

Process Paper

After contemplating many different topics for this year's theme, such as the Apollo-Soyuz mission, Brown v Board of Education, Alan Turing, and Chuck Yeager, we decided to create a project about Alan Turing. As we learned more about Alan Turing, we discovered that he had many important and original contributions to various areas of science and technology, but we struggled to articulate a concrete barrier. We were intrigued by Turing's work during WWII to help break the German Enigma code and realized the breaking of this barrier would fit the NHD theme perfectly. So, midway through the year, we switched our topic from Alan Turing to the breaking of the Enigma code.

We began our research online to gain general information and to acquire specific primary source documents from many countries' national archives. Our group took a trip to university libraries and found numerous unique documents and several books. As we continued our research, we conducted multiple personal interviews with experts from Europe, Canada, New Zealand, and the USA, giving us a unique perspective into the breaking of the Enigma code. Some of the most notable interviews were with Catherine Holden, the learning manager of Bletchley Park; Gregory J Nedved, a Defense Department historian working with the NSA; and Jack Copeland, Director of the Turing Archive and one of the foremost Alan Turing and Enigma scholars in the world.

Our group chose to create a website, as we thought it would be the best way to portray the technological aspects of our topic. Because the new website platform was not available until later in the year, we initially focused on research. We then began using google docs to make a layout of the website until the NHD Webcentral became available. We then transferred our information and pictures from google docs to an actual website. We had already put most of our information in the website when we decided to change our topic from Alan Turing to breaking the Enigma code. This was a major setback to our progress, and we had to work even harder to research and get the website done in time. Once we gathered a significant amount of information and many pictures, we started to create our website anew. Webcentral was not very user friendly, but in the end we were able to finish and create what we feel is an accurate, engaging, and informative project.

Breaking the barrier of the Enigma code fit this year's theme perfectly. The Enigma code was a clear barrier that kept Allied forces from reading crucial German military messages during WWII and hindered the war effort. When this barrier was broken, the information obtained by decrypting Axis communications helped Allied forces triumph in military operations. With use of decrypted messages, WWII was shortened and millions of lives on both sides were saved. Breaking this barrier has also highly influenced modern cryptological collaboration and development with the creation of the Brusa and UK-USA agreements and the creation of modern digital security networks.