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Final Portfolio

ENGW3302: Advanced Writing for the Technical Disciplines
Submitted to: Suzanne Richard
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Introduction

The course *Advanced Writing for the Technical Disciplines* has taught me an immense amount about how to understand and write for a specific audience as well as the most important questions to ask when identifying what is on the knowledge front. The ability to apply these skills generally makes them useful practically in any situation.

Discourse Community

The freshman project for the AWD course offered an opportunity to look into the methods of communication among the scientific research community. I took the liberty of achieving this by an intensive focus on the formatting and breakdown of an issue of a research journal, 'Nature', as well as one specific article in the issue, 'Robots that can adapt like animals'. In turn, my finished product, 'The appropriately structural discourse of engineers and scientists' was produced in a similar fashion – with intentional formatting. One of my main findings in the project as well as a personal learning outcome was that, "structure of content is very important for comprehension of communicated technical material" [1]. I argued and proved this stance by featuring examples that, along with my analysis, demonstrated this perspective.

The affect that peer revision had on this first paper was minimal, but the professorial feedback had a large impact. This habit is reminiscent of essays written in a high-school-esque way. When compared to my later projects/papers, this is a great indication of how far my writing process has come; to a state where peer feedback is one of the most influential elements in the revision process and professorial revision is usually non-existent. Another element of the writing process that shows significant change are the questions I ask myself, and in this case others, when formulating the central argument and defining evidence in a project. Upon reflection of the interview conducted for the unit on *defining the knowledge front*, I recognize that I asked questions that would supply me with details that were underwhelming: details that had already been uncovered in class. Rather than defining the knowledge front, I was redefining the knowledge front.

The strengths that shone through on the first project were analyses and creativity. I chose to look at the content of a journal in a different light than the suggested route, of focusing on discourse in written context, and instead looked at the structure and formatting of documents and the journal issue. Then I had to find similarities in this abstract content breakdown; I used graphical representations to better interpret and illustrate the points I had made.

Technical Report

One of the primary goals I set for myself for the second project of AWD was to create a comprehensive review of 'dry' processing methods for carbon nanotube (CNT) fiber, so that it might also serve as a reference for me in my future research (with a Northeastern University research group) [2]. Additionally, I wanted this literature review to be on par stylistically and tone-wise with the type of review and research articles I would use as sources for this report. To determine the proper breadth of content to cover and what kind of language to use I had to consider what kind of readership an article like mine might target. This audience, I decided, was somewhere between a very specific technical reader, researching explicitly CNT fibers, and the average material scientist of another concentration, who might know generally about the properties of CNTs. This

level of audience analysis was a level above the critical thinking I employed in the previous project.

Another task I had to achieve to write this review successfully was to critically read a lot of articles on the subject; much like Yogoda suggests "<one> can learn from the reading an incalculable amount about vocabulary, spelling, punctuation, style, rhythm, tone and other crucial writing matters" [3]. This would assist in my learning the content I would need to include as well as the style and terminology in which I should present my research. The lexicon I chose to use was derived from choosing relevant technical vocabulary; however, I also had to keep in mind that I would need to, subtly, explain some of the specialized words that scientists of other disciplines might need a refresher on. The critical reading was also crucial to synthesize and connect arguments and findings from the span of research articles that were on the knowledge front.

To realize my formatting goals, I set about to learn a professional typesetting language, one whose file format journals explicitly select and reference in their writings to prospective authors [4]. This was a task in and of itself, but very gratifying. My final report also benefitted greatly from peer-feedback, much more so than in the first project. The skill of using this feedback as a tool to strengthen my arguments was very helpful in revealing holes in my assertions as well as probing how well I communicated the information to a scientist of another field.

This report is the best confirmation of my improved ability to research and cite appropriately, which even beforehand I identified as one of my strengths. Additionally, I learned to appreciate the annotated bibliography as an incredible tool for revision and technical projects; its utility as a reference is amplified because of my ongoing interest in and commitment to the subject of this report.

Web-Based Project

The last project for this course, 'Writing for the Web' offered a change of pace and form of delivery for my information: I was able to make my content informal and interactive. This project, in which I enumerated how to make a network attached storage device from a Raspberry Pi, allowed me to interact with a global audience, albeit a definitive subsection of the global community. The readability of this information was semi-universal, however someone who had never seen a raspberry pi might need to do further reading to understand why certain steps were taken.

Being a web-based how-to guide, this project offered me a lot more freedom in terms of creativity, when compared to the projects from unit one and two – because there are so many ways to present the information on a website. I showed creativity by choosing the style I felt was most well aligned with conveying directions, as well as one that I thought embodied my style – since it was intended as an extension of my website-portfolio. The value that my project had over similar web-based tutorials was that the information was presented in a very straightforward fashion, unlike the convoluted presentation other websites offer. I have realized in embarking on this project that giving the writer control of how any of their work is presented goes a long way in making the information more useful to others.

The proposal of the project as well as the timeline for achieving set-upon objectives was a pivotal aspect of this project. It informed me that the expectations I have for myself are not always accurate, and because of this I should factor in more time for delays. I learned this lesson because getting the information I already had, formatted to

the standards to which I held myself up on the web ended up taking more time than accomplishing the proposed project.

One of the unforeseen consequences of the tight deadline I pushed on myself was that it prevented me from getting much feedback or acting on that feedback. This in turn, restricted my ability to revise the project. It was at this point I realized how similar writing assignments can be to common engineering problems where without the iterative design approach there is much less opportunity to improve the product.

Conclusion

Upon reflection of these three projects I realize both how far I have come as well as how much I still have to work on. Beginning with an area where I have improved and accomplished the goals I established for myself is the efficiency with which I write. Before this course I had a very rough time outlining a paper or report before writing it, which meant I would write it, go in a lot of different directions, and then have to revise and re-orient my arguments or change the claims I was presenting. I am proud of my newfound aptitude for planning and organizing my reports. On a related note, I still become frustrated when starting a report by writing the introduction and maintain the process of writing the introduction last. I understand, from Knight's writings, that using the introduction itself as an outline can be a useful tool, yet I still have much difficulty when starting with the introduction [5].

In closing, I will quote the single most useful, yet obvious, commentary on how to complete a project, from an article about Nora Roberts in the New Yorker. It has been invaluable to me throughout this course and I am sure will be handy in the future,

> she said that she has one key commandment of writing: "Ass in the chair." [6]

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