

Getting it Right!: Developing a Sustainable Pathway for Educating Underrepresented Puerto Rican Students in Geosciences

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Introduction

This project, conducted from May 26 to June 2, 2015, consisted of a strategic planning workshop that engaged mentors and 16 undergraduate students from diverse disciplines to discuss and develop an experiential learning curriculum and coupled research-education program in Puerto Rico. The workshop brought together new and existing partners in government, academia, NGO's, and the private sector to discuss an educational framework for creating a new linked academic year and summer research curriculum to increase participation in STEM education and grow a geosciences literate Hispanic workforce. The participant partners were:

Leading Partners...

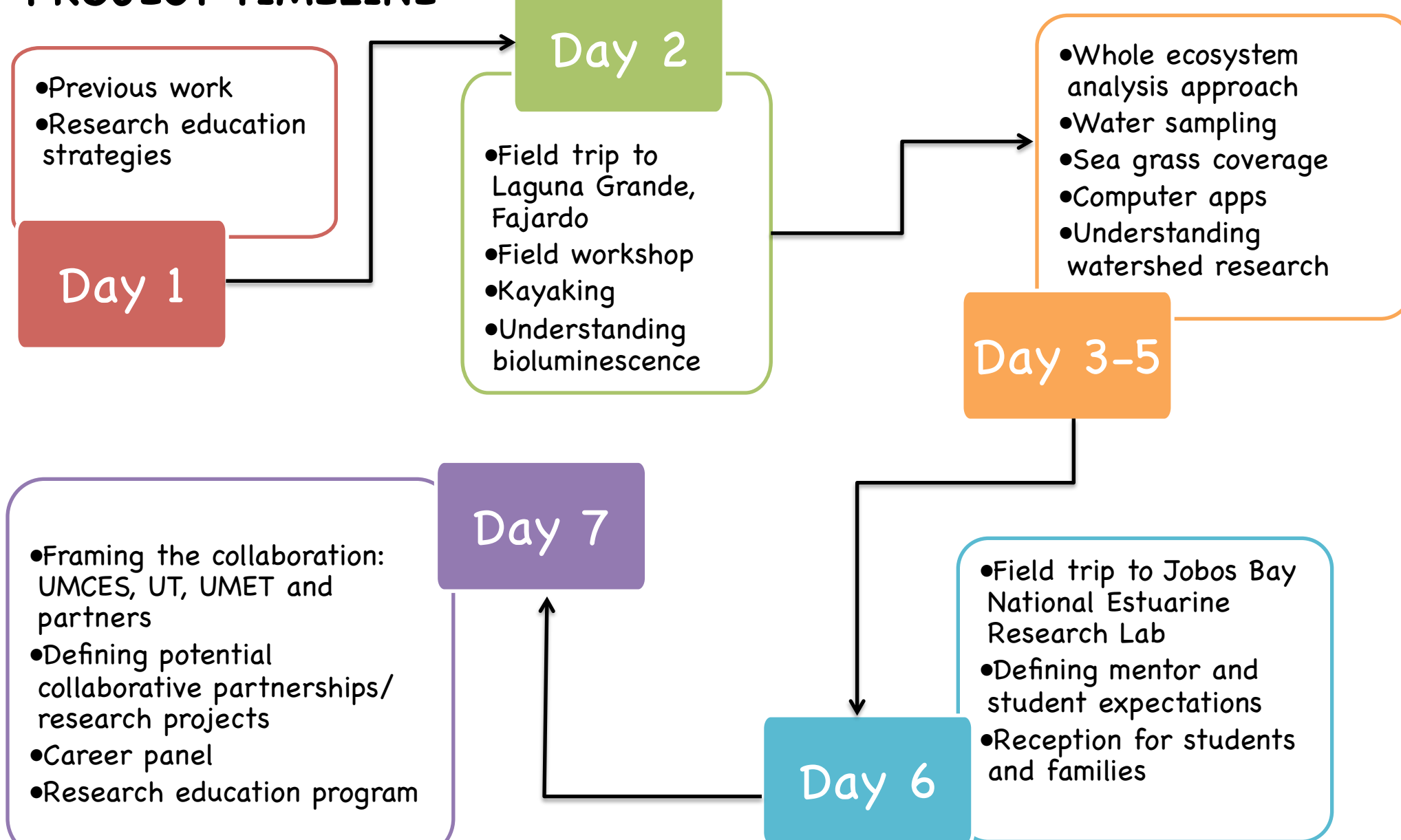


Participant Partners...



