

## INDIVIDUAL SHOWCASE: Integrating Data Practices into Middle School Social Studies through Project-Based Learning

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### Session Description

This session presents the work of two middle school humanities teachers who co-designed interdisciplinary data-infused project-based-learning modules that were implemented with their 8th grade social studies classes. The goal of this session is to share what we did with our students, how we aligned the social studies learning with an existing ELA curriculum, and our biggest takeaways from the experience. While some may question whether data is relevant in a humanities classroom, we found through this project that data literacy significantly enhanced our students' confidence and critical thinking and improved their research, problem-solving, and analytical skills, making connections between math, humanities, and the real world around them.

### Overview and Objectives

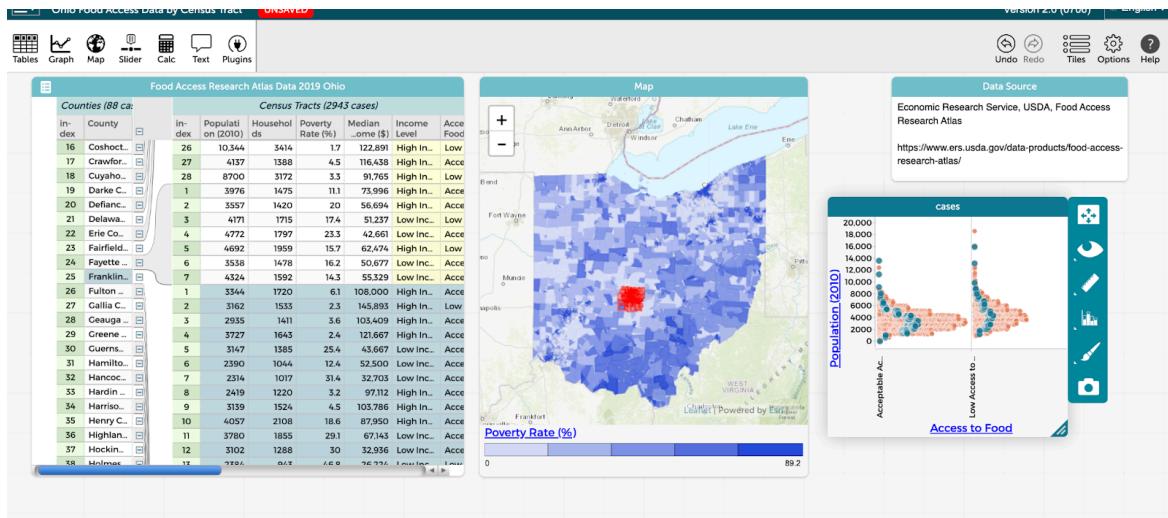
Incorporating data lessons into humanities classrooms is crucial for developing self-aware and informed students. "Data is just summaries of thousands of stories—tell a few of those stories to help make the data meaningful" (Heath & Heath, 2007, p. 241). As humanities teachers, we encourage our students to examine what story is being told, and how they can prove it. Embracing data-driven education prepares students for a data-centric world, empowering them to navigate real-world challenges with informed reasoning and confidence. In this project, we combined data practices with project-based-learning humanities modules. Project-based-learning puts students in the driver's seat allowing them to uncover and explore a topic with agency (Boardman & Hovland, 2022). Led by an engaging guiding question, students embarked on a learning journey where they evaluated a variety of texts, including datasets, to gain knowledge and collect evidence for a more authentic response. Using purposeful, rich datasets students were able to devise their own learning path, sparking curiosity and classroom engagement.

### Context and Materials

This project included two ELA aligned social studies modules implemented in two 8th grade classrooms, one in New York City, and one in Columbus, Ohio. The first unit, Food Choices, was implemented with alignment between the two schools, while the second unit, Lessons of Japanese Internment, implemented a different focus to align with the different populations of the two communities.

### Food Choices

In alignment with the EL module on Food Choices (EL Education, 2019), units were co-designed to enhance the learning experience by integrating datasets and historical content. As students read *The Omnivore's Dilemma* (Pollen, 2007) in ELA, in social studies they examined the struggles of farm workers during the 1950s leading to the labor movement and strike led by Cesar Chavez and Dolores Huerta. Students analyzed historical census data to compare wages of agricultural workers to other occupations, connecting the themes from the text to the plight of farm workers. Using this dataset and other sources, students created datastories to highlight the history of labor protections and injustices. Next, students explored World Health Organization data to highlight the health impacts of food choices, farm production data to analyze land use, economic data to evaluate food access, and data on agricultural workers' demographics to examine land ownership injustices and racial inequities. Integrating data with content from their ELA class, students wrote legislation to address food injustice in the United States today. Students presented in committee meetings and a mock congress to fully simulate the legislative process. This learning experience, grounded in real-world data, led students to find their authentic voice while understanding how we can address food injustice.



**Figure 1:** An example of student data displayed to defend a food injustice bill

### Columbus Ohio: Stories of identity and belonging

In Columbus Ohio, in a school with a primarily black student population, the Japanese internment module explored the meaning of belonging and how identity and historical events impact inclusion. By examining identity demographics, immigration patterns, and historical events that shape U.S. society and norms, students compared perceptions of identity groups over time and examined post-9/11 and COVID-19 impacts on belonging. Reading the book *Farewell to Manzanar* (Houston, 1973) and examining data from interviews with Japanese immigrants enriched student understanding of historical belonging, providing relevant evidence needed to create high quality datastories. Students also examined immigration and demographic data for Ohio, connecting community identity statistics with local businesses, housing, and culture to create spoken word pieces advocating for a sense of self validation and belonging. Finally, students used their data analysis skills to create documentaries highlighting how historical events and identity demographics impact belonging.

### New York City: Examining who gets to be an American

In a New York City school in a predominately Dominican neighborhood, the module was grounded in the question: Who Gets to be an American? Using datasets of ship logs to Ellis Island and San Francisco combined with primary source texts and a visit to Ellis Island, students created datastories highlighting the differences in immigrant experience to each coast. Students saw the *Farewell to Manzanar* story contextualized in a dataset of the Manzanar Internment Camp. Through analysis of this dataset, they were able to transfer their knowledge of earlier immigration to understand the discrimination against Asian Americans that led to Japanese American incarceration. Students created a datastory connecting themes from the text to the dataset to situate the story of one family's internment experience to the larger historical context. Following this historical dive into immigration history, students explored four datasets covering modern immigration trends including asylum and refugee seekers, current & historical census data, and ICE detention center data. Using these datasets, students created infographics responding to the guiding question.



Figure 2: An example of a student infographic

## Learnings and Implications

Using data as an additional source of information in the social studies classroom has been a game changer for engaging students in the authentic work of a social scientist. Routinely, social studies teachers rely on primary source texts, but for some students such texts are a literacy hurdle that prevents students from engaging with the content. By integrating datasets using CODAP, more entry points for students of all levels to access content increased authentic class engagement, fostered a deeper understanding of how to utilize relevant evidence in writing, and encouraged students to think critically about real-life topics. Data literacy is literacy; now in social studies class, analyzing a dataset is a core literacy skill used throughout the curriculum as students grapple with our essential questions.

## References

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