

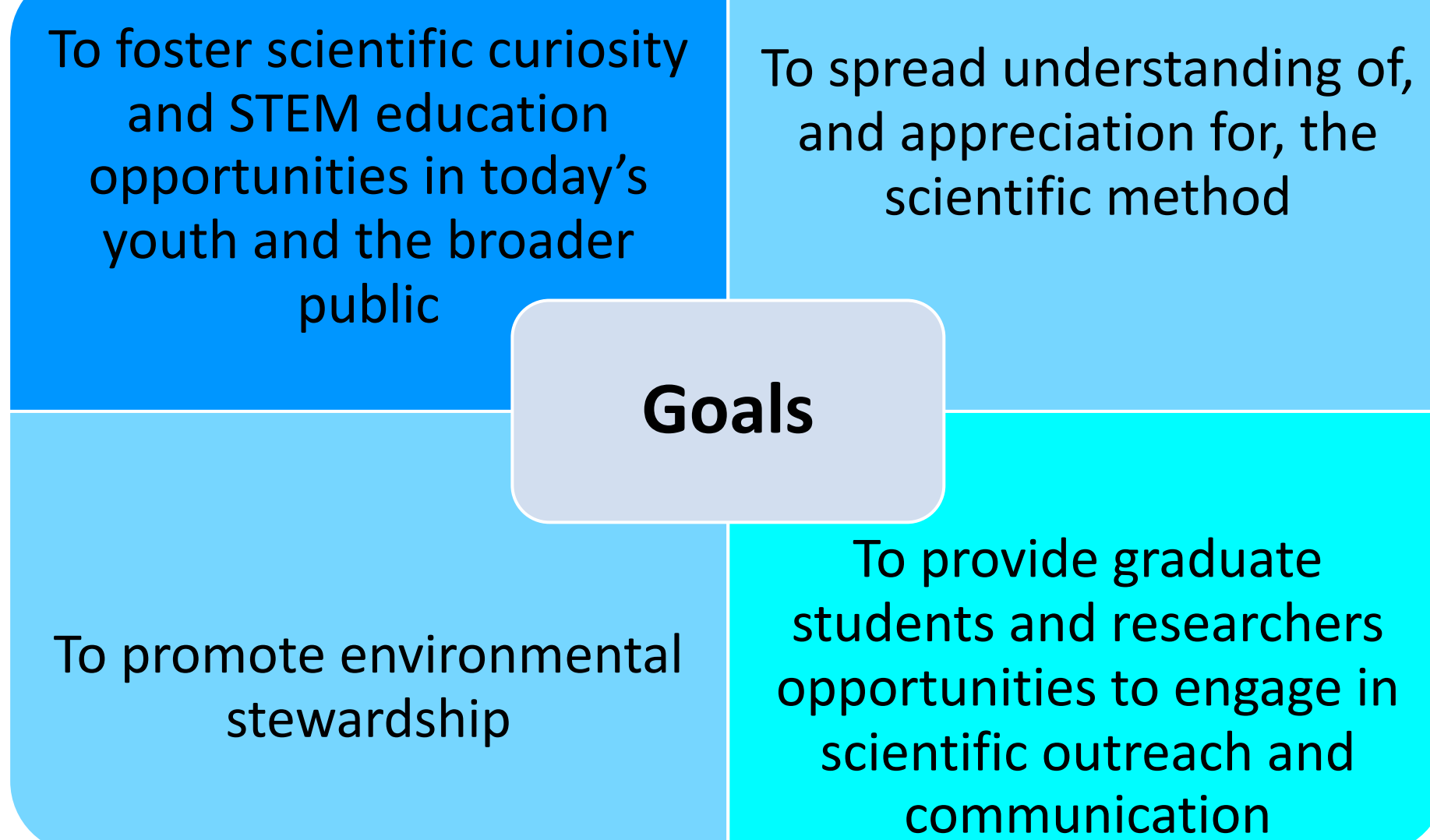
Scripps Community Outreach for Public Education (SCOPE): An example of a thriving, student-led, volunteer-driven, outreach program at a primarily research-focused institution

