

Paul Lucero  
WRTG3030  
Final Portfolio Framing Letter  
12/08/2017

Dr. Atwell,

The contents of the following portfolio are a demonstration of my ability to write within the sciences, within and outside of the context of this class. This ability is one that I have developed over the course of this class with the help of the assignments that I have completed. It is also important to give this context by mentioning the goals that I had in mind when taking this class, which will be later discussed in this letter. It is also important to note that while I believe that I have done well in this class, not all of my writing was as good as I'd have liked it to be the first time around. As such, I've attempted to revise some of the mistakes that I made in my first attempt, specifically with regards to my research proposal. While I still think that this was my most interesting and cohesive piece, there are elements of it that I can recognize are weaker outliers when it comes to my writing. Nonetheless, my portfolio taken as a whole demonstrates my ability to synthesize the course material and utilize it to develop written works.

The work that I have done within this class can be broadly divided into two categories: the work that is directed within my field and the work that is directed without. Both sets of material are concerned with much of the same set of topics: that is, prominent issues within the field of Computer Science at large, as well as how they affect the day-to-day life of individuals that may not concern themselves with such things. However, there are many noticeable differences within the two sets. The former set is more likely to utilize simplistic language and explanations, whereas the latter set is more likely to be filled with jargon and adhere more closely to the conventions of a typical Computer Science writing piece, such as a technical report or a proposal.

I would contend that my writing is stronger overall when writing to explain a concept to those outside my field, such as I did within the forum analysis and the popular discourse report. While the former involves taking material that was written for a more technical audience, the intended audience of the finished product is one that may not have any exposure to the field beforehand. One of the key components of this piece is taking a complex topic (in this case, quantum computing) and boiling it down to the key concepts; in this case, the reader needed to know that the development in question was the development of a data storage mechanism for a quantum computer, and that quantum computers are more easily capable of solving very difficult math problems but struggle with the tasks that most individuals use computers for. One of the key components in such a piece is to keep the explanations succinct but meaningful, as well as providing visuals to keep the audience engaged. This is something that I was able to accomplish very readily with the website format of the assignment.

However, my pieces of writing that were targeted at those within my field also displayed positive traits. Within my research report, I made use of statistical inference to draw conclusions about whether the trends that we observed within our data set were perhaps generalizable to

the broader population. I also made use of data visualization to synthesize a large quantity of data into an easily observable and readable format for audience consumption. There are some conventions that I wasn't as familiar with, and it's on these finer details that my writing may suffer slightly when writing towards my own field: for example, the eternal question of how to cite sources, how to organize topics, how much to expound on potentially foreign material to those within the field, and so forth. Nonetheless, I was able to make use of clear wording and diction to effectively convey my findings to my audience.

The best demonstration of my ability to incorporate knowledge and ideas in a coherent and meaningful manner was the research report that I worked on towards the end of the semester. The first and foremost way that this report demonstrates this ability is in the fact that I was able to observe the previous research that had been done with regards to gender equality in engineering fields and then determine what else might need to be done to further such studies. It also involved tying in the material that I was able to find from my own research to what my teammates wrote to give such research context. This involved being able to draw conclusions from the research that I had done, communicate those conclusions effectively to my teammates, and build in some language into the report that established the significance of the study in the context of the literature review.

Such material is easily visible within the finished version of the research paper. In the methods section, the lead mentions how one of the important parts of the study was "to determine if there was any sort of meaningful trend in the gender ratios of students [...] as the reputation of the university increases." This ties in directly to the prior discussion in the literature review of the lack of data on this phenomenon at the university level. During the results section, I also point out various noteworthy trends for later elaboration during the discussion, such as how "CU Boulder lags behind slightly in the case of engineering [...] by a difference of roughly 2 to 3 percentage points" and how "there were only 4 cases (out of roughly 200 valid data points) in which [the proportion of women in Computer Science was greater than the proportion in STEM]."

