These guidelines have been developed by the Wellcome Trust in order to help grant holders plan and implement the evaluation of their projects. The guidelines are not prescriptive, and we do not wish grant holders to apply a uniform strategy across all funded Engaging Science activities. Rather, the Trust’s objective is to offer advice about how to develop an effective evaluation strategy. We are keen to identify good practice in terms of managing public engagement projects and to enable grant holders to share lessons learnt from their experiences. Once this round of projects is nearing completion you will be invited to participate in an event which will allow people to discuss their projects and outcomes.

It is important that people are honest when evaluating their projects. The Trust wishes to fund innovative projects and in doing so some projects will not be as successful as others. If projects have not been as successful as hoped the reasons why are valuable for future learning.
WHAT IS EVALUATION?

In terms of Engaging Science projects, there are two key aspects of evaluation:

- making judgements, based on proof or evidence about the value and quality of the project (proving);
- the process of learning from a project, to improve performance or outcomes in the future (improving).

WHY EVALUATE?

Well-planned evaluation should be useful both for the project team, and other audiences or stakeholders involved with particular projects, for at least three reasons:

- Learning from past work should help people to develop more effective projects in the future;
- Evaluation of projects provides evidence that the project achieved a certain end or did what it was supposed to do;
- In the area of public engagement with science, the ability to look at projects critically can contribute to the development of the field in general.

DEVELOPING AN EVALUATION STRATEGY

There is no one best way of evaluating a project. In this document, you are invited to think about various aspects of your work that might shape the kind of evaluation that you do; but it is important to stress that the work funded by the Wellcome Trust spans a diverse set of subject areas, and there is no simple recipe for evaluation that can be used every time.

We have provided a general guide to the issues that you may have to consider, and some of the terms you might come across. It is for you to think about your own work, its objectives, and what it seeks to achieve, in building an approach that will provide evidence (where appropriate), and inform the future development of your work in this area.

In thinking about evaluation, the core question for you to consider is: How will you know whether the project has been successful? (In terms of meeting your objectives, or creating a particular effect.)

This focus on assessing outcomes or impacts at the end of a project or activity is sometimes referred to as summative evaluation.

An example of summative evaluation: A two-day workshop designed for health workers is evaluated at the end of the workshop, using a short self-completion questionnaire. The course convenor monitors attendees’ satisfaction with the course content and delivery, and passes these figures, along with figures on attendance and demand, to the project sponsors.

This kind of immediate evaluation of an activity or an event will be very familiar to people working on public engagement projects.

Well before final outcomes are relevant, most people have to manage their projects from the initial idea to the final vision over a period of time. To help guide development, you may want to explore or pilot your approaches. Evaluation carried out in these earlier stages is sometimes referred to as formative evaluation, and may be based on views gathered from a range of audiences, including the target audience, those affected by the results, and the project team themselves.
Although there is no single best way to conduct evaluation, there are some guiding principles. In order to be a useful process, project evaluation should ideally:

- be considered at the start of a project
- be in place during the lifetime of a project
- be flexible, capable of adapting to changes in the project
- meet the needs of the project team and those of external stakeholders
- match the objectives and audiences for the project

**A MODEL OF EVALUATION**

How does evaluation fit with the task of developing a project from beginning to end? The model shown overleaf may be helpful. We have mapped a project’s development from general selection of a theme, through to final outcome. The model focuses on four simplified stages in the life of a single project or activity:

- consideration of themes
- initial plan
- event or project implementation
- outcome or follow-up

At each stage, we have considered **internal aspects** of the project (for example, you and your immediate team, your thoughts and actions) and **external aspects** (dealing with audiences, stakeholders, funders and other bodies outside the project team).

**Narrowing the theme**

You may be well past this stage already. However, it is worth sounding out various groups, looking at past work, so that you are clear on what has and has not been done before, and how the various audiences react to your proposed themes and objectives. At the very least, this will stop you reinventing the wheel; at best, it can help sharpen the focus of your planned project.

**Initial plan**

Goal-setting here may be formal and detailed or more broad-brush, but it is essentially about what will be done, with what audience, with what end in mind. In the case of projects which have gone through many iterations, this stage may well use feedback and evaluation of previous work by the project team and other stakeholder groups, to determine the most appropriate goals for the current project.

For Engaging Science applicants, this stage of the plan will basically correspond to your application for funding. You will want to think about ways that you can determine whether your objectives have been met. Some people like to do this in great detail, specifying precise criteria for success. In other cases, it is difficult or unwise to determine the outcomes quite so precisely in advance.

For many projects, there is an extended period of planning after the project is given the go-ahead, when objectives or priorities change. It is important to update your evaluation plans in line with these changes; this is where it can be useful to create some kind of process where you and your group look at your objectives and your progress at various stages along the way. This could be a formal review or simply an occasional conversation. The important things are to give yourselves the opportunity for reflection as you go and ensure that you have the capacity to act on this reflection.

