

Section 15
Monitoring and Evaluation

15.1 Introduction to Monitoring and Evaluation

In this section, we consider:

- Differences between monitoring and evaluation
- Some definitions of evaluation
- Key characteristics of evaluation
- Reasons for evaluation
- Types of evaluation
- When should monitoring and evaluation be undertaken
- Common problems in monitoring and evaluation

Differences between Monitoring and Evaluation

Monitoring and evaluation are management tools which form an essential quality control mechanism for any project or programme activity. They are important in assessing how well a strategy performs in meeting defined objectives.

- **Performance Monitoring** is the process of observing and accounting for the delivery of the project or programme during its lifetime, and examining the efficiency or effectiveness of its operation.
- **Evaluation** is the process of measuring value or worth. It involves the measurement of the impact of a project or programme in achieving its goals and objectives after implementation

Successful evaluation hinges upon successful monitoring: monitoring often generates data which can be used in evaluation.

Monitoring	Evaluation
<p>...reviewing performance on a regular basis typically considering quantitative measures e.g.:</p> <ul style="list-style-type: none"> • volume (numbers of participants in a training programme, grants processed, goods/services sold) • cost (staff, venue hire, materials) • time (turnaround time for processing, when a resource is available) • It can also include qualitative measures (e.g. participant satisfaction with training delivered). <p>It is used to adjust the project, and looks at progress being made, the use of resources and planned outputs. It is a routine procedure, using regular records of project activity to help day-to-day management</p>	<p>judging the value and effectiveness of an activity or project. It considers:</p> <ul style="list-style-type: none"> • how it was managed and made use of the available resources • how well it achieved the planned outputs, for example were they on time and as envisaged • whether these outputs had the required effect (or outcomes) on those intended to benefit i.e. the impact or difference made in relation to what was intended. • whether its effects will last <p>identifying any problems which occur in the development or running of an activity with the aim of providing solutions</p>

Key Characteristics of Evaluation

There are a number of key characteristics which define an evaluation and differentiate it from other closely related forms of enquiry and analysis such as scientific research and audit. Given that it is probably impossible to arrive at a single definition of "evaluation" which will have universal appeal, we have chosen instead to identify some crucial elements which should normally characterise evaluations. Evaluations should be:

- analytical - based on recognised research techniques;
- systematic - requiring careful planning and consistent use of the chosen techniques;
- reliable -the findings of an evaluation should be reproducible by a different evaluator with access to the same data and using the same methods of data analysis;
- issue-orientated – seeking to address important issues relating to the programme, including its relevance, efficiency and effectiveness;
- user-driven - designed and implemented in ways that provide useful information to decision-makers, given the political circumstances, programme constraints and available resources.

Reasons for undertaking evaluation

Three key reasons for undertaking evaluation are:

- **Improve Management** It improves management by providing an assessment of the effectiveness of a policy, programme or project in meeting its objectives. Evaluation can help to avoid the pitfalls of the past and can help to ensure that there are fewer pitfalls in the future.
- **Accountability** It is important to be able to demonstrate to funders that any funding allocated to your organisation has been used properly and that you have fulfilled the objectives for which the funding is intended, i.e. that the impacts from the project are related to the funders' objectives. Evaluation is of interest to both the supporters and opponents of programmes, as well as to the ordinary citizen. Evaluations conducted for accountability reasons typically focus on the projects impact (the degree to which it produces its desired outcomes) and its cost effectiveness, and are meant to improve transparency.
- **Resources** Evaluation is also crucial in ensuring the optimum allocation of scarce resources. Budgets are finite, and it is important that decisions to allocate funding are made on the basis that they maximise the impact of those limited resources.

Types of Evaluation

"When a cook tastes the soup, it is formative evaluation; when the dinner guest tastes the soup, it is summative evaluation."

There are two main types of evaluation, formative and summative, which are differentiated both by their timing and purpose:

- The purpose of **formative evaluation** is to support project development and implementation at early stages of a project and to provide the information, which is needed to identify possible problems and set strategies to adapt programmes accordingly.
- In **summative evaluation** the primary purpose is to demonstrate the effectiveness of a programme, and it is often carried out after a programme has been completed.

When should Monitoring and Evaluation be undertaken?

Monitoring and evaluation are integral parts of any project or programme, rather than 'add-ons'. It is important to take them into account at the planning stage of a project or programme when translating strategy and vision into distinct objectives, as there are likely to be resource and timescale implications. You should be thinking about these issues as soon as you start to plan your project.