Shelby Jones-Cervantes, Katherine Nesbit, Wiley Wolfe, Kelli Mullane, Brooke Rasina
Scripps Institution of Oceanography at University of California, San Diego, La Jolla, CA 92093, USA

scope.sio@gmail.com <https://scripps.ucsd.edu/scope>

Overview

Scripps Community Outreach for Public Education (SCOPE) is a tractable model of a thriving, student-led, volunteer-driven outreach program at a primarily research-focused institution. SCOPE started as a grassroots movement dedicated to engendering change through public education. Our unique educational approach of connecting graduate students and researchers directly with the public renews enthusiasm and respect for the environment and the scientific process. Additionally, this model provides an avenue for scientists to share their work, engage broader audiences, and improve their informal science communication skills.



Our operation

SCOPE relies on there to four graduate student coordinators to organize program events. Events are led by our volunteer base, and the program as a whole is entirely volunteer driven. This structure minimizes costs and allows for program funds to be prioritized for scholarships. Our funding is provided through an endowment, and is essential to SCOPE's function because this program is not a student club or formally integrated into the SIO department.



Scholarship

In Fall 2016, thanks to additional donations from the Beyster family, SCOPE developed a scholarship program for teachers at Title 1 schools. The scholarship funds bus fees and/or substitute teacher fees that might otherwise prevent teachers from bring their students on a field trip to SIO. Applications are accepted on a rolling basis, with up to twelve \$500 scholarships offered a year.

Diversity of Volunteer tour leaders

Increasing the diversity of SCOPE's volunteer pool is very important to the coordinating staff and SIO. This year SCOPE volunteers were asked to respond to a voluntary anonymous survey about their demographics. Gender, age, race, etc.

