



NATIONAL
MARINE
AQUARIUM

Working with an external evaluator to assess public engagement impact

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DRIVING MARINE CONSERVATION THROUGH ENGAGEMENT

Who am I?



Marine Biologist

Educator

Project Manager

Evaluator



National Marine Aquarium



- Opened in 1998
 - Charity
-
- Conservation, education & research.
 - Mission “to drive conservation through engagement”.

What evaluation do we do?



At the aquarium, our evaluation programme started with but is not limited to informal and formal learning. We currently evaluate:

- Schools – teachers & pupils for interactive visits, teachers for explorer and outreach visits.
- Hosts – peer evaluation, shows
- Events
- Exhibits – front end, formative & summative evaluation
- The aquarium as a whole via an exit survey terminal
- Sleepovers
- Functions
- As well as many other past evaluations: café, observation study, species ID etc.
- Projects – Conservation through Tourism Award, Community Seagrass Initiative

Conservation through tourism award



Based in Mauritius

Hotels go through a process of training, assessment and change over a 2 year period.

Project working with hotels to minimise impact on coral reefs.



Evaluating the bronze level...



Topic	Target Learning Outcome	Learning Outcome
Coral	Delegate is able to explain what coral is	Coral Learning Outcome 1
	Delegate is able to recognise the different types of coral	Coral Learning Outcome 2
Coral Reef	Delegate is able to explain what a coral reef is	Coral Reef Learning Outcome 1
	Delegate is able to explain how a coral reef is formed by individual coral growth	Coral Reef Learning Outcome 2
	Delegate is able to explain why coral reefs are so important	Coral Reef Learning Outcome 3
Fish & their importance to reefs	Delegate is able to explain what a fish is	Fish Learning Outcome 1
	Delegate is able to describe the different classes of fish	Fish Learning Outcome 2
	Delegate is able to describe the variety of physical shapes that fish can take	Fish Learning Outcome 3
	Delegate is able to indicate the importance of fish to coral reefs	Fish Learning Outcome 4
Other invertebrates	Delegate is able to list some of the other phyla of invertebrates	Other Invertebrates Learning Outcome 1
	Delegate is able to list some common features of invertebrates	Other Invertebrates Learning Outcome 2
	Delegate is able to indicate the importance of invertebrates to the reef ecosystem	Other Invertebrates Learning Outcome 3
Conservation & Threats	Delegate is able to give examples of threats to coral reefs	Conservation & Threats Learning Outcome 1
	Delegate is able to give examples of conservation measures aimed at addressing threats to coral reefs	Conservation & Threats Learning Outcome 2
	Delegate is able to identify short and long term conservation actions for the hotel	Conservation & Threats Learning Outcome 3

Pre & post training questionnaire developed, which included:

- Open-ended qualitative impact evaluation questions e.g. “What comes to mind when you think of a coral reef”?
- Close-ended quantitative question about their demographic characteristics e.g. age, gender, years in formal education.

Post training questionnaire also included feedback items e.g. satisfaction, enjoyment.

Questionnaires...



BRONZE LEVEL PRE-TRAINING SURVEY

Time: _____ AM / PM Date: _____

Please complete the form in either English or French.

1. What is your name? _____	2. What is your gender? <input type="checkbox"/> Male <input type="checkbox"/> Female
3. What is your age? _____ years	4. How many years of formal education have you had? (school, college or university) _____ years
5. What is your first language? _____	6. Do you have any second language (if/yes, please tell us what these are): _____

7. What are you expecting to gain from attending this course?

8. What comes to mind when you think of a coral reef? Please list your thoughts below:

a. _____

b. _____

c. _____

d. _____

e. _____

9. If you can think of an action you could take to help coral reefs, please list below? If you can not think of any actions, tick here.

a. _____

b. _____

c. _____

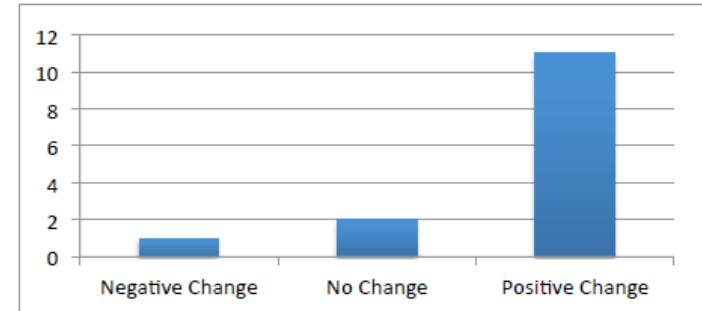
Please turn over to complete the form...

10. Draw a coral reef habitat below, including all the plants and animals that live there. Please put names or labels on everything you draw.

11. Please describe what you draw above and why.

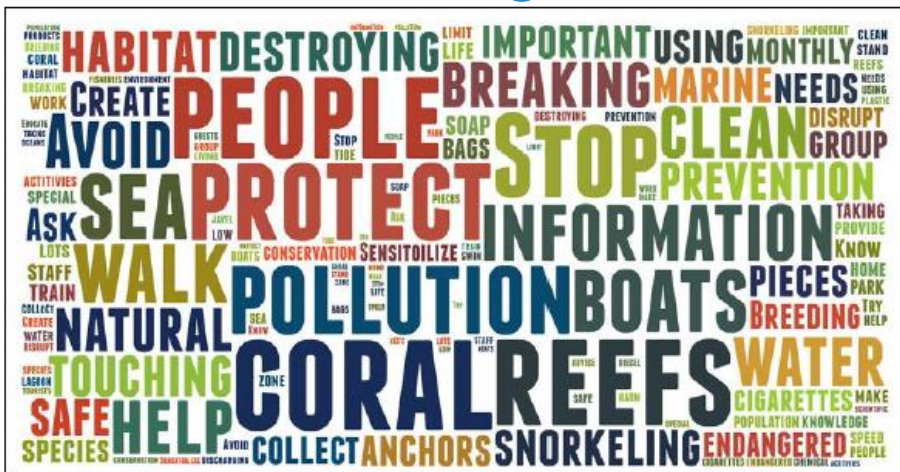
Manual content analysis on the thought listing data regarding “conservation actions” showed:

- Increase in positive ideas of coral reef conservation as shown in the graph.
- Not a far-reaching transformation in actions listed.
- A positive change in how actions are communicated.