Monitoring is a continuous process ongoing throughout the lifetime of a project or programme. Information is recorded and progress is regularly reviewed against stated targets. Tracking an activity in this way allows us to understand what progress is being made and allows for investigation and corrective action to be taken if there is any deviation from operational objectives.

This means that performance indicators should be defined at the beginning of a project or programme and targets set for them. Systems should also be put in place to gather the necessary data to measure these indicators and a process initiated to regularly review the indicators and take corrective action if the desired outputs and outcomes are not being achieved.

Evaluation will take place at a discrete point in time, usually at the end of a project or programme. In some cases, an interim evaluation may also be required. Evaluation will rely on information gathered for monitoring purposes, but will also source other information. This could include benchmarking information about another organisation providing a similar service or qualitative feedback from stakeholders and beneficiaries. It will take the form of a wide-reaching in-depth study, measuring the value or worth of a project or programme, and its impact, the extent to which objectives have been achieved and how strategies can be improved.

Some Common Problems in Monitoring and Evaluation

Problem	Solution
No data collected	Although you may not have collected data, it is better to start late than not at all.
Wrong data collected	Review your measures and identify the correct data that should be collected. Start collecting the 'right' information as soon as possible. With regard to past performance, it may be possible to infer something about this by considering proxy measures or benchmarking within the sector.
No resources	Monitoring and evaluation does not have to be onerous and additional to your existing project or programme activity. It should be an integral part. Ensuring that monitoring and evaluation is adequately resourced now will pay dividends in future.
No systems	Consider what systems you require to gather data: this could be a simple database for your project or programme.
No interpretation	Collecting data is insufficient in itself; you must interpret this in context and act on/respond to what the data shows.
Ill-defined inputs, outputs, outcomes	Consider your organisation's approach to strategic planning and more specifically the objectives you are working towards. Are these SMART? Our approach to setting SMART objectives and developing suitable Performance Indicators takes account of inputs, outputs and outcomes.

Worksheet 1
Current Practice in Monitoring and Evaluation

To what extent does your organisation undertake monitoring and evaluation?



What are your main reasons for undertaking monitoring and evaluation?



How do you undertake monitoring and evaluation (process)?



What impact has monitoring and evaluation had on your own work?



Worksheet 2
Monitoring and Evaluation Checklist

Take a moment to review your own organisation (or a specific project) against this checklist. This will highlight areas of monitoring and evaluation that you may need to focus on.

	Yes ✓	No ✓
1. Do you know who your stakeholders are and how important each of them is to your work?		
2. Do you know about your stakeholders' requirements for monitoring and evaluation?		
3. Have you defined SMART objectives and performance indicators?		
4. Have you undertaken any monitoring and evaluation already?		
5. Have you planned to undertake any monitoring and evaluation in future?		
6. Do you know what data you need to collect and how you will collect it?		
7. Do you have systems and resources in place for monitoring and evaluation?		
8. Do you know how to produce management information?		
9. Can you analyse and interpret any data that you collect now (or in future)?		
10. Do you know how you will assess the impact of your organisation (or the specific project)?		
11. Have you thought about what you will do with the results to any monitoring and evaluation that you undertake?		