Leading partners conducted a weeklong workshop to envision a pathway towards establishing a sustainable, coupled education and research program that will increase the number of underrepresented students from minority serving institutions participating in geoscience-relevant disciplines.

PROJECT TIMELINE

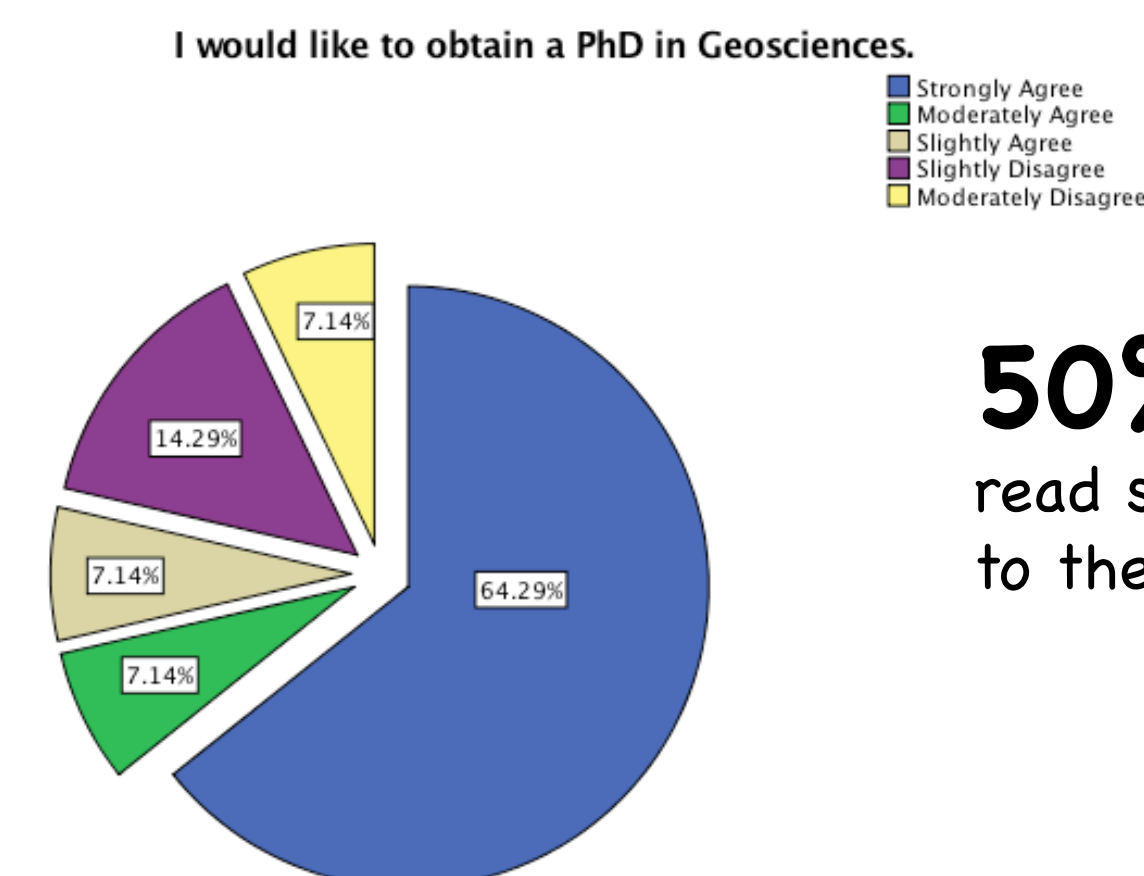


Methods



