SECTION II.9

IDENTIFYING TRAINING NEEDS AND PLANNING TRAINING

1. WHAT IS TRAINING NEEDS ANALYSIS?

Training needs analysis can be described as the general process through which the organisation or one of its parts:

1. Identifies the competence needed for the success of its business and operation
2. Specifies the range, extent, and aim of training action needed
3. Analyses how best the training needs can be met

The process needs to be proactive and systematic, and needs to be driven by the strategic objective of the company, business unit, or team.

1.1. Training needs and their identification

Although there are a number of models on how to identify training needs, most of them include some or all of the steps in figure 1:

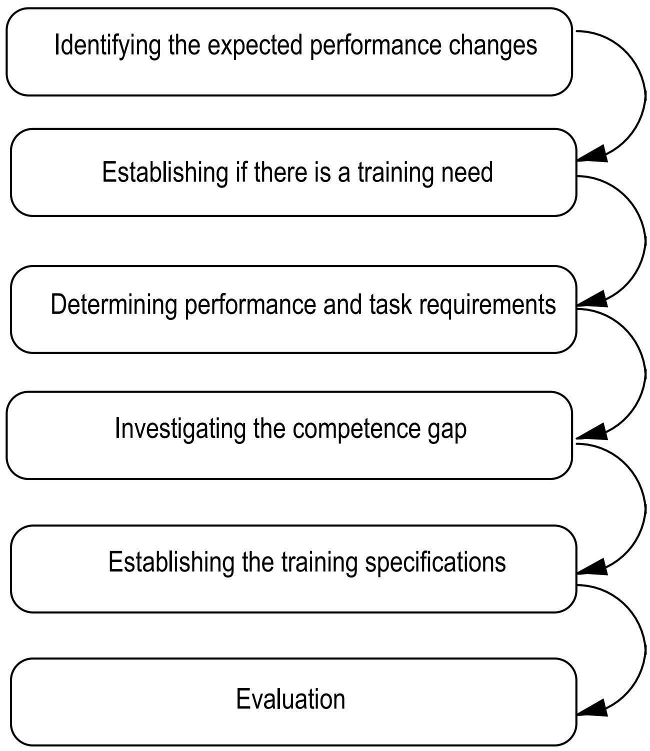


Figure 1: The process of training needs analysis

1.2. *Identifying the expected performance changes*

Identifying the expected performance changes constitutes the first step in the effort to recognise the training needs. The aim of this activity is to establish how performance is expected to change and improve as a result of the training activity. Performance changes and improvement goals should always be formulated in the light of the general vision and business strategy of the unit. Two types of performance changes should be considered:

1. performance changes necessary to achieve current objectives, e.g., identification of competencies necessary to deal with some immediate needs;

2. performance changes related to long(er) term objectives, e.g., identification of competencies aimed to produce some change or development in the strategic direction of the business.

There are several ways and sources to systematically identify the desired or necessary performance changes: in fact, any source of business data could provide some hints on what needs to be done to improve performance. However, information about performance changes is typically derived from the following sources:

Strategic planning documents: business plans, mission statements, medium term development plans, and the decision to undertake innovative projects all constitute important indications that training may be required.

Succession plans: replacement plans always provide an invaluable opportunity to assess a currently or prospective vacant position, and to identify what skills or competencies will be necessary to successfully perform the role.

Critical incidents: critical incidents are unforeseen events that, when properly understood, can indicate immediate and/or future training needs. Critical incidents include "problems" incurred by the organization but are not limited to them. For example the following count as "critical incidents": major breakdown of equipment, poor audit result, decreasing customer satisfaction, increased level of complaints (problems); new pieces of legislation, competitive initiative (external triggers); new technological or organisational innovation, sudden expansion of the business (internal trigger). Critical incidents typically identify urgent needs which require a swift response.

1.3. *Establishing if there is a training need*

Training needs derived from critical incidents usually come along with the label "urgent", and the pressure is usually to "throw some training at the problem". However, before undertaking any training activity on the basis of this kind of trigger, one should always ask whether training is the appropriate response. In the same way, before launching a long and expensive training programme, it is worth evaluating whether the performance changes can be best met by something other than a training intervention. Although training is often considered as the panacea of all ills, it may not in fact be the right answer, and it may have no substantial impact on the business and operation needs. The presence of a performance gap which seems to suggest the need for training may in fact derive from any of the following causes which go well beyond lack of skills or knowledge:

- problems with materials, equipment, or workspaces
- lack of resources
- inadequacy of work methods and of organisational processes

Accordingly, when analysing training needs one should also consider alternatives and take into consideration the "do not use training" option.