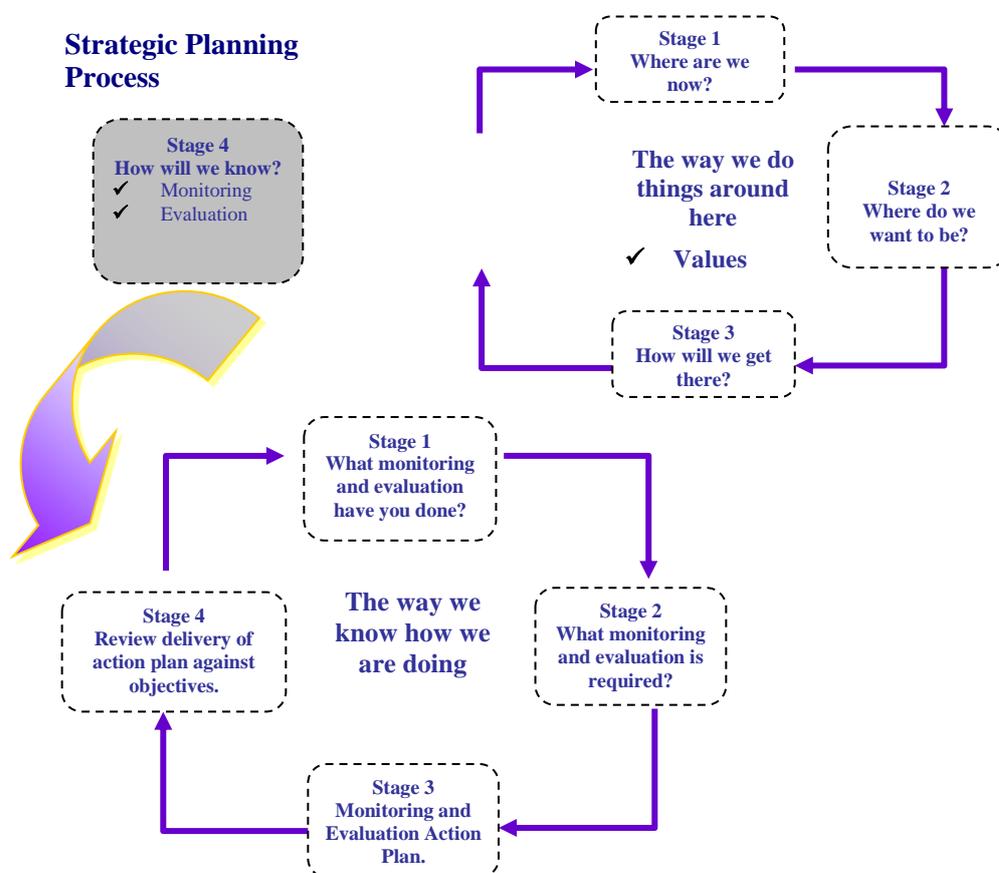
15.2 Understanding Strategic Context for Monitoring & Evaluation

In this section, we consider:

- The strategic planning process and performance improvement
- Being clear about what we want to measure
- A framework for monitoring and evaluation

The Strategic Planning Process and Performance Improvement

Consider the strategic planning process. This highlights the importance of monitoring and evaluation in determining whether you have achieved what you set out to do.



- Stage 1: Where are we now?
 - Process Initiation
 - Audit of Service Provision
 - Analysis of Present Economic, Social and Cultural Situation
 - Analysis of Strengths, Weakness, Opportunities, and Threats
- Stage 2: Where do we want to go?
 - Vision
 - Goals
 - Objectives

- Stage 3: How should we get there?
 - Strategies
 - Targets and Key result areas
- Stage 4: How will we know we're getting there?
 - Measuring Performance
 - Monitor and Review

The key features associated with an organisation that promotes continuous improvement are that it:

- *Uses flexibility as a major competitive strategy*
- *Achieves flexibility through cross-functional workforce and flexible working*
- *Produces a constant stream of improvements across all areas of the business*

“Achieving good performance is a journey, not a destination”

15.3 A Framework for Monitoring and Evaluation

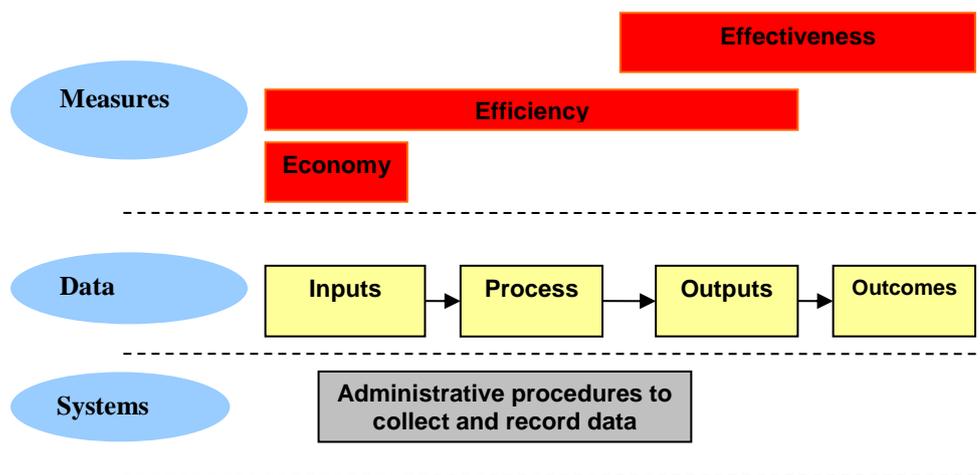
Monitoring and evaluation may be used to measure and assess the impact of any activity, whether a distinct project or a more general programme. By gathering information about the inputs, processes, outputs and outcomes of a project or programme, we can assess the economy, efficiency and effectiveness of its operation.

