Title Page, Introduction

Background: The Creation of our Research Question

Our research question originated from our participation in our CODES cohort, where our overarching theme is reparative justice. We partnered with the Missouri Botanical Gardens (MOBOT), an organization/site with a complex history that includes connections to slavery. Henry Shaw, the founder of MOBOT, was a slave owner, which gives the garden a unique and dark historical background that has been primarily overlooked.

Our cohort is divided into two teams. Alci's team focuses on exploring the legacies of colonialism and extractive practices at MOBOT, while JB's team focus was designing an outreach program to educate local schools and the St. Louis community about MOBOT's history and its ties to slavery. In our current CODES class 220, centered around science, we were tasked with creating a research question and we realized that if we incorporated scientific methods and concepts and pieces of our topics from both of our research teams, we could develop an interdisciplinary research question that can be impactful and measurable. This led us to identify science as a tool for framing the history of slavery in a new way. Our approach not only conveys historical facts but also explores the environmental, biological, and agricultural implications of slavery. This interdisciplinary perspective led us to our research question: How can we effectively incorporate scientific methods in a curriculum focused on the history and impact of slavery?

1. Topic Importance

Why is this Important? Well, in our history classes, the topic of slavery is often covered only at a surface level. While students learn that slavery existed, the full depth of its impact: social, economic, environmental, and scientific significance is frequently glossed over. This can cause a disconnect, where students know of slavery as a historical fact but lack a true understanding of its complexities and its lasting consequences. It's important/essential to dive into slavery's nuances and engage with it on multiple levels to create meaningful learning, even though it is a challenging subject to discuss. Only by moving beyond traditional approaches can we help students fully understand this period and its relevance today.

2. Current Gaps in Curriculums

Currently, the standard curriculum on slavery lacks depth and fails to capture the interconnectedness of scientific, social, and environmental factors. For instance, few curriculums address how plantation agriculture shaped both the ecosystems and the

economic systems or how the physical toll on the enslaved individuals was linked with the labor demands of the time. The traditional approach limits students' comprehension/understanding of the complexity and impact slavery has on both human lives and the natural world. This essentially leaves students without the tools to critically engage with the topic. Reforming this approach requires integrating scientific concepts into the history curriculum to bridge the knowledge gaps and encourage empathy, critical thinking, and a sense of historical responsibility.

3. Relevant Concepts and Terms

To address this gap, our research will focus on an interdisciplinary approach that incorporates scientific principles such as plant biology, environmental science, and the study of plantation systems. These scientific areas can help students connect slavery's historical and physical effects, allowing for a deep dive of its impacts. For example, understanding plant biology and environmental science as they relate to plantation agriculture can give students a clearer view of how slave labor contributed to economic gains at the cost of environmental degradation and human suffering. This unique blend of science and history will provide students with a greater understanding of both the social and physical impacts of slavery.

4. Research Question

Our research seeks to answer the question: How can we effectively incorporate scientific methods in a curriculum focused on the history and impact of slavery? By addressing this question, we aim to create a curriculum model that combines scientific and historical perspectives to create a deeper understanding of slavery’s legacy.