

Course Project

Student's Name

Institutional Affiliation

## 7-1 Course Project

### **Understanding the Liberal Arts' Lenses**

In exploring the liberal arts lenses of social science, natural science, history, and humanities, distinct characteristics emerge, shaping their approaches to understanding various phenomena.

#### **Social Science**

The social science lens focuses on human behavior, societal structures, and interactions. It employs qualitative research methods such as interviews, surveys, and ethnographic studies (Faulkner & Atkinson, 2023). Evidence includes social data, surveys, and policy analyses, emphasizing societal dynamics and behavioral patterns.

#### **Natural Science**

The natural science lens investigates environmental processes, physical phenomena, and ecological systems (Sherren et al., 2024). It utilizes quantitative research methods like experiments, modeling, and data analysis. Evidence comprises scientific data, empirical observations, and mathematical models, highlighting physical mechanisms and environmental consequences.

#### **History**

The history lens examines past events, developments, and societal changes. It employs archival research, document analysis, and historical narratives. Evidence includes primary sources, historical documents, and archaeological findings, providing insights into historical contexts and narratives.

#### **Humanities**

The Humanities lens explores cultural artifacts, languages, and philosophical ideas. It utilizes interpretative methods, textual analysis, and critical theories (Servant-Miklos & Dewar, 2024). Evidence comprises literary texts, artistic creations, philosophical writings, and cultural artifacts, offering perspectives on human experiences and values.

### **Similarities and Differences**

While each lens has distinct methodologies and focuses, they intersect in their pursuit of understanding human experiences and societal phenomena. Social science and natural science share an empirical approach but diverge in their emphasis on human versus environmental factors. History and humanities delve into human culture and experiences but differ in their methodologies and sources. Despite their differences, all lenses contribute to interdisciplinary perspectives and a holistic understanding of complex topics.

### **KWL Analysis**

#### **Know (K)**

In exploring what we know about climate change through various lenses, we draw upon personal experiences that underscore its multifaceted nature. Historically, we recognize the increasing frequency of extreme weather events and shifts in global climate patterns (Huning et al., 2020). Culturally, we observe diverse perspectives on climate change mitigation and adaptation strategies across different communities. Ethically, we acknowledge the moral imperative to address climate injustice and ensure environmental stewardship for future generations (Sardo, 2023). Socially, we see the interconnectedness of climate change with issues such as poverty, migration, and human rights. These experiences inform our understanding of climate change, highlighting its complexities and the need for interdisciplinary approaches to address its impacts effectively.

**Want to know (W)**

In formulating questions about climate change within each lens, we seek to effectively deepen our understanding and address knowledge gaps. Historically, we may ask how past climate events and human activities have contributed to current climate change trends. Culturally, we inquire about diverse cultural perspectives on climate change adaptation and mitigation strategies (Hosen et al., 2020). Ethically, we explore the moral implications of climate change policies and actions on vulnerable communities. Socially, we question how social dynamics influence climate change awareness and collective action. Utilizing keywords such as "climate variability," "adaptation strategies," and "climate resilience" facilitates research and investigation within each lens, enabling a comprehensive exploration of the topic.

**Learned (L)**

Upon consulting the resources in the library guide, we found comprehensive information addressing several of our questions regarding climate change. Resources elucidated the mechanisms by which greenhouse gas emissions contribute to global warming and climate change, detailing their impact on Earth's atmosphere and temperature regulation. Additionally, we gained insight into the primary impacts of climate change on ecosystems, biodiversity, and natural resources, including shifts in habitats and loss of biodiversity (Weiskopf et al., 2020). However, some questions, such as the socio-economic factors exacerbating climate change effects and detailed strategies at various governance levels, require further exploration. To address these gaps, we plan to conduct additional research using academic journals, governmental reports, and reputable websites, ensuring a comprehensive understanding of climate change and its implications. Through this process, our understanding of climate change

has evolved, recognizing its interdisciplinary nature and the imperative for collective action to mitigate its impacts.

### **Examine Through Lenses**

Upon examining climate change through the lens of social sciences, we uncover intricate social dynamics and human behaviors shaping both its causes and responses. Social science research highlights how socioeconomic factors, cultural beliefs, and political systems influence attitudes toward climate change mitigation and adaptation (Mohajan, 2020). For instance, studies reveal disparities in climate change vulnerability and resilience among different social groups, emphasizing the need for socially just climate policies (Sardo, 2023).

In contrast, exploring climate change through the lens of natural sciences reveals the underlying environmental processes driving its occurrence and impacts. Natural science research elucidates the mechanisms of climate change, such as greenhouse gas emissions and their effect on atmospheric composition and temperature (Hosen et al., 2020). Additionally, it provides insights into the physical manifestations of climate change, including changes in weather patterns, sea-level rise, and biodiversity loss (Weiskopf et al., 2020).

When comparing these lenses, we find both similarities and differences. While social sciences emphasize human dimensions and societal responses to climate change, natural sciences focus on understanding the physical mechanisms and ecological impacts. However, both lenses converge on the urgency of addressing climate change through interdisciplinary collaboration and evidence-based policymaking.

Further exploration of climate change may involve integrating additional lenses, such as humanities and history, to gain a more comprehensive understanding (Schipper et al., 2021). Questions for future research may include examining the historical contexts of climate change,

analyzing cultural narratives and representations, and assessing the ethical implications of climate action strategies. By embracing a multidisciplinary approach, we can enhance our insights into climate change complexities and inform more effective mitigation and adaptation efforts.

### **Conclusion**

In conclusion, exploring climate change through social and natural sciences lenses offers valuable insights into its multifaceted nature. While social sciences illuminate human behaviors and societal responses, natural sciences delve into environmental processes and impacts. Despite their differences, both lenses underscore the urgency of interdisciplinary collaboration in addressing climate change. Integrating additional lenses like humanities and history can further enrich our understanding and inform more effective mitigation and adaptation strategies.

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