



GRUVEE Broad Impacts: Elements of a Successful Teacher at Sea Experience

Buffy Cushman-Patz

Office of Legislative and Public Affairs, National Science Foundation, Arlington, Virginia, United States (bcushman@nsf.gov)

During March and April 2010, the Galápagos Ridge Undersea Volcanic Eruptions Expedition (GRUVEE) explored the Galápagos Spreading Center using the Alvin submersible and the autonomous underwater vehicle Sentry. This cruise included a Teacher At Sea that communicated daily with her home institution La Pietra Hawaii School for Girls, and engaged students from math, science, and technology classes at her school as well as from students at schools around the country through a daily blog. The cruise website, www.gruveecruise.org, received more than 5000 hits during the cruise, and involved dialogue between students onshore and scientists and crew onboard the ship. The webpage included daily updates of photos and content, as well as data-driven lesson plans focused on the data collected at sea. The teacher also maintained a separate blog through the local newspaper, the Honolulu Advertiser, targeted towards an even more general audience. Elements of the website's success included an easy to remember web-address with a catchy cruise name, web pages designed to appeal to secondary school students (created with the help of students), publicizing heavily to the target audience before the cruise began and coordinating with interested classroom teachers' curricula. The scientific content of the website and blog posts was always couched in terms that students can understand; scientific jargon was eliminated or carefully explained. Photographs accompanied every post. Students and web-visitors were able to comment and ask questions during the cruise, and cruise participants responded promptly during the cruise. Cushman-Patz will discuss how to replicate these successful elements of her experience bringing research science to a classroom setting, and their potential for Broad Impacts.