The Frontiers of the Panama Canal: Exploring New Technology in Medicine and Engineering

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Process Paper

I chose to research the Panama Canal for my project because I knew it worked perfectly with the theme of "Frontiers in History: People, Places, Ideas." I am very interested in engineering and medicine, so I looked for topics that related to the theme and involved engineering and medicine. I found that the Panama Canal fit the theme because the Canal Zone in Panama was not very developed and took engineering and medical innovations and discoveries to be able to successfully build a canal in the area.

I started my research online by looking for background information about the Panama Canal. I then looked online for primary sources I could use. I found that the Library of Congress had many primary sources. I then read parts of a book from a professional historian discussing the Panama Canal. I looked for videos to help explain the mechanics of how the canal functions. After School competition, I looked for more primary sources online and contacted the London School of Hygiene & Tropical Medicine Archives Service. After District, I contacted Linda Hall Library, the Panama Canal Museum, and a history professor at University of California, Riverside to receive more primary sources with multiple perspectives.

I created my project on a website because it would effectively present the information showing video, images, quotes, and words when needed. This helps the audience understand the information easier. I started with my thesis to introduce my argument regarding the Panama Canal. I then introduced the historical background of the Panama Canal to show why it was needed and show failed attempts to build the canal. I then discuss the hardships that prevented the canal from being built in these previous attempts. I also introduce alternate perspectives that address reasons why canal construction should not have been attempted. To show how these hardships were overcome, I discuss the discoveries that led to innovations. I then discuss the importance of these innovations that led to the Panama Canal being successfully built.

In my project, I argue that without the discoveries made in the frontier of Panama, innovations that saved many lives and drastically improved world trade would not have been made. The Panama Canal was a great location for research and created the need for innovation. Without these innovations, global transportation would be much more difficult, and many people would have died of widespread malaria and yellow fever.

The innovations made while constructing the Panama Canal helped the world in many ways. Many people's lives were saved by the discovery that malaria is transmitted through mosquitoes, and this discovery would have taken much longer without the necessity because of the canal conditions. Because of this discovery, sanitary conditions were improved to prevent the spread of diseases transmitted through mosquitoes. In addition to the health improvements worldwide, the engineering innovations improved trade and transportation between Western America and the rest of the world.