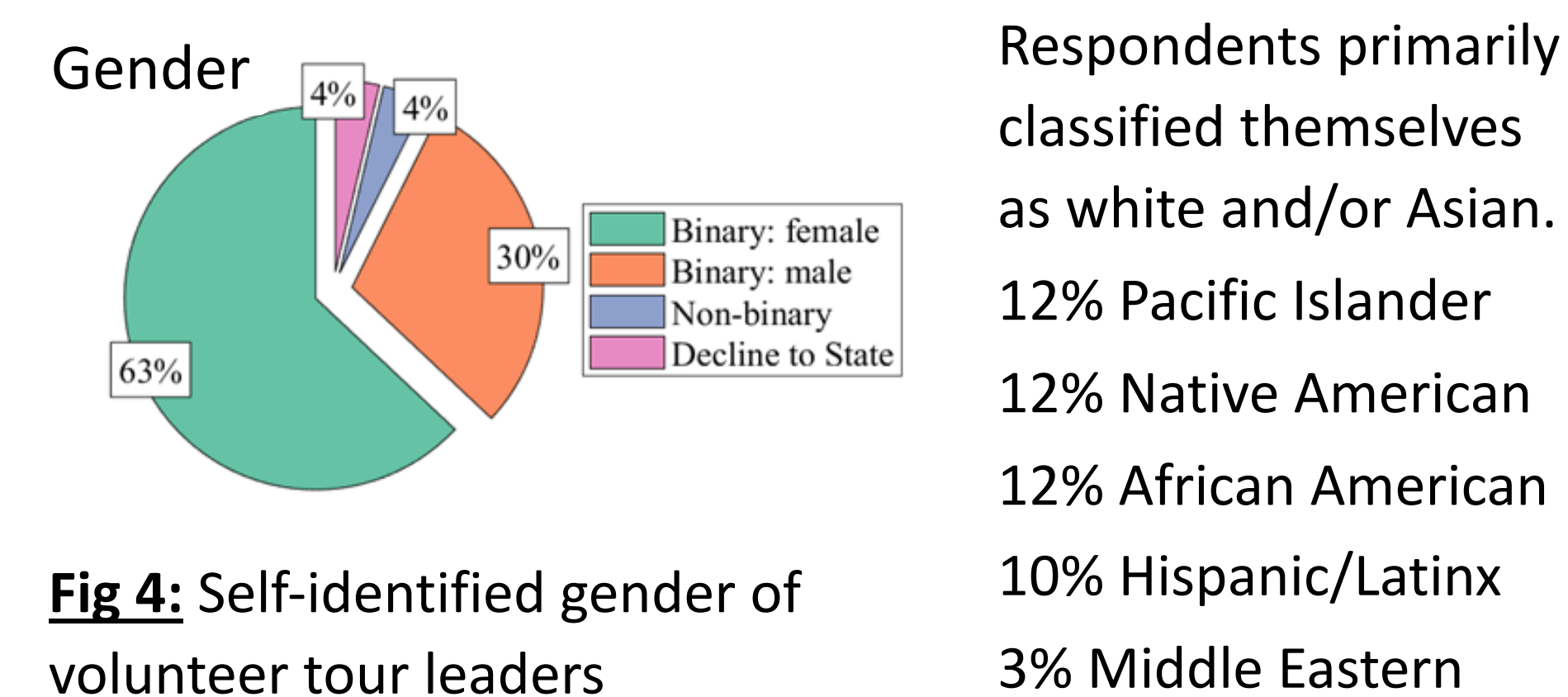


Fig 4: Self-identified gender of volunteer tour leaders

Growth and populations served

- SCOPE coordinated over 100 events in 2017 and in 2018
- Events range from tours of SIO facilities to on- and off-campus presentations and activities
- More than 2,250 people reached in 2017 (Figure 1), primarily K-12 students (Figure 2A)
- Provide tours to the general public (school and community groups) as well as groups hosted by university-affiliated entities (e.g., Birch Aquarium, donors to UCSD/SIO, development and communications offices)

