

**PURPOSE OF EVALUATION**

An evaluation system seeks to obtain, exchange and use information about an organisation's overall training function. For example, without this information it is extremely difficult to:

- Provide feedback to trainees
- Confirm achievement of objectives
- Prove effectiveness of training
- Assess competence
- Exchange data with client organisations and funding agencies
- Establish quality assurance
- Improve efficiency of training provision
- Monitor training activities

Systems for evaluating training are the responsibility of training institutions, departmental management and funding agencies. Each will have its own criteria and reasons for evaluation, and any defects in the systems may have serious consequences for the quality of professional and administrative services. Only rarely will you have the opportunity to develop a completely new system for EoT. It is far more likely that you will inherit an existing system, which may require revision and further development. The following are recommended steps to be taken to revise or further develop an organisation's system for the evaluation of training:

**STEP 1 - Why Change?**

Before starting to change an existing system, it must be clear why this is necessary. Discussion between trainers, clients, funding agencies, stakeholders and trainees should identify where there are problems with the existing system, or one's which may be created by future demands on the training function. There are also likely to be opportunities for improving the quality of training from changes to the variety of systems being used to run an organisation's training function. To answer the question Why change?, is to point out the necessity of evaluation. EoT provides the basis for answering the question.

**STEP 2 - Functional Boundaries & Identification of Key Stakeholders**

Evaluation is part of an organisation's overall, training and development function, and for purposes of EoT can be regarded as a discrete function with its own clearly defined key purpose. The evaluation function should link into other functional systems within training and development both within and external to the organisation. It is therefore important to define as clearly as possible the boundaries of the evaluation function to:

- a. Determine the internal systems needed within the EoT function to ensure the provision of effective and efficient training to meet the needs of the organisation. Systems are developed by training management and administrators and used by people contributing to EoT.

- b. Identify key stakeholders who are, or should be associated with the EoT function. Some of these people may be 'sleeping' decision makers, in that their potential to contribute hasn't been recognised. Others, for whom EoT is periphery concern, may act as 'gatekeepers' to the flow of information vital to effectiveness.
- c. Identify external, non-training systems which have an impact on evaluation. These are likely to be developed and used under the authority of other functions, providing valuable information about, for example, performance problems, introduction of new technologies, working practices and changes to government policy.

Locating the boundaries of the evaluation function may prove difficult. However, it is vital to clarify the sources of information about EoT, also the means being used to communicate this and the barriers, which prevent it being used effectively. Initially, this may require a broad review of the existence and use of information about training generally and EoT in particular. Further stages are then likely to be needed to examine the systems and subsystems used within the evaluation function.

### **STEP 3 - Description of Existing System and its Analysis**

Before starting to revise or develop EoT, it is essential to understand how the present system of evaluation works. People contributing to an organisation's training function may know details of their own work and of their immediate colleagues but do not have a comprehensive knowledge of the training system as a whole. This may therefore limit the initial contribution they can make to EoT. Two analytical approaches can provide a clearer picture of the system, or subsystem:

- a. A horizontal input/output/outcome analysis.
- b. A vertical analysis showing different levels of the system and the importance of the information provided.

An example of analysis could be to focus attention on the subsystems used to evaluate the design, development and delivery a training programme, based on a distance learning package:

#### **Horizontal Input/Output/Outcome Analysis**

**Input** - a training designer receives information about training needs. This should be as a 'design brief' that includes details of the number and variety of people requiring training, and the aim of the proposed training. This results in the following kind of action - much of which needs to be documented in the overall training system, and available for evaluation:

- A designer devises a training programme, based on the information available from the design brief, from training needs analysis or obtained during the design process.
- The designer presents a design proposal, based on the use of a distance learning package and on-job-training, to the client for comment and approval.
- Training management, the client, stakeholders and the funding agency, evaluates the proposal.
- Detailed design and development of the package are carried out, including procurement of training materials.
- Appropriate systems are agreed to evaluate key elements of the training programme.
- Direct trainers selected, trained to use the package and briefed on instructional procedures, including use of tools for evaluation.

- Mentors are selected, trained if required, and briefed on their role, responsibilities and contributions to the proposed training programme.
- Trainees are selected, briefed in respect to their participation in the training programme and the means by which their progress and achievement will be assessed.
- Trainees are helped to learn and develop their skills, through completion of the training package and on-job-training.