A conventional monitoring and evaluation framework is illustrated below. This distinguishes between the following aspects of a project or programme:

Input	the resources (e.g. staff, volunteers, materials, premises) deployed to make things happen
Process	the manner in which inputs are applied to achieve the intended outputs e.g. run a training course for 20 people over a ten-week period
Output	specific results of a project or programme e.g. advice services provided, crèche facilities organised
Outcome	consequences arising from the outputs, the difference made by the process e.g. reduced unemployment

An example:

Input	Water, teabag, milk, sugar, teaspoon, cup, kettle
Process	Boil water in kettle, pour into cup with teabag, mix milk and sugar to taste
Output	Cup of tea
Outcome	Thirst quenched



To assess a project or programme, we consider measures in the following dimensions:

- **Economy** – acquiring inputs (human, material resources) of the appropriate quality and quantity at the lowest cost. However, we need to be careful that this pursuit of cost savings does not hinder the overall effectiveness and reduce the impact of the project or programme.
- **Efficiency** – producing the maximum output for any given set of inputs or using the minimum inputs for the required quantity and quality of service provided. We consider how much effort was required to achieve a valued output, the ratio of outputs to inputs. It is also an important consideration when undertaking appraisals to ensure that the most efficient method of delivery is identified.
- **Effectiveness** – the extent to which a programme or project is successful in achieving its objectives, or final outcomes. Has the activity achieved what was intended, not only in terms of volume/quantity of outputs, but also in terms of its impact on beneficiaries.

In considering the measurement of a project or programme, it is also important to take into consideration equity (or equality) and environmental sustainability, both of which should be part of any project's underlying ethos:

- **Equity** – the degree to which access to services (and ensuing benefits) is equitable, and whether the services are appropriate to the needs of all those who should be able to use them. This is particularly important for voluntary organisations supporting the vulnerable in society and projects or programmes focused on social inclusion. Any such activity should not affect some people less favourably than others.
- **Environmental sustainability** – ideally activities should protect and enhance the environment or have a "neutral" environmental impact. If this is not possible, steps should be taken to fully mitigate or even outweigh any damage.

15.4 What to Measure – Indicator Setting

Measuring performance is central to any strategic planning system. From the time we draw together a Vision statement, and in every other part of the strategy process, we should constantly pose the question:

“How will we know if this is happening or being achieved?”

Frequently however we bypass this question or even ignore it. To ensure that it is addressed we usually identify it as a discrete part of the strategy process. We need to keep emphasising however that performance measurement should be a thread which runs through strategic planning rather than being tacked on at the end of the process.

In addressing this issue we can ask three basic questions:

- how will performance be measured?
- what are the performance targets set?
- how will the results be fed back into the planning cycle?

A useful analogy for a performance measurement system is that of The Dashboard. Just as a pilot uses a variety of indicators – e.g. speed; height; fuel level; temperature – to help manage the “performance” of the plane, so too should organisations use a variety of indicators or measures. This will ensure that there is width; breadth; and depth to the local understanding of performance.

The performance measures (or indicators) should be selected to best represent the factors that lead to improved customer, operational, and financial performance. A comprehensive set of measures or indicators tied to customer and/or company performance requirements represents a clear basis for aligning all activities with the organisation’s goals. Through the analysis of data from the tracking processes, the measures or indicators themselves may be evaluated and changed to better support such goals.

A performance indicator is used to:

- Measure progress towards achieving corporate objectives and targets.
- Promote the accountability of service providers to the public and to other stakeholders.
- Compare performance to identify opportunities for improvement.
- Promote service improvement by publicising performance levels.
- Focus attention on performance and service levels promised and expected
- Know when to adjust services and resources
- Develop culture of continuous improvement

What makes a good indicator?