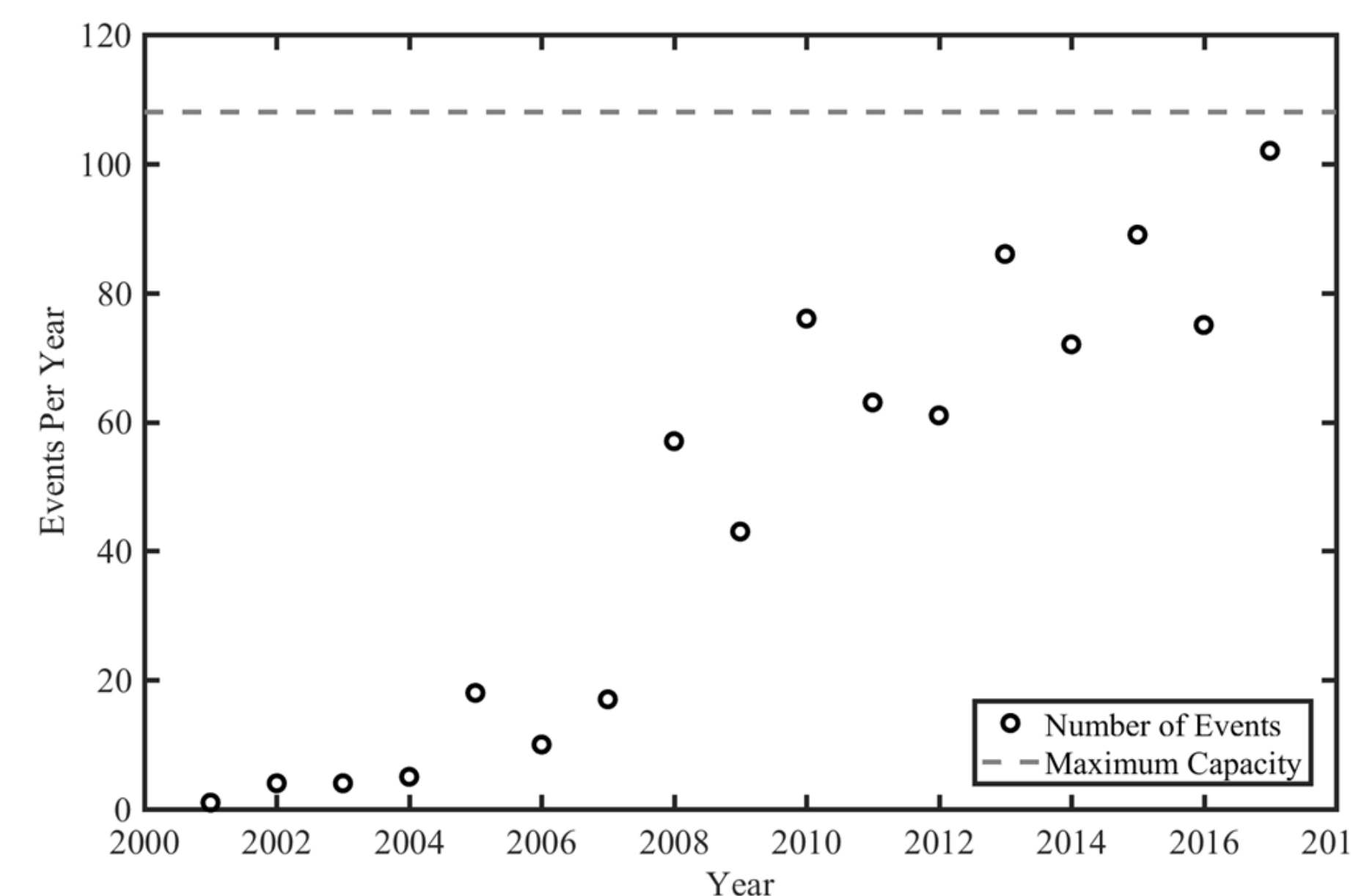


Fig 1: Each year the number of events hosted by SCOPE is limited to 108 events per year. This is calculated from 2-3 tours per week, excluding school holidays and finals weeks.