**Output/Outcome** - Depending on the numbers of trainees involved and the timescale for completing the training programme, the system and tools used for evaluating output or outcome should include:

- Comparing proposals submitted by designers representing different training providers.
- Validating objectives stated for the training programme with identified training needs.
- Reviewing the utility of the proposed distance learning package.
- Assessing cost implications in the development of the package.
- Reactions of clients, stakeholders, mentors and trainees to the proposed programme.
- Assessing the competence of direct trainers being used to deliver the programme.
- Obtaining details of the number of people trained.
- Confirmation that satisfactory performance has been achieved, against agreed criteria.

The actions listed of 'input' and 'output' are far from complete, although each implies the existence of a subsystem to specify, record and disseminate information. You may also wish to consider whether 'output' or 'outcome' is more suited to your evaluation. Output is easier to do because you are likely to be seeking quantifiable information - for example, the number of people trained. Evaluating outcomes is more demanding. It seeks less tangible, more sensitive qualitative information - for example, assuming you already know the number of people trained, but now want information about their level of performance.

### **Vertical Analysis**

This analysis is based on having developed a role analysis, based on EoT function. By identifying the people you wish should contribute to evaluation, you can help them to analyse their role and agree on the systems and actions you require of them. Status within an organisation and the public service generally, will determine the level of contribution you can expect. For example, it would be unrealistic to expect a head of department, personally, to provide information about the number of people trained - this can and should be done by a section officer. However, if the information you are seeking concerns the costs and benefits of a programme, then it may require the involvement of a person at a higher level in the organisation.

As you seek to revise or develop an organisation's EoT function, you may wish to establish and continually review the analysis of the function. You will have to balance what you would like to evaluate, with what prudence and practical reality dictate. The systems and subsystems you describe in this step may prove disappointing, and far less than you desire for effective EoT. Nevertheless, Step 3 is the starting point for revision - you are describing what exists and what you can build on.

### **STEP 4 - Definition of Key Aims**

Fundamental questions can now be asked about existing systems used within the EoT function. For example:

- Why do certain systems or subsystems exist? What are their primary role and purpose?
- Given this role and purpose, what should be the means used for effective operation?
- How far do these systems and subsystems match desired standards?
- Identification of new system or sub system and specify its purpose

Answering the first two of these questions help to establish the **key aims** for the EoT function and its systems. For example, taking the design of a training programme task as an illustration, the key aim is:

*To ensure clients obtain competent design and development services from training staff, and for these services to provide effective and efficient training, leading to improved performance.*

However, the need for improvements emerges when the third question is answered. For example, using the design task:

- The quality of training provided is poor. Trainees, whose learning is based on the distance learning package, report a lack of relevance to their needs. In addition, there is no evidence that it leads to improved performance.
- Mentors complain that the distance learning study material does not help trainees to transfer their learning to improved job performance.
- The trainers continue to run similar programmes, without using internal validation measures to check the quality or relevance of the training.
- Departments continue to nominate people for the training programme, without carrying out external validation to ensure its effectiveness.

As distance learning becomes increasingly available, the same training material could be used in many departments and public sector organisations. Inevitably problems will occur, as illustrated in the above examples. Having effective EoT systems in place will enable problems to be identified and corrected - ensuring increasingly effective training that is efficiently delivered. Failure to develop EoT systems means that the key aim is unlikely to be accomplished

## STEP 5 - Definition of Key Tasks

Once key aims have been specified, and potential problems recognised, the following question can be answered: if these are the key aims for the system then what are the **key tasks** which must be carried out if the aims are to be achieved? For the training design example, mention is made of key tasks - but not all of them. In addition, what about subsystems needed to coordinate activities, especially but not exclusively ones concerned with EoT? Unfortunately, highly competent trainers can be rendered virtually useless due to poor quality systems. Here are a few examples:

- People are nominated for training courses, which have no relevance to their needs. There are no EoT systems to pick up this issue, so people continue to be nominated for inappropriate courses. The EoT function draws attention to assessing learning, with systems that report on achievement of objectives and feedback from trainees.
- Information resulting from a TNA consultancy is not communicated fully to all who need it. Although there might be information about training needs, systems do not provide

information about desired standards of performance. The EoT function makes provision for proving that training leads to satisfactory performance.

