



## MAJOR TAKEAWAYS

### ➔ Significant Gains

Evaluation data demonstrate continuous growth in team members' abilities across skill areas and knowledge domains:

- Statistically meaningful improvement in content knowledge, pedagogical skills, and technological skills
- Increased nuance in descriptions of teaching practices and the benefits and challenges of teaching with SOS

### ➔ Predictable Barriers

Technology and content knowledge appear to be major challenge areas when staff begin training. However, with appropriate support, they also represent the skill areas in which team members show the most rapid gains.

Meanwhile, developing technology and content skills within the context of research-driven pedagogical frameworks seems to help build team confidence and comfort across all three domains of knowledge.

### ➔ Transferable Skills

For both full-time and part-time participants, inquiry-based teaching has stood out as an element of SITI training that could be applied to other AOP work.

Other areas of transfer mentioned by both cohorts include reflective practice, comfort with science content, and expansion or flexibility of individual repertoires (in terms of both content knowledge and techniques).



# INVESTING IN INTERPRETATION

With funding from the Institute of Museum and Library Services, the Aquarium of the Pacific (AOP) has developed a professional development program called Science Interpretation and Technology Integration (SITI).

**SITI's purpose is to train and build staff skills in content, technological, and pedagogical knowledge to support live interpretation with the Science On a Sphere (SOS) platform.** The training consists of a series of workshops and ongoing reflective practice activities that combine peer discussion, lectures and enrichment opportunities, reflection, observation, and hands-on practice within a staff cohort.

Staff who have gone through the program demonstrate...

- Increased understanding of core science content
- Increased ability to explain core science content
- Increased ability to use the SOS to engage audiences in core content

This outcome achievement fits within an overarching strategy of fostering improved education practice throughout the institution (and, by extension, improved educational experiences for guests) by supporting individual staff members' capacity for inquiry-based teaching.



## Measuring Progress

In 2013, staff took a baseline questionnaire about their knowledge and perceptions related to SOS facilitation, as well as about their expectations and goals for professional development. Throughout SITI, participants completed annual questionnaires to document change and to share feedback about the program.

In 2016, participants took a retrospective pre/post questionnaire that invited them to describe the extent of their personal skill development both before and after SITI.

Evaluation data from both the program as a whole and from specific project years demonstrate gains not only across skill areas, but also in staff confidence and comfort.

The findings described here are highlights from a larger evaluation report, produced by the Lifelong Learning Group for the Aquarium of the Pacific in 2016. This project was funded by the Institute of Museum and Library Services.

## Looking Ahead

Following the success of SITI, the team identified major elements of training that they saw as integral to the program. Together, these key activities begin to lay out a blueprint for simplifying the SITI model in ways that will both maintain its effectiveness and allow it to remain sustainable after the funded program:

- Providing resources and structured opportunities to help staff overcome content and technology barriers
- Helping staff build supportive mentoring and peer-learning relationships
- Framing research-driven interpretation strategy as both an individual accountability and a departmental priority

**“I've learned how to better interpret a space...to allow people to make connections, to ask them questions and have them think about their world in different ways, and invite them to ask their own questions.”**

**-Part-Time Staff Participant**



**Lifelong Learning Group**