Aggregate analysis on the same data comparing pre/post training resulted in these two word clouds. There is a shift from negative to positive responses in the way actions are communicated:

Pre - training



Post - training



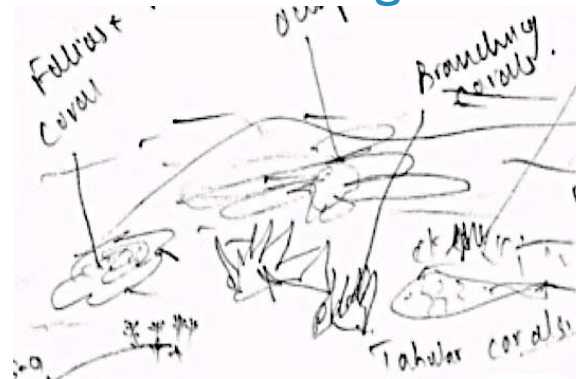
Annotated drawing analysis showed the following:

- Substantial improvement in understanding of different coral types.

Pre - training



Post-training



- Some increases in learning pertaining to fish knowledge but limited to a minority of cases.
- Limited increase in knowledge pertaining to invertebrates – most notable related to plankton.
- Limited evidence of conservation learning.

Community Seagrass Initiative



Citizen science project that is Heritage Lottery Funded. Partners include the MBA, Plymouth University, Cornwall and Dorset Wildlife Trusts and Sealife Centres.



The citizen scientists will be monitoring seagrass beds over a period of 3 years. They will look at nutrient and phytoplankton levels, seagrass health, species richness and exploring unknown seagrass beds.

Evaluating the CSI



Longitudinal study scuba divers over their interaction period with the project using Qualia Analytics – programme imbedded on CSI website.

3 questionnaires with a mix of

- Open-ended qualitative impact evaluation questions regarding the marine environment e.g. “What comes to mind when you think of seagrass”?, as well as confidence in skills over a 6 month period..
- Close-ended quantitative question about their demographic characteristics e.g. age, gender, ethnicity.

A screenshot of a web browser displaying the "Volunteer Registration Form" on the CSI website. The browser's address bar shows "http://www.csi-seagrass.co.uk/community/". The website's navigation menu includes "Home", "About", "Map", "Seabed Explorer", "Education", "Get Involved", "Events", and "Contact Us". The "Get Involved" section is highlighted. The form is titled "GET INVOLVED" and "Volunteer Registration Form". It contains a section for "Your Contact Information" with input fields for "First name", "Last name", "Email", and "Contact number". The Windows taskbar at the bottom shows the time as 16:16 on 02-11-2015.

MENU

Dashboard

Survey Analytics

CSI Diver Experience Survey

Registration

Preliminary Survey

Demographics

Comparable

Visitors

Export Data

Dashboard / Dashboard

2015-09-21 - 2015-11-02

Set

CSI Diver Experience Survey Survey statistics

46

Total Enrollment

46

Total Survey Submissions

100%

Survey Completion Rate

3 months / 1 week

Time passed since survey was created / last updated

1 hour ago

Last Survey Completed

0

Partially completed initial survey

When to hire an external evaluator?



- You don't have time or the staff to do an evaluation properly.
- When you are personally involved in a project and need an impartial party that can be objective.
- When you need expert help in designing an evaluation strategy or in analysing data. The scope of the project may require outside expertise.

Advantages



An external evaluator may:

- Be able to provide an objective view of your project, eliminating perceived bias.
- Be perceived as lending credibility to your project for funders or stakeholders.
- Possess skills or knowledge that an internal evaluator may not. They may also have exposure to a broader range of methods that would be useful to incorporate.
- Have access to external resources that may be helpful to the project.

An internal evaluator working with an external evaluator can:

- Provide an “insider” perspective on staff or community issues as well as resources associated with the project and supplement the external evaluator in this way.
- Generate support for the external evaluator involvement and bring a team of people together for the benefit of the project.

Things to keep in mind



- **COST** – external evaluation consultants can be more costly.
- **TIME** – an internal evaluator has immediate access to the information as it is analysed so can begin informing project decisions. It may be difficult to manage an evaluation conducted by an external evaluator as they may have other projects running simultaneously. **HOWEVER...**internal evaluations involve staff time and may draw on limited personnel resources.
- **EXPERTISE** – it may be difficult to find evaluators who have experience in your field or project.

Top tips working with external evaluators...



- Do your research!! Find out what their experience/background is, check references, look at their past work - have they worked on similar projects?
- If they seem suitable, get in touch early – good consultants will be busy and will need a good lead-time to fit your evaluation into their schedule.
- Discuss and agree the particulars:
 - What is the **total** cost? Can you afford it?
 - What specific services will the evaluator provide?
 - What is the time-line of the evaluation – can the evaluator deliver in the time scale you need them to?
- How will you communicate with the evaluator – email, phone, in-person – and how often?
- Will they be available if unexpected issues arise?

Any questions?