- Time and resources are wasted when two training institutions, independently and unknown to each other, design and develop similar training packages. The EoT function includes tasks concerned with monitoring training activities, and therefore should have systems to prevent duplication.
- Training is concerned only with the technologies being used, and does not take into account people related skills, such as team working, communication, customer care which is likely to be important. The systems used to support the EoT function include tasks for improving the quality and relevance of training.
- New equipment or software is installed in organisations without knowledge of training institutes, who continue to run courses based on the old equipment and obsolete software. This requires systems in all areas of the training function, including EoT.

Unless key tasks are clearly specified, it may prove difficult to develop appropriate systems. Without these systems, many activities of the training function can be wasted.

**STEP 6 - Key Information Needs**

It is a basic requirement of quality assurance systems to exchange information vital to the products and services being offered to customers. Trainers, within the context of the training function, also need to have and to exchange information vital to their ability to provide effective professional training services. Therefore, it is important that **key information** for various aspects of an organisation's EoT function should be specified. This can be based on the points raised in Step 3:

- Operational information about a client organisation, departments and individuals who need training.
- Problem prevention/solution information to provide accurate and up to date information about problems and training and non-training needs in the organisation.
- Coordination information to enable trainers to collaborate with line departments and other functions in the organisation.
- Development information to enable training resources, activities and materials to be procured, developed and shared.
- Control information to provide details of the validity of training, for quality assurance and evaluation.
- Financial information to report on the costs incurred in developing or running training activities.
- Performance information to assess the extent to which levels of performance have been improved, against agreed standards.
- Cost/benefit information that takes account of the above information, in relation to stated government policies, such as training for all and value for money.

**STEP 7 - Diagnosis of Efficiency Needs**

Deficiencies can be identified by looking for variances. A variance is a tendency for a system or part of a system to deviate from some expected or desired standard. In other words, it is a weak link, a part of the system where problems occur. Variances can be either key variances or operating variances.

**Key variances** are caused by the omission of a key task, or one that is poorly performed. For example, a key variance would occur if training needs were not identified before preparing a design brief, or starting to design training without having appropriate TNA information.

**Operating variances** are caused by flaws in the systems being used. In this example, the training designer is dependent on the flow of information from a consultant, or line department or beneficiaries. If this is deficient in some way then the resulting design will also be deficient.

Competent training staff should be aware of most key variances because these are their responsibilities within an organisation's training function. Operating variances are likely to occur due to flaws in the systems being used to run the training function. For example, if there are no subsystems available to communicate the need for training from a line department to a training institution, how can institutional staff be expected to design effective training?

For the EoT function the diagnosis and listing of key and operating variances can be done by identifying all those who have a connection to evaluation - both within and external to the organisation. To eliminate as many variances as possible, everybody should be involved.

Consider the following examples of variances from training design to illustrate what needs to be tackled:

- People are chosen for a training course without reference to their actual training needs. Unless the EoT system picks up perhaps several variances, people will continue to attend a course unsuited to their needs.
- Training institutions, because they are unaware of training needs, design broad, general courses usually longer than is necessary. Key variances can create this situation, which is only likely to change following appropriate EoT activities.
- Courses are run at a nominal fee, without any relevance to the true costs associated with running them - an operating variance within the EoT system. Perhaps it's following revision to the EoT function that heads of department and funding agencies become aware of the mismatch between the costs of the course and the minimal resulting benefits.
- The development of distance learning packages can be focussed on subject content, rather than identifies training needs or operational utility. Variances associated with TNA and design systems may create this situation and it may require the discipline of an EoT system to enable the package to be revised.
- Training is designed without knowledge of the number and level of people who need training. Courses are therefore designed for classes of 20 or so trainees, when the number of people needing to be trained can be in the hundreds. Unfortunately, no design brief (a key variance) was prepared so no account was taken of the need to design a mass training provision, capable of meeting the needs of a large number of people. Because efficiency is an important feature of EoT, remedial action can be taken.

These examples contain several variances, due to key tasks not being performed, or to faulty or nonexistent systems. It would be unrealistic to expect all variances to be eliminated at once. However, it is realistic to expect trainers to include a quality assurance system to continuously seek ways of improving the efficiency of the training function. Identifying and revising variances in an organisation's training function could become key tasks for those contributing to EoT.