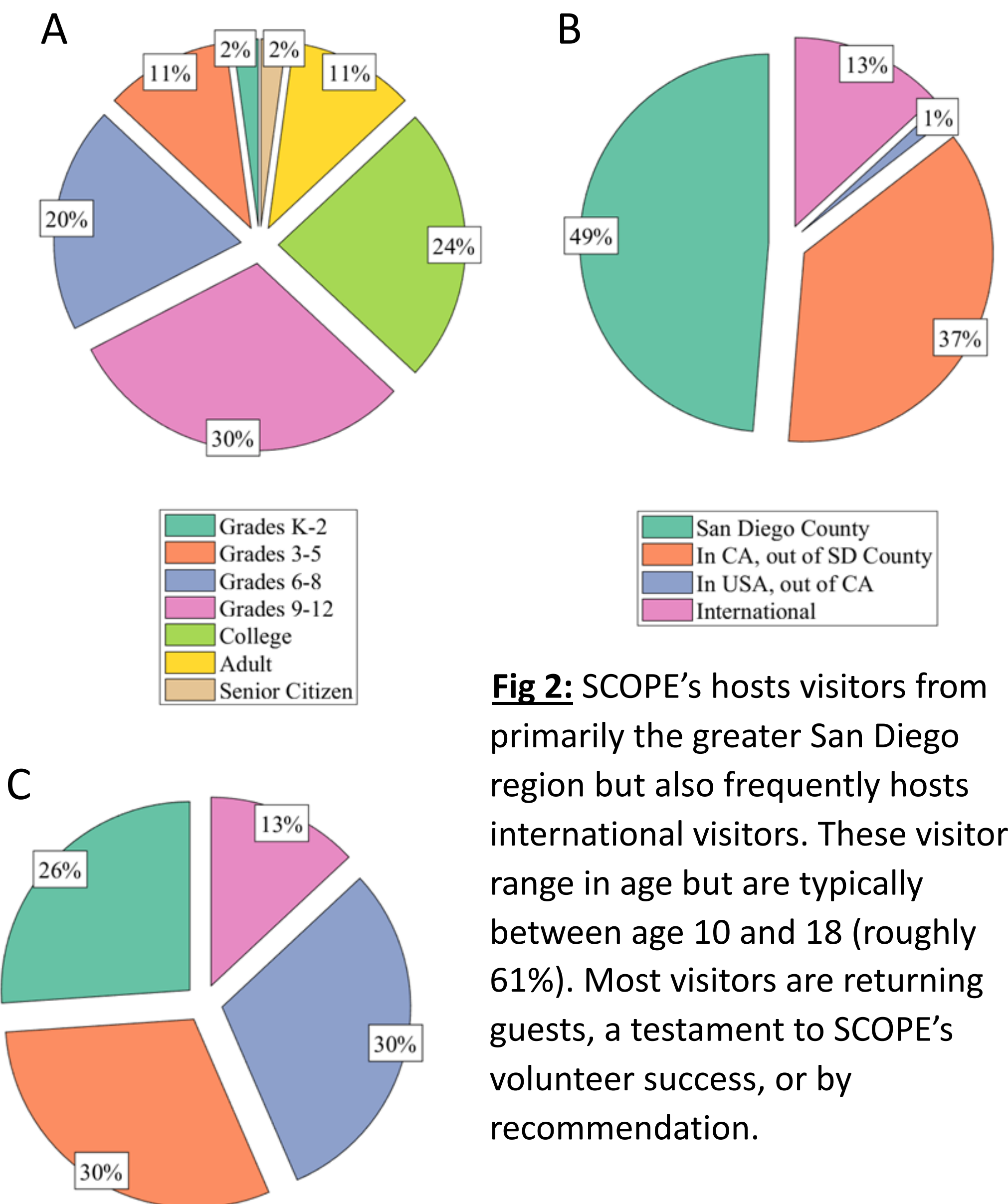
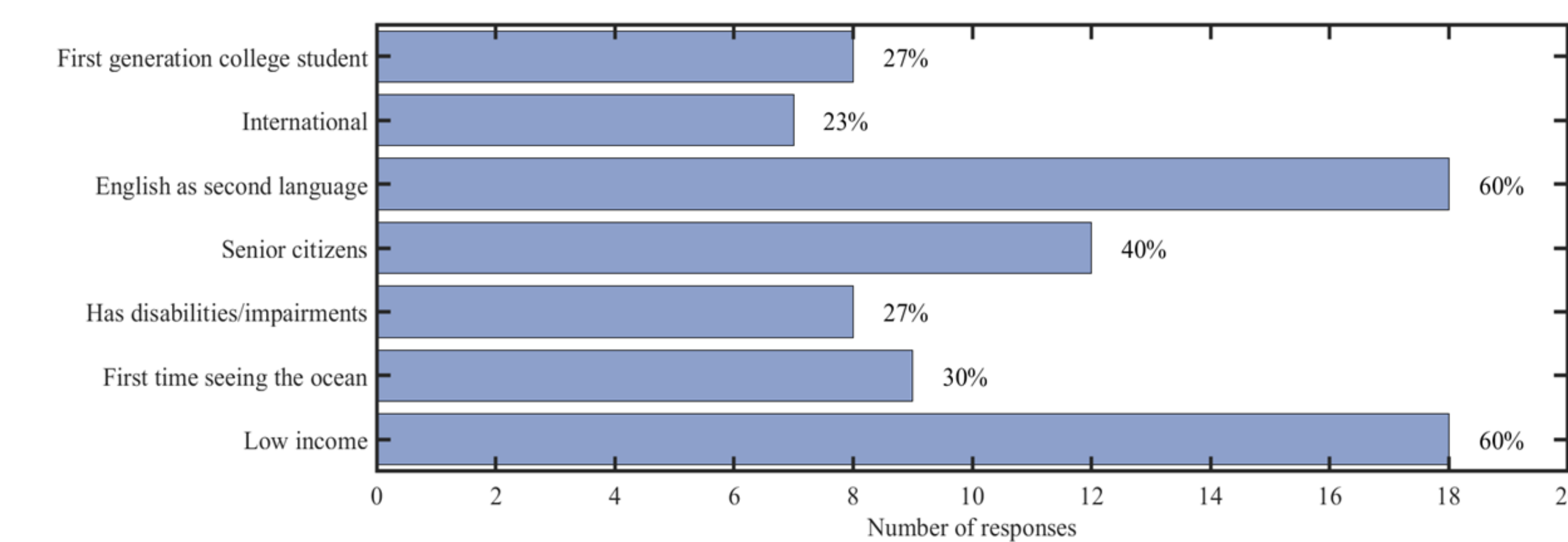


Fig 2: SCOPE's hosts visitors from primarily the greater San Diego region but also frequently hosts international visitors. These visitors range in age but are typically between age 10 and 18 (roughly 61%). Most visitors are returning guests, a testament to SCOPE's volunteer success, or by recommendation.

