STEM COURSE ENHANCEMENT GRANT – FINAL REPORT

1. Title   Student-Directed Learning to Increase Engagement in World Regional Geography

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3. Funding $1500

4. STEM Course GEOG 2356-01: World Regional Geography – Latin America, Africa, South Asia (Fall 2022 online with 22 students; at least one section taught every full-term semester)

5. Project Narrative

- **Executive Summary**

Geography bridges the natural and social sciences to promote a better understanding of the world. Despite the significance of understanding the world – and important current global issues – students continue to display a low level of engagement in introductory-level core curriculum geography classes such as GEOG 2356: World Regional Geography – Latin America, Africa, and South Asia. Research shows that first-year geography undergraduate students are more likely to be engaged if they are involved in assessing their existing knowledge, identifying their learning needs, and directing both the lines of inquiry and the methods used. Thus, this project sought to increase student engagement in World Regional Geography through the development of a semester-long, student-directed collaborative learning assignment in an online section of the class.

- **Overview**

Despite the significance of geographic inquiry, students who take GEOG 2356: World Regional Geography – Latin America, Africa, and South Asia as a core curriculum class often display a low level of engagement with the class's geographic topics. This project was designed to encourage engagement by having groups of online students identify interests, ask questions, and search for sources to help them answer those questions.

This project was conducted online using a world map, color-coded with the regions covered in the class, overlaid onto Google Jamboard's virtual whiteboards. I chose to use a map on a virtual whiteboard to help the students better visualize the parts of the world under examination and to create a more interactive feel than a sterile discussion board forum. I chose Google's platform over others because I had read that students would not need to create an account, so long as I used the "public" setting. Past experience has shown that

students do not like having to sign up for external content or programs. Google Jamboard, however, proved to be more difficult than anticipated. While some students were able to access and edit the board, others had to request access. After I realized this, I made an announcement on Blackboard, but it was a problem for students who waited until the night the assignment was due to access the whiteboard for the first time.

In the first step of the project, students used virtual sticky notes to identify what they thought their knowledge gaps were for each region. I provided examples and prompts if needed. Responses were varied from broad (culture) to more specific (how do environmental issues like pollution affect this region). In the second step, I broke the students into smaller groups based on common interests and collated their knowledge gaps. Students used virtual sticky notes to reframe their knowledge gaps into research questions. In the third step, I collated the different versions of their questions into a single research question for each region. Students used virtual sticky notes to identify sources of information they felt would help them answer each question. In the fourth step, students were to read the information presented by their group and identify the main point from their reading that would help them answer the question. In the fifth step, students prepared a written report in the format of the research question, the main point, additional information from their sources supporting that main point including citations, and references from their sources of information. In the final step, students were asked to reflect on what they learned about the research topics, the process, and geography.

- **Reflection**

While frustrating at times, I feel that this project yielded better results than previous student research projects. From my perspective, a distinct advantage of this project was that the best students were the first to contribute to their groups' whiteboard with high-quality responses. Other students modeled their responses after them, improving overall quality. Students reported that they appreciated the opportunity to learn about topics within their interests but that once they got into the research, they found there were also points of interest in the topics proposed by their group members. They particularly noted that the shared research helped them consider new types of source materials, approach a topic from a different perspective, or delve deeper into a topic than they would have if they had only considered their own sources. In the future, I would keep the basic structure of the project, but I would like to consider alternative formats. Although I liked the visual aspects of the map, I would not use Google Jamboard again primarily due to the access issues but also limitations with the virtual sticky notes (e.g., length of responses, hyperlinks, etc.). I will discuss alternative formats with the college instructional designer.

- **Budget**

I requested a $1,500 faculty stipend as an incentive to experiment with a very different type of project than I have used in the past as well as to support the time investment in developing the concept and materials for the project.