

# Inspiring Australia Evaluation Resources

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**An Australian Government Initiative**



## Contents

What resources are included? .....	1
Aims .....	1
Outcomes .....	2
Collecting evaluation responses .....	3
Paper-based surveys .....	3
Online surveys.....	3
Observations .....	4
Bean poll .....	4
Suggested event-specific questions.....	6
Frequently Asked Questions .....	7
Contact details .....	8
References .....	9

## An Introduction to Evaluation

Welcome to the Inspiring Australia Evaluation Resources. These are designed to help event organisers develop an effective and efficient evaluation strategy. Many events will be unique, communicating diverse topics to different audiences in a variety of ways. Evaluation needs also vary.

These resources include generic templates for online and paper-based surveys that will be appropriate for a variety of events and target audiences. These surveys represent the middle ground, aimed at maximising feedback and comparability across the range of events. The resources also include suggestions for other methods of more time-consuming evaluation for those who want greater depth or simpler evaluation which sacrifices depth in order to achieve a higher response rate.

This document includes some basic advice on event evaluation and a set of FAQs. The resources will continue to evolve and we welcome feedback and suggestions.

### What resources are included?

The Resources include a series of templates for online and paper-based surveys, designed to be used for a variety of event types and audiences. There is a set of multiple-choice questions that form the basis of each survey template. These common questions aim to be suitable for all types of events, and will help to evaluate science engagement across the country. Although we ask that you not change the common questions, they can be personalised to some degree by indicating the topic of the event. For example, “This experience has made me want to find out more about *science*” could become “This experience has made me want to find out more about *astronomy*.”

The survey is limited to two sides of one A4 page, as a longer survey is likely to put people off. There is room for you to add up to four open-ended questions of your choice to the survey. We have compiled a [list of suggested questions](#) to suit different event types and objectives. If you want to ask a question that is not on the list, you can of course do so. However, we ask that you limit this, to enable as much cross-program comparison as possible. If you want to include your own question, we are happy to discuss question development and provide feedback to ensure that the information collected is as useful to you as possible. Our contact details are included below.

It can be difficult to decide which questions to ask and how best to collect responses to evaluate your event. While many event organisers are knowledgeable evaluators, others may be less experienced. To assist, we outline a simple process which will help decide which questions to ask and how to ask them.

### Aims

It is essential to consider the event or program aims when you are planning your evaluation. Thinking about what you are trying to achieve is necessary to work out how to assess whether or not you have achieved it.

Inspiring Australia has four broad aims. They are to:

- inspire target groups and get them to value scientific endeavour
- attract increasing national and international interest in science
- critically engage target groups with key scientific issues
- encourage young people to pursue scientific studies/careers.

These aims cover a range of more specific objectives, such as informing people about a particular topic or equipping people with critical thinking skills. Effective evaluation should consider the aims in

terms of delivery of specific and targeted outcomes. The [Framework for Evaluating Impacts of Informal Science Education Projects](#) contains a chapter describing use of logic models to explicitly state and visually represent aims, objectives and outcomes. This framework was supported by the USA's National Science Foundation with the aim of advancing the field of informal science education. Case studies and reports can be obtained from the Center for Advancement of Informal Science Education: <http://caise.insci.org/>.

### **Outcomes**

Five Generic Learning Outcomes (GLO) from the [Inspiring Learning Framework](#), have been developed by the Museums, Libraries and Archives Council in the UK, to describe the benefits of attending museums, libraries and archives. The GLOs and the National Science Foundation supported *Framework for Evaluating Impacts of Informal Science Education Projects* have informed development of the Inspiring Australia Evaluation Resources. The GLOs are:

- Enjoyment, inspiration, creativity
- Attitudes and values
- Skills
- Knowledge and understanding
- Activity, behaviour and progression.

Common questions in the survey templates have been chosen to cover all five GLOs. A [list](#) of suggested optional questions is provided and related back to the GLOs.

It is useful to note down the desired outcomes of your event and read through the list of optional questions. Which of these questions might be most useful to get information about the specific objectives and outcomes of your event?