#### **STEP 8 - Diagnosis of job satisfaction needs**

Introducing an EoT system, or changes to activities within one that already exists, depends on acceptance and support by all those involved. People are likely to respond positively to proposals for improvements – that is, if it satisfies them. Failure to taken account of their feelings may lead difficulties – bearing in mind that successful EoT initiatives require active support. Obtaining data about these needs can be obtained by questionnaire, interviews and discussion groups to identify problem areas. It is only when an organisation's training function as a whole is working to accomplish job satisfaction that EoT can become an accepted component. If evaluation is seen to be done within a culture of 'blame', then the following areas of fit will not be evident

Efficient delivery of training services, in association with job satisfaction for those people involved, is important. An efficient, well-run training function reduces frustration and increases job satisfaction. Similarly high job satisfaction requires feelings of competence, responsibility and pride in work.

An important aspect of the work of senior trainers is to ensure that subordinate staff, and others who contribute to an organisation's training function, gain satisfaction from their training activities. To do this, two factors have to be taken into account:

1. The extent to which a person believes that their expertise is being used effectively.

2. Whether the training systems being used in their organisation are suitable.

Job satisfaction means the achievement of a good fit between job needs, expectations, and job experience. The following is a list of five areas where there should be a close '**fit**' between a trainer's needs and expectations, and those provided in their job by the employer.

1. **Knowledge Fit.** A trainer wants personal skills and knowledge to be used and developed. A good fit exists when trainers believe that personal skills and knowledge are being well used and developed.
2. **Psychological Fit.** A trainer seeks to further personal interests, e.g. to have sense of achievement, recognition, responsibility, advancement, status. A good fit exists when trainers believe that personal interests are being successfully catered for.
3. **Efficiency Fit.** A trainer seeks an equitable effort-reward bargain, and acceptable supervisory controls. Trainers also need efficient support services such as information, technical aids, administrative and supervisory help. A good fit exists when they believe that financial rewards are fair and other control systems acceptable - also that support services are efficient and adequate.
4. **Task Structure Fit.** A trainer seeks a set of tasks to perform which meets requirements of the job and incorporates variety, interest, targets, feedback, task identity and a realistic amount of autonomy. A good fit exists when trainers have the tasks and duties, which meet their perception of their role.
5. **Ethical (social value) Fit.** A trainer seeks to work for an organisation whose values do not contravene personal values. A good fit exists when trainers believe that the philosophy and values of senior management in an organisation do not contravene personal values.



**STEP 9 – Anticipating Further Changes**

As with most systems, training systems have to change and adapt to suit organisational needs. Therefore, built into the system must be the capability to recognise and adapt to changing requirements. This means that the training system must have enough flexibility to cope with change. A broad assessment of the demands likely to be expected of an organisation's training function over a period of five years or so will indicate changes that will affect its training systems. Typical changes include:

- Introduction of new technology
- Changes to working practices
- Requirements to improve performance standards
- Increasing professionalism
- Changes to government policies
- Efficiency initiatives
- Organisational restructuring
- Privatisation of services

Although TNA, design, development and delivery are key features of an organisation's training function, the use of EoT systems can help towards improving effectiveness and efficiency. Information obtained from EoT is evidence that training is a worthwhile investment and worth supporting. Unless EoT is done, it may prove difficult to use training as a valued agent of change and development. This can apply both to an organisation and to its training function.

**STEP 10 - Specifying Efficiency Needs and Objectives for New System**

Analysing EoT systems used by an organisation's training function is an essential prerequisite to actually improving them. Senior trainers have the responsibility to prioritise needs and decide objectives to improve efficiency, taking into account alternative strategies and reconciling conflicts. Depending on your position, you may seek help from senior officers to prioritise needs and objectives, or you are able to take initiatives yourself.

The agreement of objectives is likely to prove a demanding process in which the interests of individual contributors may have to be reconciled with interests of managing the organisation's training function as a whole. It is essential that senior trainers are aware of the wishes and priorities of the people who will be affected, directly or indirectly, by changes to training systems. These people - clients and stakeholders - should have their view taken into account. This will help them to obtain benefit from their suggestions and to have a sense of ownership in the systems they will be expected to use.

