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Kirmser Undergraduate Research Award Reflective Essay

How I Learned to Stop Googling and Love the Library

I am a little embarrassed to say that I did not take advantage of K-State Libraries until my senior year. While I had research and writing assignments in prior courses, the assignments always involved a narrow prompt that did not require much creativity in my research. With a combination of Google Scholar and combing the reference list on Wikipedia pages, I was able to conduct research for these essays without much difficulty. However, my senior research paper for ECON580 – Economics Senior Seminar – was a different animal. When Dr. Dan Kuester informed us that our papers only needed to cover some economic topic over the course of fifteen pages, ¹ I felt lost.

Over the next few weeks, I came to view this assignment as a unique opportunity to combine my different academic backgrounds in economics and biology into a project that I could make entirely my own. Since high school, I have planned to attend law school with an interest in environmental law, but opportunities to explore this interest in my undergraduate curriculum were sparse. I thought back to a particularly interesting chapter in my textbook for BIOL642 – Principles of Conservation Biology – that covered environmental economics. The general goal of this discipline is to integrate biological data into the economic frameworks that businesses and governments use to make decisions.

Excited by my idea, I pulled up Google Scholar and searched for "environmental economics." While there were plenty of results, I quickly realized that I was clicking on article after article – many of which were dry economic theory – without knowing what I was looking

¹ Ironically, he would later grant me an extension.

for. Thinking back to a presentation that the Citizens' Climate Lobby gave to our ECON580 class a few weeks ago, I started focusing on carbon taxes, but found that research on the carbon tax often alluded to other environmental policy options without offering much detail. These comparisons between policies inspired the format of my paper. If I could develop a method of evaluating these economics-driven environmental policies, I would be able to cover the pros, cons, and utility of each policy option. These analyses could then be combined into a paper that might prove useful to researchers and policymakers alike. I knew that I had a lot of research ahead, but at least I had a structure in place that would let me sift through any sources I found.

At this point, Dr. Kuester recommended I meet with Kendra Spahr from the Library's Academic Services to help prepare me for the research required to actually write my paper. This was the best decision I made throughout the entire process. Kendra was gracious enough to meet with me on less than a week's notice. When I admitted I had only been using Google Scholar, she showed me how to use the library search engine as well as the *JSTOR* and *EconLit* (which is part of *ProQuest*) databases. Kendra recommended I use the "AND" option when doing an advanced search in these databases – for instance, "carbon tax" AND "policy" – to reduce the bycatch of abstract economic theory articles that kept turning up. This made my searches considerably more efficient when focusing on a particular type of policy instrument. Kendra also demonstrated the "site:gov" tool when doing a normal Google search, which led me to the multiple EPA pages included in the bibliography. My meeting with Kendra helped mature my approach to research and shaved off hours of unnecessary work had I continued to rely on Google Scholar alone.

After meeting with Kendra, I was fired up to begin my research. I used the new search strategies she taught me to begin compiling a list of sources. While the bulk of my paper would

be spent discussing climate policy tools, I needed to cover relevant scientific and economic background information. Hale Library's resources were helpful here. I was able to access my old BIOL642 textbook through Course Reserves to find climate change data or, in the case of emissions and world population data, at least point me in the right direction. Kendra and I discussed an Interlibrary Loan for physical copies of the Stern Review and Heilbroner's excellent economic history book, *The Worldly Philosophers*, but I opted for online versions in the interest of time.

As I read through articles about each specific type of policy, I knew I wanted to develop an organized way of evaluating each option. This meant that when organizing my sources, it was not enough to classify them based on whether they discussed carbon tax or cap-and-trade. I started to take note of what factors each article considered when analyzing a policy. For instance, Nordhaus is concerned about near-term GDP when setting a carbon tax, whereas Lamperti et al. worry about how command and control policies will facilitate sustainable innovation. The multidimensional assessment I had to make of each source led to my "Three Criteria" system for discussing each policy.

Using library databases and advanced search techniques lent a great deal of organization to my research. This comes through in the way I set up my paper, which includes background on the issues of climate change and market failure in addition to the specific policy options. A paper of this breadth would have been extremely difficult if I had used Google Scholar alone. The skills I learned from Kendra helped me narrow my topic and scope of research from "environmental economics" to a more systematic discussion of the economics behind various policy tools available to combat climate change. Conducting this project by fully using library resources not only matured me as a writer and researcher, but enabled me to create a final

product that combines my academic backgrounds and career interest. My hope is that the paper is thorough but accessible in a way that makes it useful for policymakers, academics, and anyone interested in helping to preserve our planet.