In order to be useful and effective, there are a number of general characteristics that a performance indicator should display:

- **Clearly defined:** You should be able to define the indicator in a way which makes it possible to collect the information in a consistent way in each monitoring period, so that fair comparisons can be made.
- **Measurable:** Your performance indicator should be numerically quantifiable (i.e. expressed as a number);

- **Targetable:** You should be able to set a numerical target against the indicator, predicting future levels of performance;
- **Relevant:** The indicator should be something which staff and/or service users would consider important.
- **Understandable:** It should be easy to understand what the indicator means, and why it is relevant to performance.
- **Verifiable:** The indicator should be collected and calculated in a way that enables the information and data to be verified.
- **Cost effective:** It is important to balance the cost of collecting information with its usefulness.
- **Unambiguous:** It should be clear whether an increase in an indicator value represents an improvement or deterioration in service.
- **Attributable:** Service managers should be able to influence the performance measured by the indicator (that is, it should either be totally within their control or at least open to significant influence).
- **Responsive:** A performance indicator should be responsive to change.

When constructing performance indicators, it is important to consider what behaviour an indicator ought to encourage. Indicators that might encourage counter-productive activity should be avoided if possible. The definition of an indicator ought not to deter organisations from developing innovative processes or coming up with alternative methods, systems or procedures to improve service delivery.

In practice it can be difficult to devise a performance indicator that fulfils all the criteria precisely, and trade-offs will often be necessary. Less than 'perfect' indicators can, however, represent a valid starting place if refinements are carried out when more insight into the area is gained. There will be trade-offs between indicators that are 'easy' but provide information which is of little use, and indicators that are much more onerous to collect but provide very useful information about how a service is performing.

How many indicators?

The challenge, when developing Performance Indicators, is to balance the number of indicators against the overall ability to describe the service. The number of indicators, however, depends on what is appropriate for the target group and context in question. In some cases, where a stakeholder is interested in several complex services or where there are many different stakeholders, it might prove difficult to keep the number of indicators down. It is important that the set of indicators is chosen carefully, as it is easy to produce a portfolio with so many indicators that it becomes hard to focus on the true performance of the organisation. Organisations need to keep the overall number of indicators to manageable number if they are not to be swamped with information.

Too few

- Not enough information
- One failure can be disproportionate

Too many

- Lack of clarity of focus
- Resources to collect them

5 - 10 recommended

Generic Types of Performance Indicator

The three dimensions of performance are (as already defined):

- Economy
- Efficiency
- Effectiveness

A common way of developing performance indicators is to use these three dimensions as a basis

Performance Domain	Typical Indicator sets
Economy	Resource inputs Expenditures Average costs
Effectiveness	Final outcomes Recipient satisfaction Output volume Output quality
Efficiency	Intermediate output efficiency Final outcome efficiency

A related approach to ensure a balanced representation of the service is the differentiation between **cost**, **quality** and **time**. Cost reflects the financial side of the organisation's activities, quality captures the features of a service and their appropriateness for the user, and the time aspect covers the responsiveness and speed with which services are delivered.

Not all stakeholders will find these dimensions equally relevant, but together cost, quality and time can provide a simple way to ensure balanced coverage in relation to a service area. A balanced set of indicators can be constructed by using cost, time and quality measures.

Indicators of What ?

A “good” dashboard of indicators will allow us to ask and answer a variety of questions. These will allow us to build up a comprehensive picture of performance. Some of that performance will be measurable in terms of “results”: other parts of it however can only be measured in terms of activity. The resultant indicator types and the questions they will help answer are as follows:

Indicator Type	Question
Outcome	<ul style="list-style-type: none">• what is the impact of our work?• are we achieving our objectives?• do the underlying issues or problems that we identified still exist?
Output	<ul style="list-style-type: none">• what “goods/services” are we producing?
Process	<ul style="list-style-type: none">• how are we doing our work?• what activities are we engaging in?
Input	<ul style="list-style-type: none">• what resources are we using?

Worksheet 3

Looking at your organisation (or a specific project) can you come up with at least two ways you'd measure performance under the four headings below?

Inputs (*the resources you use to make things happen*)

Processes (*how you do things ... the activities you actually engage in*)

Outputs (*what you actually produce or deliver*)

Outcomes (*the "betterment" achieved as a result of what you do*)

Worksheet 4
Current Performance Indicators

List the performance indicators that you currently measure (or are measured against) and the way that you currently measure those indicators.

