Lessons from the Research Process

In the Fall semester of 2016, I created a research paper as a part of Freshman Composition 2. I have loved art and the humanities as long as I can remember, but what really captured my imagination was numbers. Unfortunately, as a Chemical Engineering and Math student, I do not encounter arts or humanities in my classes, and due to the stringent schedule and heavy class-load, I do not have time to take elective courses.

My professor allowed us to choose our own topics; so, naturally, I wanted to defend the humanities against the disdain that many engineers show toward them. Something in me fought against the idea that these two things were diametrically opposed, though. I reasoned that if I loved both disciplines, then surely someone else did too. Unfortunately, this vague and abstract topic was all that I could think of. Fortunately, though, there are myriad books and papers on the sciences and humanities, spanning many different specific topics and applications. I was guided to sections in the library that concern a few of these topics and applications. I also read both scientific and opinion articles on many different facets of the idea, and these profoundly clarified my topic. Many of the articles were about the recent crisis in education funding, and the budget cuts that are almost exclusively affecting the arts and humanities. This made me think more on the innate value of the humanities, and how that value relates to other fields.

More research ensued, navigating books and articles defending the humanities against the cultural push towards STEM careers. What I noticed, though, was that all of the books and articles I found fell into one of two categories: they discussed the relationship between science and the humanities, or they defended the humanities against the recent budget cuts. Questioning whether the two camps were really so separated, I read the resources’ citations and read their
sources, and the separation was maintained. Here, I found my topic. It became my goal to connect these two topics and deduce how that connection might affect our reactions to these budget cuts. With this goal in mind, I revisited the sources I had already discovered, and determined which ones would actually be of use to me. I then visited science-focused databases and searched for articles on the humanities, and searched for science articles on humanities-focused databases. This uncovered one new source, and included a few I had already found.

Finally, I had a good research basis for a specific topic. However, there was a hole in my research. One author had a profound understanding of the relationship between art and science, but his book was published in 1962; as such, I needed to explain why it was a relevant source despite being published long before this was a popular issue. Therefore, I researched the author and found a biography that explained his background and why he would have this profound understanding ahead of his time. I also looked more closely into an author who had some very descriptive ways to integrate art and science in education. Curious of how she came to these conclusions, I decided to research the author, and upon further inspection, I found that she was a professor at a school which focuses its curriculum on maintaining the relationship between art and science while they are being taught. I thus used the school’s website itself as a secondary source, providing ideas on how to use that integration to compensate for budget cuts. Before these secondary sources, my research seemed incomplete, with multiple unexplored facets, but they turned it into a thorough explanation of my discoveries.

While I had written many papers prior to this experience, none of them had been based on research. Thus, while I understood the basic ideas of conducting research on a topic, I had never experienced the process itself. In fact, I had no idea what a secondary source was until my professor explained it in class. It never occurred to me that the research process itself might
guide my paper, let alone help to clarify my thesis, but that is exactly what it did. Admittedly, I did not expect to learn much in Freshman Composition II, given that I took it as a Junior, but I was quickly disabused of that notion – I realized partway through the class that I had never really encountered the research process before. I finally understood something that my Composition I professor had told me; that is, that we cannot truly have a reliable stance on an issue unless we understand the stances that have been taken previously. Academia was explained as a conversation, and to have a part in the conversation you must listen to what has been said previously. This past winter intercession, I took a humanities class and found myself paying more attention to the conversation I was entering than I would have before learning about the research process. Despite my initial attitude towards the class, I am extremely grateful for the experiences I had in Composition II, for it taught me vital lessons about research and Academia that I likely would not have learned otherwise.