

END OF FUNDING PERIOD REPORT

LAUC Statewide Grants, Research & Professional Development Committee

Primary Applicant(s): Samantha Teplitzky

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TITLE OF PROJECT: Taking the world for a spin: teaching spatial and data visualization with a digital globe

Time Period of Grant: Fall 2016

Amount of Award Received: \$380

Original Abstract as Submitted:

In the summer of 2016, the Earth Sciences & Map Library at the University of California, Berkeley, purchased a Magic Planet digital globe in a collaboration between the library and the departments of Geography and Earth & Planetary Science. This 30" diameter 3D display supplements and expands the library's instruction and outreach activities in GIS, data visualization and modeling. Faculty and graduate students were surveyed regarding their interest in using the globe for teaching and research projects. Based on this feedback, librarians developed a basic training plan for using the globe in the classroom, as well as an assessment tool to rate the effectiveness of instruction with the digital globe. Student and faculty responses at the end of fall semester (2016) will be evaluated for future plans to increase the variety of data sets and animations available to view on the globe. Curriculum and guides for visualizing custom and interactive data sets will be developed and made available based on current researcher and student interests. We are excited about partnering with our departments and engaging our students in the possibilities of 3D visualization, and look forward to sharing lessons learned.

I. ACCOMPLISHMENTS and EVALUATION

- Describe what was achieved during the time period of the grant.

Along with Susan Powell, I presented a poster, "Taking the world for a spin: teaching spatial and data visualization with a digital globe," at the American Geophysical Union (AGU) meeting on December 13, 2016 in San Francisco. The poster was accepted into the Education Section *ED21B: Amazing Technologies and Capabilities that Contribute to STEM I Posters*. The AGU Fall Meeting is the largest worldwide conference in the geophysical sciences, attracting more than 24,000 Earth and space scientists, educators, students, and publishers. Presenting there gave us an opportunity to make a case for librarians as partners in earth science learning and research.

- Did the project accomplish what it intended? Did it make a difference?

The project aligns with the UC Berkeley Library's strategies to create a program of services for data science and emerging areas of research, to acquire comprehensive digital collections, and to collaborate with campus partners (in this case the Earth & Planetary Science and Geography departments). It also looks ahead as we plan to adapt the physical space in the Earth Sciences & Map Library to support visualization projects and more experimental use of library space. The digital globe is the first step in that direction. Presenting this poster at AGU allowed us to promote our activities and partnerships around data visualization. We interacted with many attendees who were curious about acquiring a digital globe in their own settings and were excited at the prospect of collaborating with their own libraries as potential partners.

- What advice do you have for others applying for LAUC research grants? N/A

II. IS YOUR PROJECT COMPLETED? Yes_X_ No__

III. FINANCIAL STATEMENT

In my original request, I asked the committee to fund \$545 to cover the cost of one \$480 AGU early bird conference registration fee plus the \$65 abstract submission fee.

The presentation grant of \$380 was very helpful to offset the full cost of attending the AGU Fall Meeting.

IV. SHARING YOUR PRODUCT/RESULTS

Our poster has been uploaded to escholarship:

<http://escholarship.org/uc/item/7cb6641c>