	<i>Performance Indicator</i>	<i>Method of Measurement</i>
<i>1</i>		
<i>2</i>		
<i>3</i>		
<i>4</i>		
<i>5</i>		
<i>6</i>		
<i>7</i>		
<i>8</i>		

15.5 Collecting the Data you Need

In this section, we consider:

- Types of Data
- Approaches to Data Collection
- Tools and Techniques for Data Collection

In order to undertake effective monitoring and evaluation, it is important to be able to gather the right sort of information in the appropriate way. The information being gathered will be used either to establish a baseline or to demonstrate change from that baseline.

Types of Data

In general, we want to track changes which are both qualitative and quantitative in nature. Quantitative data is factual or numeric. Qualitative data refers to attitudes, behaviours and feelings.

Also, be aware that changes can be tangible or non-tangible. By tangible we mean, real material changes that are easily defined and described. By non-tangible, we mean more subtle changes such as in individuals' behaviour, 'group' behaviour or changes in relationships

The matrix below shows the methods most appropriate for gathering information on changes in these scenarios.

	Tangible	Non-Tangible
Quantitative	Count	Observe
Qualitative	Describe	Interview

Approaches to Data Collection

There are many ways to gather information. These may generally be classified in one of three ways:

- Observation
- Review of existing records
- Asking questions

Different methods will be appropriate to use in different situations and in some cases, it may be necessary to use a combination of methods.

Ways to gather information include:

- Reviewing documentation or existing information.

A lot of useful information will already be available in e.g. external information e.g. Noble Indices, census data. You should also consult your own strategy documents

and relevant information in your sector. If you intend to use existing records it is important to think about how they will be used and how readily they are available.

- Observation

In this approach, an evaluator is present, watches events and actions and writes down, films or tape-records what happened. Actually being there has obvious benefits. There are some problems though. First by being present, the observer may affect what happens. Second it can be hard to observe and take accurate notes at the same time. Third, what the observer records may be biased by his or her own view of what is important.

Observation can be undertaken in a participant or non-participant fashion. It allows you to collect evidence directly, but requires you to be present when the key events occur. Observation can be a useful way to build hypotheses which can be subsequently tested using other types of information.

Xxxxx Group Evaluation

We would appreciate it if you could take a few moments to give us some feedback on your thoughts about today. Your comments help us to understand whether our workshops/ events are useful, relevant and interesting.

XXXXXXXXXXXXX Group - Session Evaluation Form	
Project Name	
Add Type of Event	
Delivery Agent	
Workshop	
Venue	
Date	
Presenter 1 (<i>Insert</i>)	

Achievement of Learning Outcomes through Workshop/ Event (<i>to be inserted for each session by delivery agent</i>)					
	As a result of this session.....(<i>examples for start of statement in italics</i>)	Strongly Agree	Agree	Disagree	Strongly Disagree
1.	<i>I have a greater understanding of</i>				
2.	<i>I have a greater understanding of</i>				
3.	<i>I have a greater awareness of</i>				
4.	<i>I have a greater understanding of</i>				
5.	Please give us a reason for your response:				

6. What did you find most useful/interesting?

7. Is there anything about today's session that you did not like?

The Next Step	
8. Please list three actions you would take as a result of the Workshop.	

Thanks for taking the time to complete this evaluation sheet
Name: (optional) _____

Xxxxx Group - Youth Evaluation form for 11+ age group

Project Name			
Project Deliverer		Project reference number	
Sessional evaluation form			

How would you rate the following about this project?

	Yes, Brilliant 	Good enough 	OK 	No way 
1. The things that you did on the project				
2. The things that you learned on the project				
3. The fun that you had				
4. The friends that you made				
5. The instructor				
6. The food				
7. The meeting place				

As a result of the project	Yes, Brilliant 	Good enough 	OK 	No way 
Evaluator to add in the learning outcomes here				
8. I know more about.....				
9. I understand more about.....				

Finally	
10. What part of the project did you like best?	
11. What part of the project did you like least?	
12. In what way could we make the project even better?	
13. Tell us one thing that you have learned as a result of taking part in the project?	