1.4 Determining the task requirements and key competencies

Once the necessary performance changes and improvements have been identified and a wide range of solutions examined, and once training is recognised as the most cost-effective way to meet the business need, it is fundamental to provide as many specifications as possible to give focus to the training activity.

A key procedure in this process is firstly to determine which are the task requirements necessary to carry out the job at the expected level of performance, and then to assess which are the key competencies required to achieve that level.
Three steps are involved in this activity:

Step 1: identify tasks and activities.
Step 2: identify key competencies
Step 3: specifying performance standards and measures for each key competence.

The necessary information can be gathered either by direct observation or by structured or unstructured informal interviews. Consultation with key personnel and analysis of documents are also important sources of data.

Data can be organised in a tabular format using the following table:

TASK AND ACTIVITIES	KEY COMPETENCIES	STANDARDS

***STEP 1**: identify tasks and activities.*

To determine the task requirements of a job it is firstly necessary to gather detailed information about the present or future tasks and duties, reporting relationships, overall purpose of the work activities. The more complete is the picture, the easier it will be to identify the training needs. The key question is: what will they be expected to do?

Example: TRAINING NEEDS ANALYSIS OF THE BDB RISK MANAGER

TASK AND ACTIVITIES		
Ensures that delegated risk responsibilities are well managed by those appointed to carry them out Provides the necessary support (in the form of coaching or corrective treatment) to team members		

etc.

***STEP 2**: identify key competencies*

The next step is to spell out the experience, qualifications, abilities, and personal qualities required to perform the job satisfactorily. This can be done by specifying which are the key competencies necessary to carry out successfully each of the work tasks. Competencies should be expressed in terms of behavioural and attitudinal capabilities (know how), technical skills, knowledge, and abilities.

Example: TRAINING NEEDS ANALYSIS OF THE BDB RISK MANAGER

TASK AND ACTIVITIES	KEY COMPETENCIES	
Ensures that delegated risk responsibilities are well managed by those appointed to carry them out	Be thoroughly trained and proficient in all aspects of Risk Analysis and Risk Management and must be able to demonstrate a successfully Risk Portfolio Have a sound experience in the construction industry Shall be adequately empowered for the carrying out of the role	
Provides the necessary support (in the form of coaching or corrective treatment) to team members	Be able to carry out or assist others in the analytical compilation for the quantification of Risk in the mode most suitable for the Project	

etc.

***STEP 3**: specifying performance standards and measures for each key competence*.

When possible standards and/or measures should be provided which allow you to recognise when an acceptable level of performance has been achieved. Two sets of standards may need to be established:

- level of performance at the end of training
- level of performance after a period of job experience.

Example: TRAINING NEEDS ANALYSIS OF THE BDB RISK MANAGER

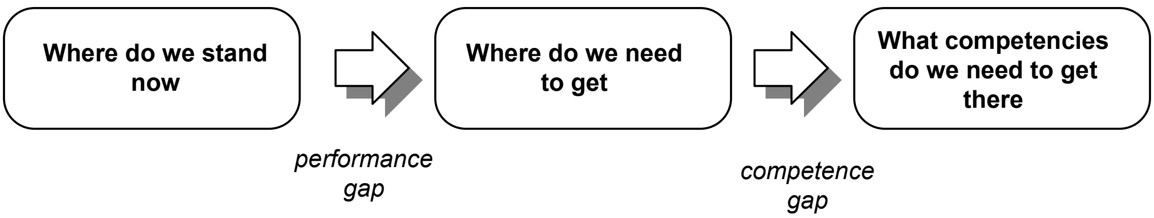
TASK AND ACTIVITIES	KEY COMPETENCIES	STANDARDS
Provides the necessary support (in the form of coaching or corrective treatment) to team members	Be able to carry out or assist others in the analytical compilation for the quantification of Risk in the mode most suitable for the Project	Risk register is properly maintain and updated Risk meetings are regularly held Clear qualitative and quantitative assessment of risks is produced

etc.

1.5 Investigating the competence gap

The next step in the analysis of training is to investigate the gap between the present and required performance in order to identify the competencies, skills or knowledge needed to fill this vacuum. This will help to identify precisely the training requirements and will support the delivery of effective and focused training.

Gap analysis responds to the following simple questions:



The performance gap analysis can be investigated in a number of ways using a range of approaches from the most informal to the most formalised. Among others there are:

Asking the senior manager in charge. This is a very common and in many ways effective strategy. The main disadvantage lies of course in that it is based on personal evaluations -- and that often the answer will tell you as much about the senior manager him/herself as about the performance gap.

Observation of people in the workplace and work samples. The advantage of this method is that you derive first hand data. Disadvantages come from the amount of time involved and from the fact that you only have access to what people do -- not how well they do it. If the activity is not a very "practical" one the result can be misleading.