## Collecting evaluation responses

There are many different ways to collect evaluation responses. What you choose to do will depend very much upon your event and your audience. Some of the options for collecting evaluation responses are discussed below, including:

- [Paper-based surveys](#)
- [Online surveys](#)
- [Observations](#)
- [Bean poll](#)

As different methods have different strengths and weaknesses, it may be appropriate to collect responses using multiple methods, depending on available resources. Remember that once responses are collected, they still need to be analysed or else you have wasted your time and that of your attendees.

### ***Paper-based surveys***

Paper-based surveys are arguably one of the easiest ways to evaluate an event. Five survey templates are provided for evaluation of events.

- The ***Default*** survey is ready to use if you do not have time or need to alter questions. Just print it and go.
- There are two ***General audience*** surveys for use at events with participants of all ages. One of these includes a question on how participants found out about the event, if you wish to find out which publicity strategy was most effective.
- The ***Primary school*** survey is designed for events held at primary schools or exclusively for primary school students. The language has been simplified for younger students.
- The ***High school*** survey has been tailored for use at events held at high schools or exclusively for high school students.

Depending on the structure of your event, you could place surveys on tables, include them in participant packs, or hand them out at the end of the event. You may wish to have some clipboards and pens, and a collection box on hand to facilitate completion of the survey. Some event organisers choose to offer a small incentive, such as a lolly, sticker or balloon, for survey completion.

### ***Online surveys***

You may wish to use an online survey to evaluate your event.

Using an online survey removes the need for data entry before analysis. However, online surveys tend to have lower response rates than surveys delivered at the time of the event. This can be because people forget about the survey after leaving the event or because completing an online survey requires extra action compared to completing a survey at an event. Response rate can be increased by providing tablet computers at the event, or making the survey smart-phone-friendly, so that people can complete the survey at the event.

Some events have an online registration process. In these cases, you could collect some baseline data before people attend the event. For example, you could ask registrants to rate their knowledge on a particular topic, and compare the responses to those given after the event.

## **Observations**

Observations can provide rich insight into your audience. For them to be most useful as a component of your evaluation, observations should be methodically collected. They may include things like:

- Basic demographic observations – who is there?
- Behavioural observations – what are they doing?
  - Time spent at different parts of the event
  - Actions at different parts of the event
  - Facial expressions

Observations can be difficult to collect as you need to have at least one person whose job it is to observe attendees' behaviour at the event. You may use 'sneaky friends' who go up and have a chat to people to find out what they are thinking (with thanks for terminology to Carly Siebentritt from CSIRO Education, Victoria).

In order for observations to be most useful, they need to be collected systematically and rigorously. Otherwise they may not really tell you how the audience is responding to the event. Even so, observations will be subjective and this is an inherent limitation. Without knowing a person, it can be difficult to interpret actions and facial expressions. For example, how can you tell whether a person on their phone is bored and checking Facebook, or tweeting about the really interesting thing they just learned, or texting a friend to come and join them at a really fun event?

## **Bean poll**

At many events, it can be difficult or even inappropriate to ask all attendees to fill in evaluation forms. Sometimes events are free-flowing, with people coming and going as they please; at others, evaluation forms could be distracting. At events such as these, the people who fill in the evaluation forms are often those who feel strongly about the event and/or topic, those who have something to say. While this can provide useful information to event organisers, the evaluation is unlikely to be representative of the entire audience.

At these types of events, a better method might be to conduct a *bean poll*, a simple evaluation to get a snapshot of attendee's responses to the event, using one question. Attendees are asked to 'vote' for their response using voting chips, stamps, stickers or a star-rating system. This method of evaluation is easy to set up, and both quick and easy for attendees to complete. All attendees should be asked to take part in this evaluation. Depth is sacrificed for a greater response rate.




A *bean poll* can be carried out on its own or in combination with a survey, depending on the event and audience.

## How to do it

There are a few ways to set this up, depending on your event and what you have available.

- Set up jars or containers labelled clearly with each option – you might want to colour-code these. Ask attendees to put a voting chip (e.g. small plastic chip, bottle cap) in the jar which represents their answer.
- Display large sheets of paper or card – one for each answer. Ask attendees to put a sticker, stamp, or smiley face on the sheet which represents their answer.
- Have smiley faces printed on strips of paper or business cards. Ask attendees to circle the one which represents their answer.