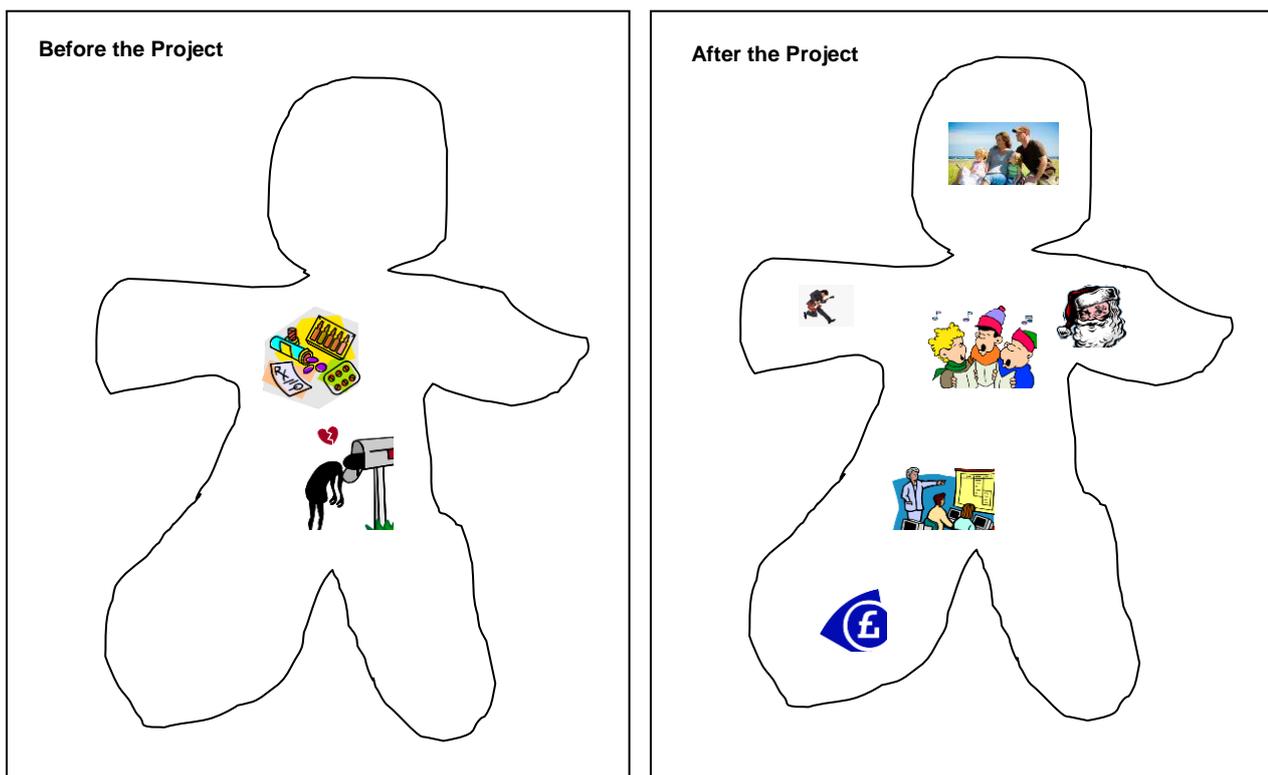
Body Maps

Body maps can help projects understand how people feel about themselves, for example body image or self esteem. Two types of body maps can be used:

1. using a pre-drawn body outline on a sheet of paper;
2. participants lying on a large sheet of paper and having someone else draw round their body.

In either case the participant writes or draws key features about themselves on the map. When they have completed their body map others can ask them about what the words or drawings mean. This can be undertaken at an early stage of being involved in a peace building project, once trust has been established, and then again at a later date and compare the two maps.

This method may be an attractive one for young people who are caught up in rioting, taking drugs or behaviour in their community which is not acceptable to local people. Results from this type of programme show that young people may be angry and frightened at the start and then move on to being in a better place throughout and after the programme, some being able to move on to more mainstream types of programmes.