**IMPLEMENTATION OF THE EVENT OR PROJECT**
For many Engaging Science projects, the main activity is a specific event or programme, and this is the obvious focus for evaluation of the project. (Not all projects are like this - you may need to adapt these ideas for use in your own setting.)

In evaluating events, whether one-off or part of an extended programme, there are external and internal aspects to consider.

**Internally**, there is the individual or team’s judgement about the event: how satisfied they are with their efforts, how well the internal processes worked, and whether the event or project did what everyone hoped it would do. Effective formative evaluation can help to back up the organiser’s “gut feel”. Simple techniques such as keeping a notebook and recording problems, successes and important things learnt can make this a systematic process.

**Externally**, most projects will use formal or informal feedback from different groups to judge success. These aspects may include feedback from:

- the audience itself
  - did enough people come/did it sell out?
  - did the audience understand it?
  - did they enjoy/appreciate the event
  - did the event create the desired cognitive/emotional effects?

- peer group
  - what was the reaction from respected sources?
  - was this seen as a good project?

- media coverage and review
  - was the event covered in relevant press and publication?
  - was it reviewed favourably?
OUTCOMES

In many cases, the immediate effects – audience numbers, appreciation, opinions – are all that are important as outcomes, and aspects of these are covered above. In other cases, you may want to look at effects on attitudes, or on behaviour, over a longer period of time.

FEEDBACK

You may want to feed results back to interested parties, funders, policy makers and other external bodies. However, we have focused on the internal aspects of feedback, because we feel that the primary value of incorporating good evaluation is in providing you with information you can use to improve your own professional practice (as communicator, educator, academic, or artist). Some of the outcomes will be of value to funders like the Wellcome Trust, but first and foremost the process should be made relevant and valuable to you.

WHAT TO EVALUATE

Progress against objectives

Using this approach, you set out a range of objectives for the project at the start, and measure success at the end of the project by the degree to which you met the original objectives.

This can be a simple and powerful way of examining your project, because it looks at what was intended, and is not specific to any particular method.

For example: The objectives of Project X are: to run 4 well-attended evening events for adults; to gain media coverage in the local papers; to run a highly interactive event which participants find enjoyable and challenging.

Progress in relation to these objectives would be fairly straightforward to measure.

In setting objectives, look at them carefully, to decide the kind of criteria that you might use to decide whether or not the event was successful. This might lead you to reconsider your objectives or project plan.

A caveat: Evaluation focused on objectives usually takes place right at the end of the project. However, this end-of-event approach can discourage project managers from critically assessing the objectives themselves. It is very common for original objectives to be refined or even superseded during the life of a project. Evaluation by objectives can sometimes create a level of rigidity that is unhelpful to the project.

Impact, success, outcomes

You may want to know very generally how successful your project was, or you may have specific criteria against which to measure progress.

Impact refers to the effect of an event, activity or programme on its intended audience and others. The effect you are looking at may be quite short-term, as in the appreciation of a play, or it may be more long term, e.g. the effect of biology teaching on pupils’ desire to study biology at a higher level.
In the main, you are likely to be concerned with short term impacts, related to attitudes or opinions. Establishing the impact of an exercise on longer term behaviour change is much more difficult, and in this area you are likely to need professional or external help.

It is often important to people that their project is successful. “Success” is a very vague term, and the definition of project success may differ quite radically from one project to another.

In the case of a research-based project, success may be defined principally in terms of the researcher’s own interests e.g. number of publications in quality refereed journals, capability to draw further funding and so on. In the case of an education project, it may be quite specifically related to certain fixed outcomes in terms of student performance or understanding of certain terms.

Your own satisfaction with the outcome

The other aspect that is important for every project is your own or your team’s own assessment of what you have achieved. This can be very important: for many projects it is as important to run a project well as a team as it is to achieve goals with the external audience. The excitement or buzz from running events is important and rewarding. When it goes well, give yourselves a pat on the back.

At the same time, there are some dangers in subjectivity: you can become so close to a project that you find it difficult to identify or acknowledge aspects that need improving. It is important to check that the audience or stakeholder perceptions of the project and its outcomes match. As we have said elsewhere, it is worth cultivating a project process from the beginning that allows for critical commentary on objectives and process.

EVALUATION METHODS

The approach used to evaluate a project will depend on the nature of the project and its objectives. There are no absolute rules here: your methods, broadly speaking, should be in line with what you are trying to find out. Measuring impact will typically be achieved using quantitative questions; assessing the strengths and weaknesses of an intervention are likely to involve gathering open-ended, more qualitative information. You may well need to use both.

Qualitative methods

Qualitative approaches help you understand ‘why’ rather than ‘how many’. As such, they are invaluable for understanding a complex situation or developing an initial understanding of an area prior to developing a structured questionnaire.

Qualitative methods, being open-ended, also have the value of making your audience feel involved and consulted. It is frustrating to complete a questionnaire that does not give you the opportunity to give an unscripted response.

Methods include:

- open-ended questions on questionnaires
- personal interviews
- focus group discussions.
- observation
- comment boards, diaries, visitor books, etc.