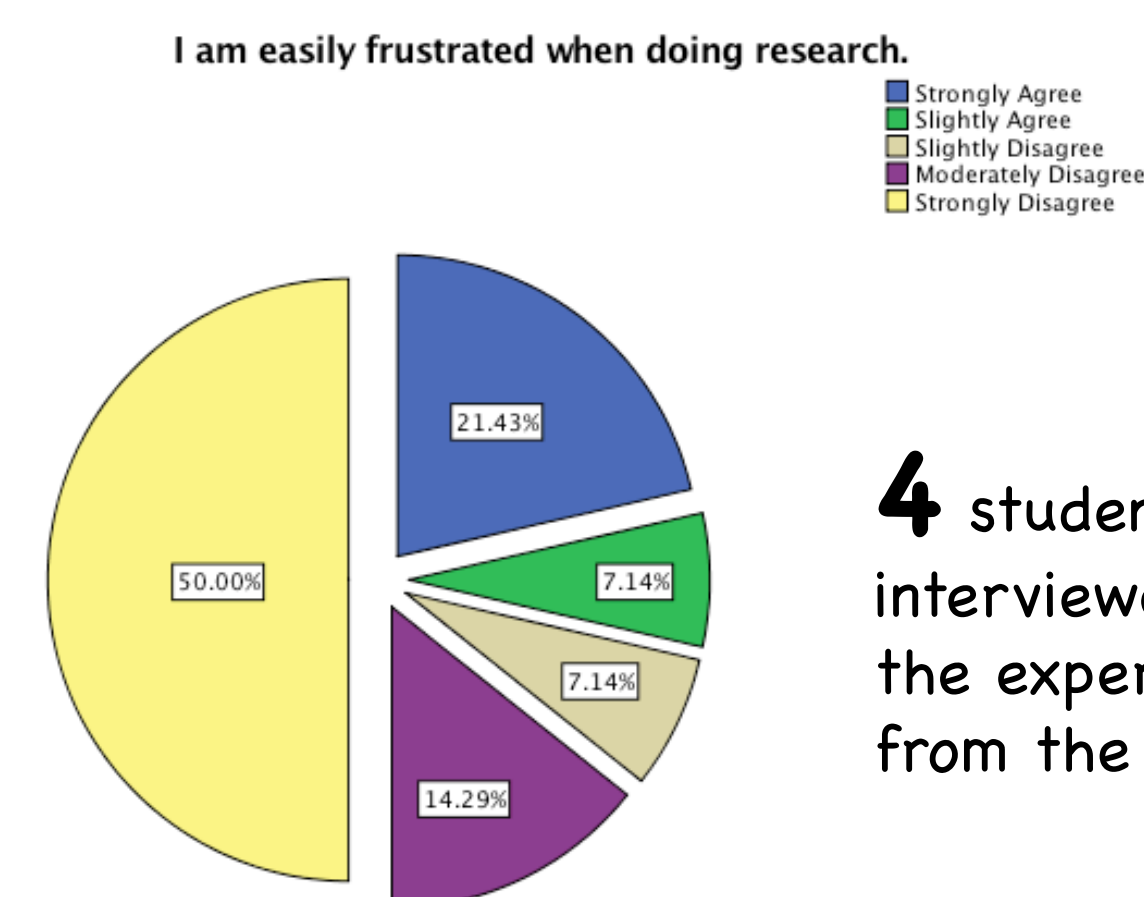
- **2-days strategic planning workshop with partners**
- **5-days research apprenticeship workshop**
- **Geoscience research experts from UMCES worked hand-in-hand with UT and UMET faculty and students**
- **Strong evaluation component, using quantitative and qualitative methods of data collection**
- **Outcome-driven planned activities**