Evaluation Wheel

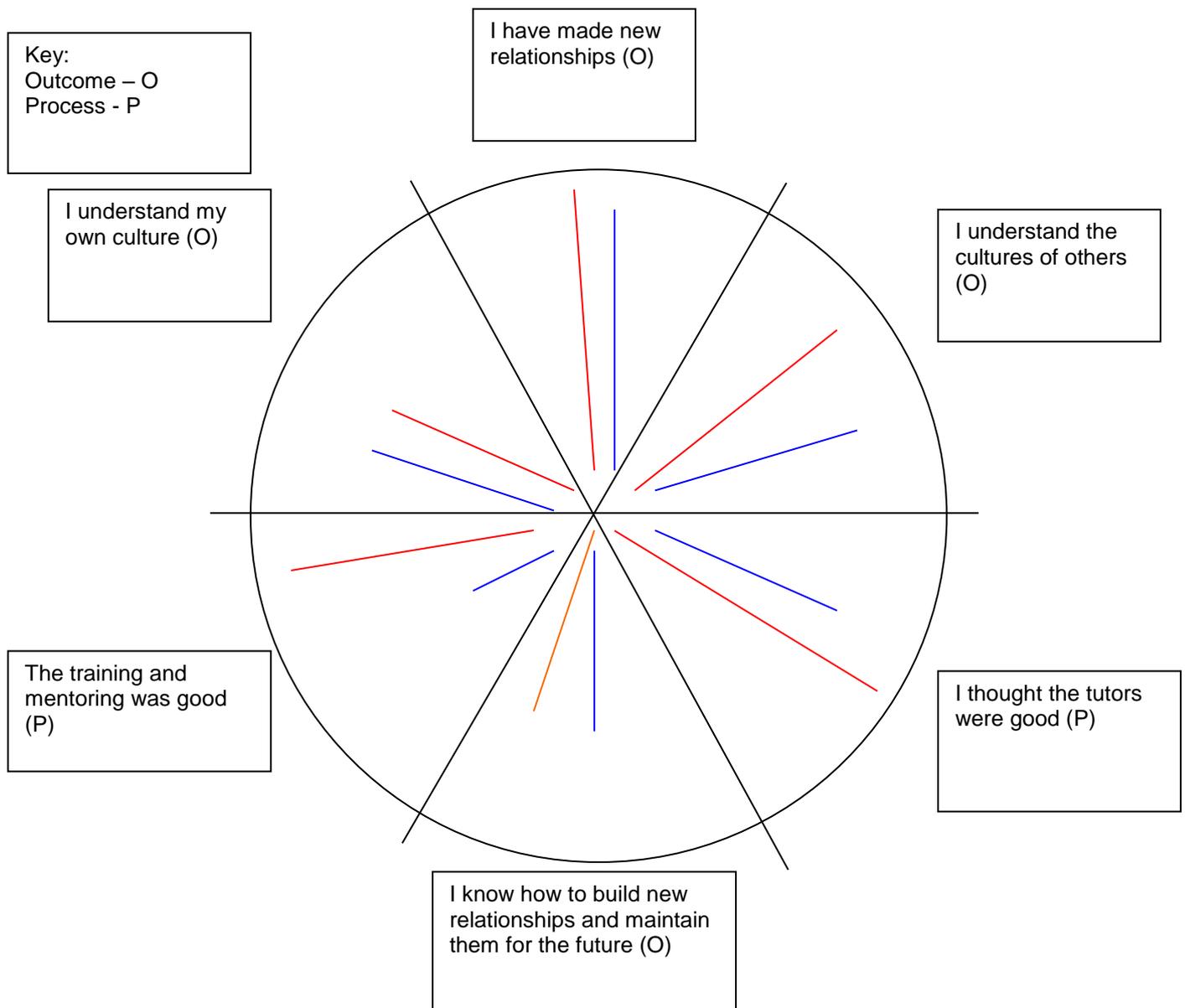
Using evaluation wheels in peace building is a simple and relatively fast way to get participants' opinions of a project. This technique can be completed individually or at group level and can be used at the middle of a project. Simply put:

- Divide the wheel into segments relevant to the various aspects of the project (usually 6 or 8)
- Label each segment with a part of the project to be evaluated.
- Participants can show how they feel about the project by drawing a line (like a spoke of a wheel) in each segment from the centre to the rim. The closer the line is to the rim, the happier the person is with that part of the project.

This process needs to be facilitated by the project promoter explaining how to complete the wheel and then leaving the room to allow either the individual or group to complete the exercise comfortably and in confidence.

On their return, the facilitator can discuss with the group the findings with a view to improving the project. This is a qualitative tool and does not lend itself to producing quantitative data.

A template is attached below.



How the wheel can be used

- The wheel can relate to an outcome. Each spoke should relate to an indicator.
- Participants can decide what should go on each spoke or this may be pre-set by the evaluator.
- Each person should mark where they think they are on the spoke. There can be rungs added to represent values, these can increase or decrease in value from the centre but must be consistent. Values may be left open or given an interpretation.
- The exercise can be repeated over time to check progress, with dots joined up to visually represent change.
- Group perceptions can be collated, however instead of a spoke a segment should be used to represent an indicator. In this case each person places a dot within the segment and draws a line from this to the centre. If each person uses a different colour a visual representation of a group can be obtained.