphasizing the need for objectivity vs. personal opinion when reporting on scientific matters. However, future instances of the course will aim to address the need to encourage critical analysis of literature while researching peer-reviewed sources in support of a formulated argument.

Q5) What would you change? 1) Do you intend to run this project again, and if so, will there be 2) changes to the course and/or 3) changes to the project based on your experience running it?

We would like to run this project again, with CCT383 being offered next time in the Spring 2019 term. Based on our own internal assessment, coupled with the report provided by WDI, we consider that only minor changes are needed. In particular:

- Spend additional time creating mock assignments (but fewer assignments needed), and extending the feedback provided on such mock assignments.
- Dedicate additional time to the revise-resubmit phase for the assignment A3 (the third of five writing assignments, and the last of the assignments to have revise-resubmit), to specifically focus on developing critical writing instead of just summarizing the external sources.
- Introducing a graded hands-on tutorial activity, developed to focus on the critical analysis of the literature vs. summarizing this can be implemented through the redevelopment of one of the existing tutorials, and can be done without engaging students in writing (e.g. point form only). However, this will require TA time.

Reserving additional 1-on-1 time for reviewing issues in assignments. We propose to implement this in the form of a mandatory in-person review of the revise-and-resubmit cycle. This is mostly prompted by the observation that currently office hours, while plenty, were mostly used for: a) brainstorming by the highest performers in the class, b) feedback by the same group of students or c) guidance in selecting topics / formulating a core argument by a broader category of students. Students did not seek the instructor or the TA for in-depth guidance on writing.

Details on revised approach to mock marked assignments

The analysis of the course evaluations and of the data collected by the WDI coordinators showed that a more dynamic approach to such mock assignments is needed, and extension of these mock resources to other graded work in the course.

For example, the WDI report noted that "critical engagement with research" did not show significant improvements over the assignments or over the revise-resubmit cycle for essays. This was not expected, although it is explainable since the focus of the mock essays was on writing in general and on clarity in particular. We plan to address this through a three-point plan:

- 1. Additional mock essays illustrating a wider range of shortcomings, such as the lack of critical engagement with research literature.
- 2. Modifying some of the non-essay assignments. For example, we plan to add a new activity that would guide students through the engagement stages around 4 or 5 sources of literature without focusing on writing (e.g. through bullet points). This will include both developing a mock assignment and preparing additional literature resources
- 3. Allowing for a dynamic response to the early assignments. The returning TA for this course (Amna Liaqat) is a PhD student with expertise in learning analytics this will be leveraged by deploying such analytics over the first and second assignments (essays). The analytics produced will be used to inform the writing of additional mock essays that will more accurately reflect the common mistakes observed. This adaptive dynamic approach will allow us to better tailor the mock assignments to the specific needs of the cohort. This will also address one of the shortcomings of the prior approach the mock assignments were developed with input from the TAs but without conducting rigorous analysis of students' writing beside simply grading the essays.