As part of the application process, applicants (typically teachers) are asked to respond to various group demographic questions with either yes or no. Their responses indicate that SCOPE serves a large variety of populations. Most significantly, 60% of SCOPE's visiting groups are low income and learned English as a secondary language. Surprisingly, 30% of our groups are seeing the ocean for the first time. These students are primarily from the San Diego area, typically living within a half hours drive of the water.



Feedback from visiting groups

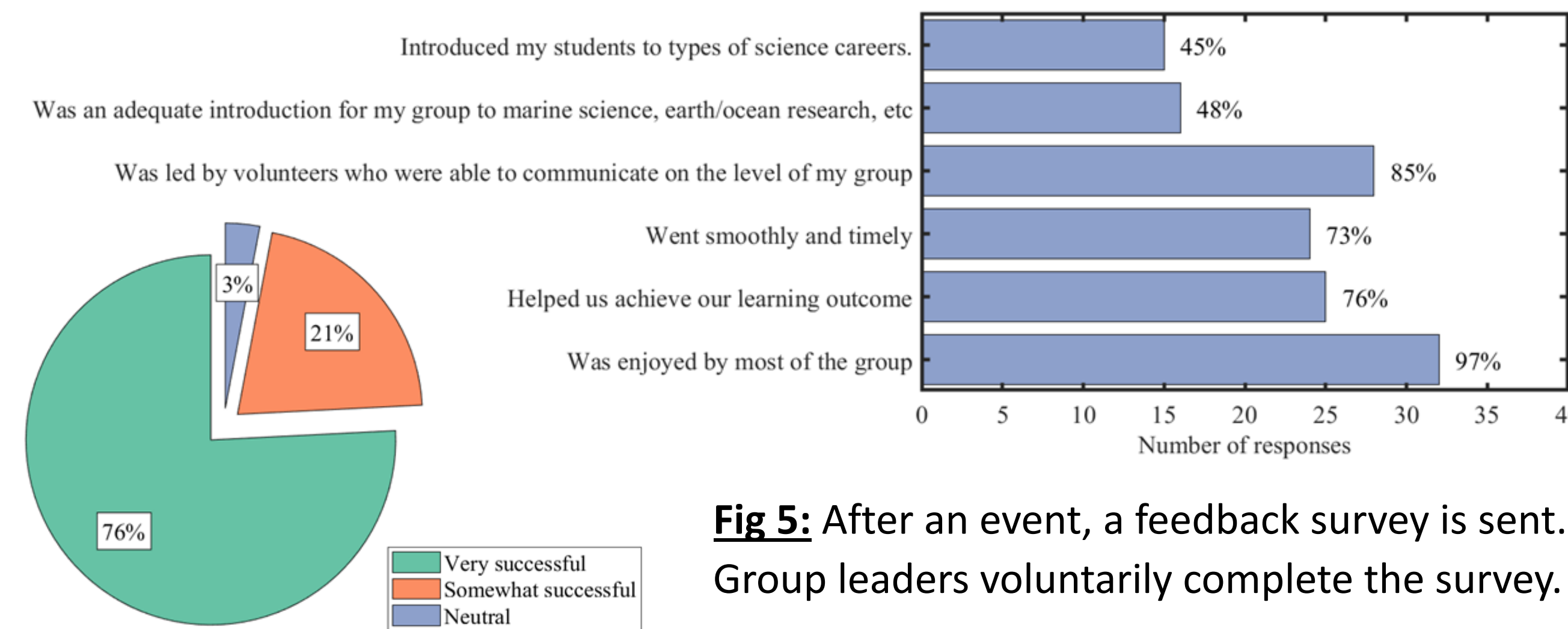


Fig 5: After an event, a feedback survey is sent. Group leaders voluntarily complete the survey.

Acknowledgments

Funding: The Beyster Family
SIO's EDI Coordinator: Keiara Auzenne
Birch Aquarium partner: Cheryl Peach
Collections Managers:
- Charlotte Seid
- Ben Frable
- Linsey Sala
- Alex Hangsterfer
Facilities managers:
- Phil Zerofski
- Christian McDonald
- Maggie Tilley



SCOPE relies on SIO volunteers age 21-60, who give tours of the Scripps Pier, Hubbs Research Aquarium, and local beach geology to the public.