In training technology terms, aims are intentions and objectives are measurable outcomes. Aims can therefore be statements of intended improvements to the existing training systems, or developments for anticipated changes. These aims should be clarified into specific, measurable objectives. Typical objectives that emerge from this process are:

**Efficiency Objectives**

- An average reduction of 5% in the length of training courses.
- 10% better utilisation of existing training facilities.
- An increase of 15% in the number of people trained.

These are rather general objectives, and not associated with any particular training function or institution. However, once objectives of this kind are agreed, they can focus attention on specific training systems needed for them to be achieved.

**Job Satisfaction Objectives**

- Clearly defined trainer roles.
- Specific targets agreed.
- Personal development planned.

Job satisfaction for trainers depends on a combination of selection, tenure, achievement, variety and interesting professional challenges. The above objectives provide a basis to enable people to make a significant contribution to their organisation's training function. Achievement of objectives such as these will help to realise more of their potential.

**Objectives to Improve both Efficiency and Job Satisfaction**

- Utilising in full the principles of systematic training.
- Devising a system for internal and external validation of training courses.
- Helping line managers develop effective on job training.

Often trainers are keen to widen the scope of their activities, especially away from the traditional instructional role. The examples here offer opportunities for personal and professional development leading to potentially significant benefits for the organisation.

**Objectives Related to the EoT Matrix**

As an EoT system is established, evolves and is sustained, it requires decisions to be made about how this should be done - given possible changes in the organisation and factors that senior management regard as important. Easterby-Smith makes the point that EoT should be focussed on areas where greatest benefit can be obtained. The EoT matrix can help you decide appropriate, realistic and beneficial objectives. For example:

- You can discuss with key stakeholders where to concentrate EoT activities.
- Short, medium and long-term areas for EoT can be identified and action planned.
- Cells within the matrix can be identified, along with others that have an association.
- Responsibility mapping can be done to clarify *actors* and *actions*.
- EoT tools and techniques can be selected and appropriate procedures devised.

By using the matrix you'll be able to agree objectives from an overall concept of the EoT function that is related to clearly defined areas, activities and objectives.

**Objectives Related to Future Change**

Carry out TNA consultancy assignments in client organisations.

Evaluate alternative or competing strategies in response to identified training needs.

Use cost/benefit analysis to evaluate a particular training intervention.

These objectives encourage trainers to think about the future - the contributions they can make to inevitable changes to working practices and the personal development they must undertake to maintain professional competence.

**STEP 11 - Developing New EoT Systems**

Developing new systems is a combination of agreeing efficiency and job satisfaction objectives, designing new administrative systems and taking advantage of technological innovations. Changes to an organisation's training systems will be the responsibility of training management, but it should be done in collaboration with all those who contribute to the training function. This also applies to the EoT function; bearing in mind that EoT cannot be done in isolation and development will be an iterative process involving all aspects of an organisation's training function.

By analysing an organisation's training system, its subsystems - in particular, those that impact on the EoT function, you should also have generated a wide range of ideas for improvements. This is likely to present a variety of options that are available to deal with system variances, with development opportunities to respond to anticipated changes.

**Organisational Options**

At this stage it's important to reexamine the conclusions drawn from Steps 4 and 5. These answered the questions:

- What should be the key aims within the boundary of the EoT function, and how do these aims differ from what is actually happening?
- Given these key aims what should be the key tasks carried out within this area?

The key tasks associated with the key aims now need to be examined in detail, as these will be the focus for development activities. The following questions need to be answered:

1. Given our definition of key tasks in Step 5, what are the operating activities (day to day or regular tasks) that must be carried out?
2. What are the problem prevention/solution activities that will result from the key aims and key tasks identified?
3. What coordination activities will be required within the area, and between it and other areas?
4. What development activities will be necessary to keep the new system adaptable and in a constant state of improvement?
5. What control activities will be necessary? What kind of targets need to be set, and how can performance best be monitored?
6. Given the complex mix of activities are there special skills required in some functional areas?
7. Are there any key roles or relationships to which particular attention should be given in the development of new systems?

Answers to these questions provide the basic data for organisational options. Each of these options should specify:

- A broad outline of the EoT function - concerning working groups, individual contributors and respective responsibilities.
- A more detailed description of the work of each of these groups and individuals.

- A description of how key aims and tasks from Steps 3 and 4 will be distributed between groups and individuals.