Possible questions and responses

- What did you think of today's event/activity?
  - Didn't like it
  - It was ok
  - Loved it
- Were you inspired today?
  - Not at all
  - A little
  - A lot
- Did you learn something new today?
  - No, nothing
  - I learned a little
  - I learned a lot
- Did [this event] affect the way you think about [the topic]??
  - Not at all
  - A little
  - A lot
- How do you feel about [the topic/event]?  
      

## Suggested event-specific questions

Below are optional questions you may wish to use to evaluate your event. The questions are listed according to the Generic Learning Outcome under which they fall.

<b>Enjoyment, inspiration, creativity</b>
What was the most interesting thing you learned today? What did you like best about this event? Was there anything about this event you think could be improved? If so, what? Is there anything else you would like to see at future events like this? If so, what? Was there anything you think should be removed from this event? If so, what and why? Were there adequate facilities (e.g. food, toilets) for this event? If not, what could be improved? How did attending this event make you feel? What could you do with this information/technique? What are the possibilities for using this kind of science?
<b>Attitudes and values</b>
What interests you about this topic? Do you see this topic as relevant to your everyday life? Why or why not? What does science mean to you? Did this event change how you think about the topic? If so, how? What, if anything, did you experience that made you change your mind about something? Was there anything that made you feel strongly about the topic?
<b>Knowledge and understanding</b>
What have you learned today that you didn't know before? Was this an effective way to learn about this topic? Why or why not? Is there anything else you would like to know about this topic? If so, what else would you like to know? What do you think was the presenter's key message? What were you expecting to learn today?
<b>Skills</b>
What new skills did you learn today? Was this an effective way to learn these skills? Why or why not? Did you do anything new today? If so, what was it? Did you learn how to do anything new today? If so, what was it? How did this event change how you might go about [skill]?
<b>Activity, behaviour and progression</b>
What made you decide to attend today's event? Did you plan to attend this event? If so, why? Are you going to use what you learned today? If so, how? Are you going to change your behaviour based on what you learned today? If so, how? If you were telling someone else about today's event, what would you say? Did this event live up to your expectations? Why or why not? What were your expectations of this event? Were your expectations met?



## Frequently Asked Questions

### *How should I evaluate my event?*

How you choose to evaluate your event really depends on the type of event you are running and the audience you are targeting. Surveys are a relatively simple evaluation method that can tell you a lot, so many people choose to use surveys. However, you can also conduct observations of your audience, have staff ask attendees questions, or conduct a simple *bean poll*. Different evaluation methods are discussed in more detail in the "[Collecting responses](#)" section.

### *What kind of questions should I ask?*

The questions you should ask depend on your event objectives. What are you trying to achieve with your event? What do you want people to do as a result of attending? The development of this Resource Kit was informed by the *Inspiring Learning Framework*, which proposes five Generic Learning Outcomes (GLOs) and by Friedman and colleagues' Framework for Evaluating Impacts of Informal Science Education Projects. The GLOs are reflected in the common questions in each survey template and the suggested open-ended questions. It is anticipated that at least one of these outcomes will be applicable to most science engagement events.

### *How many responses do I need?*

There is no magic number to tell you how many responses to collect. The ideal number of responses depends on the size of your audience, the information you are collecting and the level of variation you expect in responses. For example, if you expect that responses are going to be highly variable, more responses are needed for the sample to be representative of the whole audience.

### *Why is there an "other" option for gender on the survey templates? My event is for school children - how do I explain this to them?*

The "other" option is provided in acknowledgement and respect of the fact that not everyone identifies with their biological gender, or indeed as either male or female.

In our experience of working with school children, sometimes children might giggle when they notice the "other" option, as this is not an idea they may have encountered before. In these cases, it is often helpful to make a simple, respectful statement, such as the following:

*"Ok everyone, I know that for most people it is easy to say which gender you are, but for some people it is not that simple. This is not a joke; it is a perfectly valid response, and I ask that you respect that."*

In our experience, school children have responded well to this statement and continued on to the rest of the survey without further comment.

## References

Friedman, A. (Ed.). (2008). Framework for Evaluating Impacts of Informal Science Education Projects [On-line]. Retrieved from [http://insci.org/resources/Eval\\_Framework.pdf](http://insci.org/resources/Eval_Framework.pdf)

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