Individual and group interviews. This is the most common way of doing it. There are in fact many forms of individual interviews that can be used for this purpose. Among the most common are: performance appraisal interviews, where the interviewer generates data on past and present performance, while at the same time trying to identify the ways to overcome them; critical incident analysis, where the focus is on the reasons behind a recent incident or near miss. Although individual interviews may be very effective their success depend significantly on the skills of the interviewer. Moreover, they are very time consuming -- and there is always the risk that the interviewee will say what they think the interviewer would like to hear, and not what they actually think.

Tests While tests are very effective for collecting large amounts of data in a short time, they can be very costly to design, and they usually require expert input to be properly designed, pre-tested, and interpreted.

Simulations and assessment/development centres. These are fairly innovative and very effective approaches. Of course they are very expensive, and they can only be enacted within a general corporate strategy.

1.6 Establishing the training specifications and drafting the training plan

Once the training needs have been specified in detail they can be translated into appropriate training actions. This is achieved by drafting a *training plan* aimed at meeting the competence gap that hampers the performance level. The training plan summarises all the information gathered in the previous steps and turns them into a training action plan. A training plan should include specifications on:

Why is training needed - i.e., what are the business needs and expected performance changes. This section should contain a statement of aims that will constitute the criteria for evaluating the training activities.

The target of the training activity (who will be involved in the training activity).

The knowledge, skills, and attitude learning objectives. The objectives should be described using behavioural terms, that is, terms describing actions and things that people will be able to do.

Constraints that need to be taken into account such as budget and cost limitations; how many people can be released at a time; duration of the training; urgency

The training methods to be used.

The skills required by the trainer(s).

The time scale and setting for delivery of the training, that is when and where the training will take place.

On the basis of the training plan it is possible to decide whether the training needs to be formal or informal, that is, whether the best solution is instruction-like formal training or instead the training needs can be fulfilled by internal mentoring or on the job learning initiatives (job rotation, vicing). Once the type of training has been chosen, the make or buy decision can be taken.

Example: Training plan for the RISK MANAGER in the BDB

Business needs	A well-implemented risk strategy will enable the team to have a greater understanding of the project and will have tangible benefits: by identifying uncertainty, and managing it, risks can be mitigated and opportunities capitalised upon. The single body appointed to maintain and control the overall management of Risk, will be known as the Risk Manager. The presence of a competent risk manager is considered as a key aspect for the success of the project
Target and learning objectives	The training will enable the deputy Risk Manager to: ○ acquire extensive familiarity with the process of risk management and related techniques; ○ be thoroughly trained and proficient in all aspects of risk analysis and risk management and able to demonstrate a successful risk portfolio; ○ be able to carry out or assist others in analytical compilation for the quantification of risk in the mode most suitable for the project.
Constraints and methods	Because their role tends to be quite specialist it was suggested that: a) the appointed risk manager will search for in-depth training outside the boundary of the project; b) at the same time (or alternatively) the risk facilitator will also act as provisional risk manager for a short period so that the appointed project manager can become proficient in the practice through a sort of apprenticeship.
Time scale and setting	Risk managers will have to be in place to participate in the “Design strategy Risk Analysis workshop” and in order to support the risk management processes within and between clusters.

1.7 Evaluating the training needs analysis (as part of the training evaluation process)

Training evaluation typically tries to assess the effects of a training intervention with regard to:

- Satisfaction of trainees with the training delivery
- Improvement of skills derived from the training activity
- Effects of training on job performance
- Fulfilment of the original training needs and benefits in term of organisational performance.

It is difficult if not impossible to separate the evaluation of training needs analysis from the assessment of the other aspects of training. Although an in depth analysis of training evaluation methods goes beyond the scope of the present practice note, it can be noted that poor results in any of the evaluation areas may indicate deficiencies or faults in the process of training needs analysis. For example:

Poor results from the evaluation of the trainees satisfaction can stem from a misjudgement of the time scale and setting (when and where), from choosing the wrong training method, or derive from poor performance of the trainer.

Poor results from the evaluation of the achievement of the learning objectives may be caused by poor performance of the trainer, by the training methods used, or by the wrong fit between the training offer and the training target (this applies in particular when a training event judged positively by the majority of the participants gets negative reactions from isolated individuals).

Poor results from the assessment of the effects of training on performance are especially important in our context in that they may reveal a poor analysis of the learning objectives deriving from a flawed identification of competence gap or reveal that training was not the right choice after all. Similar considerations apply to negative results from the analysis of organisational level improvements. In both cases, however, interpreting the evaluation data becomes especially difficult in that the outcomes depend on a number of factors beyond the quality of training activities [*].

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