Results



50% of the students had read scientific articles prior to the workshop

All students encouraged their parents to protect the environment



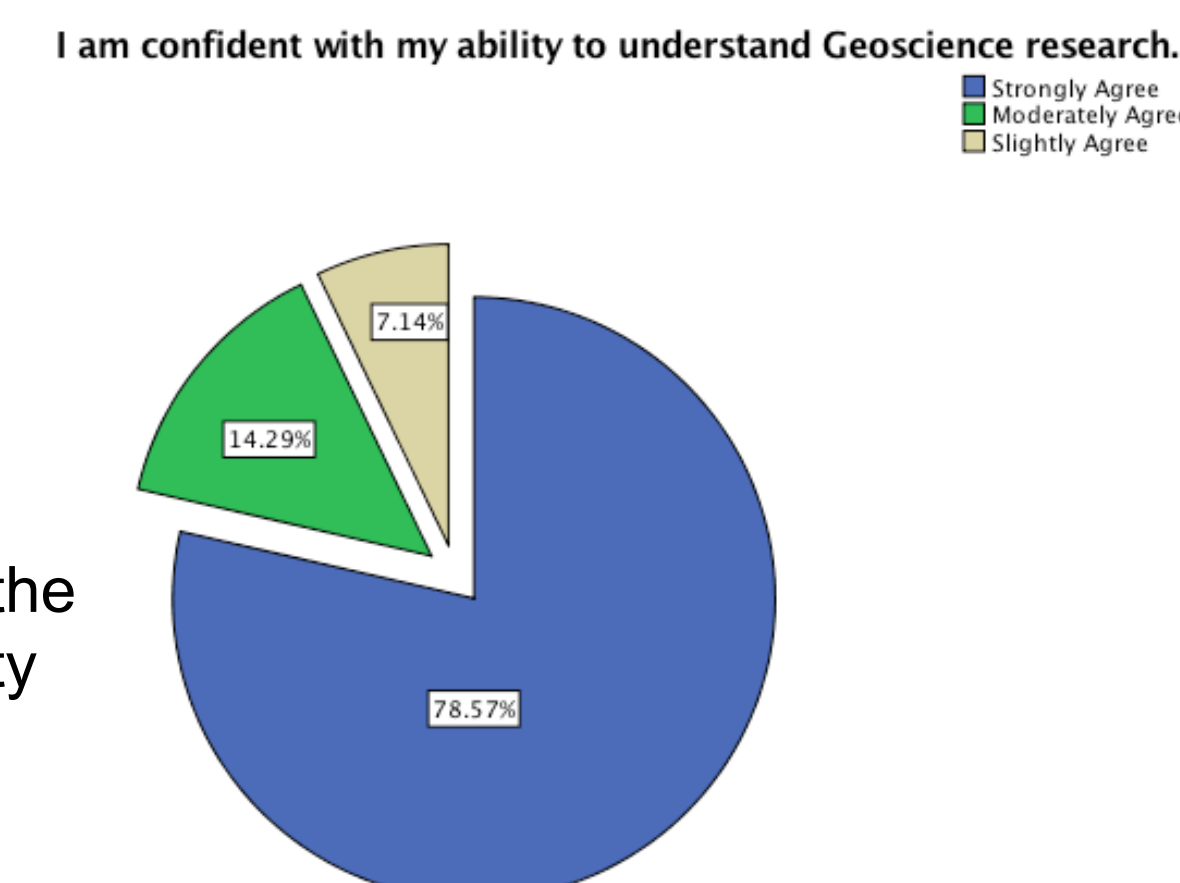
4 students were randomly interviewed and expressed they liked the experience of collecting samples from the bioluminescent lagoon

7 collaborative research projects were identified

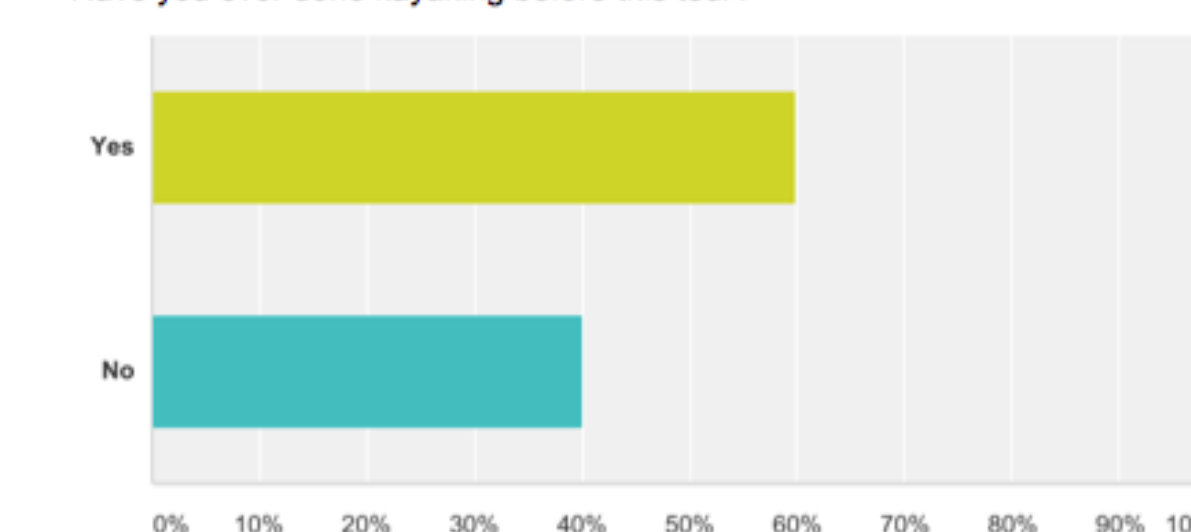
All students' English skills improved significantly

Evaluation Procedures

- ✓ observations
- ✓ pre-post surveys
- ✓ activity assessments at the end of each major activity
- ✓ informal talks with participants
- ✓ informal interviews
- ✓ focus group



Evaluation: Kayak Tour (n = 15)
Have you ever done kayaking before this tour?



1 student had never touched sea grasses before

Draft curriculum framework developed for UT and UMET



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