

Identify a Difference in How Historical Events are Portrayed in Textbooks that are Taught in Different Settings

A DS 4002 Case Study by Allison Kerper



History textbooks taught in schools are intended to provide an objective description of historical facts. However, since they are written by humans who inherently have some biases, it is impossible to rid those opinions entirely. While this impact may seem small, for students and teachers who build their knowledge on this information, their perception of events may be drastically altered. This can result in a difference in the understanding history across school districts, states, and countries.

The New York Times did an analysis of eight American history textbooks taught in California and Texas. This revealed a significant number of differences, from the words used to describe events to the inclusion of details on specific amendments[1]. These textbooks were from the same publisher but altered by school district. For an already polarized society, the negative impacts of this on the country is clear. Standardizing and debiasing academia is crucial to ensuring that students are properly educated and equipped with objective information. This starts with textbooks and ensuring that they provide clear and accurate descriptions of events.

You are a data scientist tasked with determining the variance in the description of a historical event across different textbooks. This comparison can either be completed between school levels or geographic locations. Between school levels, you can analyze if the textbooks taught in higher level education provide a more graphic or negative description than those in lower level schools. You will use a sentiment analysis on passages from textbooks to determine how the descriptions differ. You will then calculate the average compound sentiment for each group of textbooks and determine the difference between the comparison groups.

[1] A. Goldstein, "Two States. Eight Textbooks. Two American Stories.," The New York Times, Jan. 12, 2020. [Online]. Available: <https://www.nytimes.com/interactive/2020/01/12/us/texas-vs-california-history-textbooks.html>