Each organisational option should contribute to the achievement of efficiency and job satisfaction objectives set out in Step 10. Options can be described and evaluated under the following headings:

Description of Options:

**Job Satisfaction** - Advantages / Disadvantages

**Efficiency** - Advantages / Disadvantages

Each option can be checked against the efficiency, job satisfaction and future change objectives listed in Step 10. In evaluating options, the following questions need to be considered:

- Does the option achieve the priority efficiency and job satisfaction objectives listed in Step 10?
- Does it also achieve all or some other less important objectives, relevant to certain groups or individuals within the EoT function?

### **Technical Options**

These should be done in combination with organisational options to identify suitable technologies that could be used. It's possible that existing systems are suitable although changes may be required to the way they are used. Another technical option could be improvements to existing IT systems, or to the competences of people using them.

**STEP 12 - Detailed Development**

It would be unrealistic to expect systems used for the whole of the EoT function to be changed or further developed overnight. Earlier, steps covering aims, objectives and options should have established '**areas of concentration**', where maximum benefits can be achieved. Detailed development can now be undertaken in these areas with responsibilities agreed and tasks distributed to working groups and individuals.

Some of these tasks are likely to be new, so training needs should be identified and dealt with at an early stage in the development process. Particular attention must be given to the creation of effective relationships and procedures across various areas within the training function, and to other functions and stakeholders. In Step 10, for example, objectives were listed to illustrate developments in efficiency, job satisfaction and future change. Once these are selected, specific tasks can be allocated to people closely associated with them.

**Clearly defined trainer roles.**

For some trainers, and for others who contribute to the EoT function, this clarification of roles can be of immense value. As it can also create anxiety and conflict, the process needs careful and sensitive handling. Tasks involved in this area of improving job satisfaction include:

- Establishing a trainer task inventory.
- Interviewing trainers and others to analyse their existing role.
- Redefine roles and responsibilities, taking into account organisational requirements.
- Encourage them to redefine their role to make it more effective.
- Identify their training and development needs.

The implications resulting from this work are of great significance. Concepts of 'boundary management', 'role locking' is likely to influence the situation, also hierarchical considerations may inhibit the realisation of job satisfaction. Raising, then failing to fulfil expectations, may actually result in less rather than more job satisfaction

**Carry out TNA consultancy assignments in client organisations.**

One of the most important ways trainers can combine contributions to improved efficiency with an increase in their job satisfaction is for them to become involved in TNA consultancies. This involves working with a 'client', 'stakeholders' and 'beneficiaries' - requiring them to undertake tasks, such as:

- Discussing performance related issues with stakeholders.
- Interviewing beneficiaries to establish standards of performance.
- Collaborating with departmental management to help improve performance.
- Forming networks with specialists from other functions.
- Planning multi-disciplinary projects.

These tasks are likely to help towards improving efficiency, while giving trainers a professionally satisfying experience.

**STEP 13 – Implementation and Action Plans**

Whatever steps have been taken to analyse an organisation's training systems, and whatever areas have been selected for improvement, nothing will be achieved unless action is taken. The

systems need to be carefully examined and improvements planned, with actual implementation needs carefully planned and executed. Using the EoT Matrix as an overview, you must tackle the following questions:

- What kinds of problems are likely to be encountered on implementation and how can these be avoided, or dealt with?
- During the implementation period what activities will have to be coordinated, both within the area for development and with other systems?
- What training is necessary and how will this be provided?
- How much time is required for implementation and how can progress be monitored?

The answers to these questions may require revision to your plans for the development of the EoT systems. Perhaps some plans are too ambitious, or too dependent on other functions.

#### **STEP 14 – Review Process**

Once new systems are in use, their ability to meet all the objectives set for them during design and development must be tested. Two of the approaches used at the diagnostic stage are now used again - variance analysis and job satisfaction analysis.

It will be recalled that the aim of the improvements was directed towards evaluating a selected aspect of training, intended to achieve **improved efficiency** and **improved job satisfaction**. Improved efficiency can be checked by establishing the extent to which key variances - system weaknesses that cannot be eliminated - are now effectively controlled.

Indication that job satisfaction has improved will be felt by trainers, trainees, clients, stakeholders or funding agencies. Perhaps this will be informal for an individual or one that is a collective improvement initiative to continue improving an organisation's training systems.