The most commonly used qualitative method is the open-ended question on a questionnaire which allows respondents to talk about their thoughts, opinions and feelings in their own words e.g. what did you enjoy about the event? These are simple to use and often extremely helpful. You may also want to consider more extended qualitative approaches such as one-to-one interviews or focus groups; these are particularly suited to in-depth or exploratory studies.

Pictures can be worth a thousand words, so consider whether or not photographs or video will help to capture behavioural feedback. You might need to be aware that some people “perform” for cameras, whilst others may be intimidated, you should seek permission to take photographs or video and limit their use to the functions for which you have sought permission.
Quantitative methods

Quantitative methods are concerned with measuring ‘how many’ or ‘to what extent’, and rely on statistical theory to judge significance of results or generalise findings to a broader population.

If you want to measure change in behaviour as a result of your intervention, then you will usually need to do a baseline survey, and repeat it later.

Simple self-completion questionnaires form the backbone of most project evaluation. However, self-completion methods can result in very low proportions of responses, or biases in the response (e.g. only those who were very happy or very unhappy respond).

If the project warrants it, you may want to consider using personal interview methods (face-to-face or by telephone). These do not depend so much on individual motivation to complete a survey. In addition, most studies like this actively seek to recruit a certain sample profile, enabling you to use inferential statistics to generalise findings to a wider population. If you need this approach then you may want to consider contracting–out all or some of the evaluation. See the resources appended for more information.

CONFIDENTIALLY/ DATA PROTECTION

You must take all reasonable steps to make sure that the respondent is not adversely affected by taking part in evaluation. You must keep their responses confidential, unless you have their permission, and you must not do anything with their responses that you did not inform them about at the time. You may need to take particular care with children and teenagers, as permission needs to be granted from a parent or responsible adult, such as a teacher for interviews with children aged under 16.

There are two useful sources of information: the Data Protection website, and the Market Research Society (MRS), which has various codes of conduct relating to data protection and confidentiality issues.

For the Data Protection Commissioner:  [www.dataprotection.gov.uk](http://www.dataprotection.gov.uk)

For market research guidelines: [http://www.mrs.org.uk/standards/dp.htm](http://www.mrs.org.uk/standards/dp.htm)

WHO SHOULD EVALUATE?

In most cases, the project leader or project team is best placed to evaluate their own projects. If the project is sufficiently large or complex, you may want to contract out project evaluation to a third party.

In both cases, it is best to look at the time and resources you will need to do any evaluation. It is extremely common for people to underestimate the amount of time and effort to put a good evaluation plan in place, or to fail to put aside any budget for it. Once again, plan it in from the beginning. Remember it is likely to be considered an eligible cost by many funders.

CONTRACTING OUR EVALUATION

If you are contracting work out then competitive tendering is a very useful tool that is available to you. At one level competitive tendering can play an important part in establishing a cost effective solution, but it can also play an important role in helping you to identify the most appropriate techniques for a given activity. You could take the approach of stipulating the outputs you require and outlining any constraints such as budget, timetable and access to respondents and let bidders suggest appropriate methodologies. Please see the resources section on page 9 for details of evaluation suppliers.

The bidders are likely to have more experience in the use of some of the techniques and be practised at refining or mixing techniques to yield the outputs that you want. The competitive process may well give you different options to compare, with background arguments as to their relative merits. This information could leave you in a much stronger position to decide the methodology that you think is right for your specific situation.

Remember however that the evaluation is to help you, and those stakeholders that you specify. So you need to set clear goals for the evaluator and then continue to take an active role in managing the process to ensure that you are getting what you want.
IMPROVING FOR THE FUTURE

We hope that these thoughts will help you to develop evaluation plans that are appropriate and helpful. Perhaps the biggest challenge in doing evaluation is to develop some detachment from your project, so that you can look critically at what you are trying to achieve, and to what degree you have succeeded. Information, as they say, is power, and understanding how to assess the effect of your work should help you to achieve your vision.

RESOURCES

The Market Research Society
15, Northburgh St.
London EC1V OJR
Tel:020 7490 4911
www.mrs.org.uk

The Market Research Society oversees standards in professional market research in the UK, and publishes codes of conduct on different aspects of market and social research.

The Researcher Buyer’s Guide Online

Provides the details of MRS affiliated agencies and organisations providing both qualitative and quantitative research in the UK. The guide also includes organisations who provide fieldwork-only or ‘field and tab’ services. All organisations listed abide by the Market Research Society Code of Conduct.

www.rbg.org.uk

The Association of Qualitative Research

A listing of specialist qualitative researchers can be found on the AQR website: www.aqr.org.uk.

The Evaluation Society

Website of the UK Evaluation Society. Provides a range of resources for professional evaluators, including a useful set of web-based resources.

Further reading in research and evaluation


Basic, sound information on designing questionnaires to collect data. Lots of examples of scales, questions, and sampling. Also covers qualitative methods.


This is a heavyweight look at recent thinking in evaluation – critical and entertaining. Only for the enthusiast, but solid and thought provoking.