Honors Contract

Literature Review Contract Completion

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Over the past few semesters, I have been working closely with Dr. Kady Schneiter in the Department of Mathematics and Statistics to investigate factors that lead to students’ success in an undergraduate statistics course. As part of this project, we needed to do an extensive literature review. Dr. Schneiter helped me to better understand the purpose of a literature review. She explained to me that before research is performed, the researchers need to understand what research has already been done in your area of research. Obviously, if there are numerous studies that have already been done that are extremely similar to your proposed study, you may want to reconsider your proposal, or think of a new angle that can be explored on the same subject. The researcher must know how the research that will be carried out is different and/or similar to existing research. Once this is understood, the researcher knows how his or her research is positioned in the existing literature.

This literature review consisted of exploring articles that have been published on factors related to success in statistics and mathematics courses. I specifically looked at the methods that were used to analyze data and draw conclusions. We are interested in exploring the relationship between mindset (fixed vs. growth) and students’ performance in the class, so I read a literature by Carol Dweck. Dweck is an expert on fixed and growth mindsets, so her writings were particularly relevant.

During this contract I had difficulty maintaining direction and focus in my literature review. There is so much literature to wade through, and there were a number of topics that I needed to explore. In addition, the papers are often wordy and difficult to read and understand. Eventually, I decided to try and write what I thought my introduction should sound like. This simple act of writing down some sentences to set up the paper that would eventually follow helped me understand what sources I would need to include to solidify the statements that were made in my preliminary introduction. This was one of the most valuable things that I learned while doing this literature review.

Dr. Schneiter was an invaluable source of help throughout this process. We had a total of six meetings. During these meetings, I would summarize for her the significant things that I had found, and we would talk through topics and areas to focus on and to further explore. Her experience in research and literature reviews was extremely helpful.

I felt that this contract was particularly practical for my future education goals. I am planning on completing a master’s degree. The experience that I gained during this literature review will be valuable in a graduate degree when I will be doing even more extensive research. Research that is more in depth will require a thorough literature review. Performing this literature review has helped me become more comfortable with the process of research. Reading and understanding academic articles has also become easier for me. I have learned how to navigate massive journal databases. I have also learned how to use Zotero, a free software package that helps researchers organize articles and sources, and even helps to create citations for bibliographies.