The document that best reflects my ability in the class to apply new concepts and ways of writing was my research proposal. While there were a few glaring errors (i.e. lack of citations in the body of the introduction and a lack of clarity on what the actual study would accomplish/its purpose) I think that it still represents my best work in terms of writing something new. While I was aware or could easily pick up on the idea of the research report, the forum analysis, and the popular discourse report, the research proposal format was new to me, and it's something that I was able to adapt fairly readily to. The failings that I had with regards to this paper are things that I tend to struggle with, especially on first drafts - that is, citing my sources and getting to the point. However, the research proposal format itself was one that I was able to become comfortable with fairly quickly.

I think perhaps the biggest struggle that I had with the paper was not the format itself but that I was struggling to come up with something good to write about. In this sense, I think that this paper best demonstrates my ability to apply the structures and styles that I've learned in this course, even if it may be weaker on the content side of things. One of the problems that I

especially recognize as occurring during the writing process was that I struggled with establishing a balance between succinctness and thoroughness in my explanations of both my study and the issues that my study would have hoped to examine.

This is precisely why I've chosen to revise this paper, because I think that the idea of the study could have been much clearer from the outset, and there could have been far more citations to prior literature to make it clearer as to where I was coming from with the paper. As such, I've updated the literature review section to make it more concrete as to what I'm looking to investigate, I've updated the methods section to remove some unnecessary portions of the study (e.g. informing participants after the fact of the results and so forth,) and I've performed a pass to make sure that the content is up to par. However, the structures and styles have remained fundamentally the same. The document is better for the rhetorical situation because the moment-to-moment reading experience is better and easier to follow.

Returning to the goals that I set for myself in the first week of the course, I think that there's some that I have achieved - or at least demonstrated my ability of - in this course. There are others that I'm not so sure that I've achieved to my liking, and would really like more practice with. The first goal that I set for myself was to gain an ability to express matters in my field on an easier to understand level. I think that this is the one that I've probably done the best with, when it comes to my ability to execute on both the style and the content of the forum analysis and the popular discourse report. The key bit when it comes to this type of writing is that it's quite a bit like teaching, which I've been able to practice in my work as a tutor in the Computer Science Lab this semester. This is something that I didn't realize coming into the class, and was able to figure out when I was working on these assignments. This helped me to be able to communicate effectively about something as esoteric as quantum computing to an uneducated audience.

The second goal that I set for myself was to be able to understand technical writings in other fields more effectively. I think that I've accomplished this somewhat by listening to others' popular discourse reports, as well as performing peer review in class. It's still not something that I'm entirely comfortable with, but this class has taught me that many technical writings - independent of the field in which they are written - are very similar in a lot of ways, as far as structure goes. This is perhaps one of the most key components in easily understanding such technical writings. The combination of the research proposal & research report was probably the most key document in developing this knowledge, since it got me looking at research that had been done in my field and similar fields, as well as designing and performing my own research.

The last goal that I set for myself was to understand how to apply all of the course material to the "on society"; that is, what is the significance of technical writing in the grander scheme of society, even those who are not likely to read the technical writings themselves? This is something that I'm not as strong on, because it's not something that this class particularly covers. I now know that the "on society" bit is more related to writing about technical topics in a way that others can understand even if they have no technical background, such as we did with the popular discourse report. However, it's still something that I'd like to work on in greater depth.

I hope that you enjoy examining my final portfolio. I believe that it is an effective demonstration of my ability to execute on the concepts that I've learned in Writing on Science and Society. While there are flaws in the execution of some of the papers that I've written in this course, it represents a good basis of knowledge to be able to write effectively in my field and in other fields that I may encounter throughout my career. I hope to be able to effectively take the material that I've learned in this class and integrate it into my future learning, so that I may have a greater chance of success in communicating effectively with my peers, with individuals in other fields that I have little to no knowledge of, and with individuals who are interested in my own field but may have no knowledge of it.

Best,  
Paul Lucero