Techniques for the identification of training needs

No one ever listened themselves out of a job.

Calvin Coolidge

CHAPTER OBJECTIVES
When you have read this chapter you should be able to:

- describe a range of methods for identifying learning needs
- identify sources of information relevant to learning needs
- use a variety of methods for information-gathering, including interviews, discussions and questionnaires
- explain the way in which development centres are constructed and operate.

There are many approaches to the identification of training needs, some of which are described here. Unfortunately, waving a magic wand isn’t one of them! They all involve hard work and the adoption of an analytical and diagnostic approach to try to determine what is required. Some trainers prefer the term ‘training needs analysis’ (TNA) to ‘identification of training needs’ (ITN), but it is the same thing. As mentioned in the previous chapter, many people in the training profession prefer to use the term ‘learning needs’ rather than ‘training needs’ because it seems to be more inclusive of the wide range of learning methods that exist, and because it is less trainer-centred. Use whatever terms you like, bearing in mind the possible reactions from the people affected.

JOB AND TASK ANALYSIS
There are many reasons for analysing jobs and tasks. One common reason is to provide a basis for job evaluation; another is to be precise about requirements in a selection situation. There are also many different systems of analysis. Some seem to generate a multitude of documents; others use highly involved and sophisticated methodology. In their book Job Analysis, Pearn and Kandola (1988) describe 18 different analytical techniques. The process described below is a simple and traditional approach.

Background

‘An analogy of digging a hole can well be applied to the task of job analysis. Both the area to be covered and the depth are arrived at by knowing the purpose of the hole. This analogy...
goes further in that the task can be both tedious and messy. The area of a particular job to be analysed and the depth are arrived at by knowing the purpose of the analysis exercise.’

Malcolm Craig, in Truelove (ed., 1995)

Job analysis

I am using the term ‘job analysis’ to describe the level of analysis which takes us to the stage of writing a job description. This is a collection of statements regarding the functions performed in a job grouped in a way which helps a reader to get ‘the big picture’ of what is involved. The most widely used methods of gathering information to prepare a job description are:

- interviewing the job-holder(s)
- interviewing the boss of the job-holder
- direct observation
- asking the job-holder to keep a record of what is done (time-sheet or diary).

Whichever method or combination of methods is used, the aim is to provide a descriptive document which clarifies understanding of the functions performed in the job. To further aid understanding, certain key facts are usually inserted at the front of the description. The format and contents of the front section will vary from one organisation to another, but may typically comprise:

**Job title**
The official title as noted on employment (Personnel) records. Take care to avoid any terms which imply sex discrimination (eg tea lady, repairman).

**Reports to**
The position which has line responsibility for the job being described.

**Responsible for**
A list of any subordinates.

**Purpose**
A short, often single-sentence, description of the main objective of the job.

**Location**
Relevant information regarding site or department.

**General**
Any other relevant information.

Other commonly included pieces of information relate to pay grade, hours of work, and working conditions. These are not particularly useful from the trainer’s viewpoint, but may be required for other purposes.
Techniques for the identification of training needs

The job description then proceeds to list what is done in the job. There is some confusion in the terminology used in job analysis. I find the use of the term ‘responsibility’ unhelpful, and prefer to use the term ‘duty’ for a chunk of work described at this level. Later on, a duty may be broken down into smaller ‘tasks’. Note that in the (very simple) example below several activities have been clustered together under relevant headings. Each of these duties starts with a present participle ending with an ‘ing’. The key to describing what is done in the duty is to start each sentence with an active verb – ‘answers’, ‘places’, ‘assists’, etc.

**EXAMPLE JOB DESCRIPTION: TELEPHONIST**

Reports to: the Administration Manager

Responsible for: no subordinates

Purpose: to provide a prompt, efficient and courteous telephone service for a Regional Operating Centre

Location: Main Building, Northern ROC

General: the post-holder is one of two operating a modern switchboard serving 340 extensions

Duties:

**Receiving calls**

Answers incoming calls promptly and courteously. Ascertains the nature of the call and directs it to the most appropriate person. Takes messages accurately when required

**Outgoing calls**

Places calls for senior staff, and may assist other staff with difficult or overseas calls

**Dealing with emergencies**

Implements set procedures to deal with fire or other incidents

**Operating fax machine**

Sends and receives messages by fax

Other duties:

Assists with various office duties from time to time, including covering on reception

Once a job description has been completed, we can then proceed to analyse the components of the job further. This is done by clarifying in more detail the stages involved in each operation through task analysis.

**Task analysis**

Many training situations do not require the in-depth breakdown of tasks into small component parts. However, some complex tasks must be painstakingly analysed in order that an accurate and detailed picture is created which will form the basis of a training manual or programme. One of the consequences of the widespread use of Information Technology is that many people have to learn to find their way around software packages. These are becoming increasingly large and versatile, and whereas some people cope well by trial and error and using the manual, many others get stuck and give up. Even those who cope well may remain
Training in practice

ignorant of some of the facilities available to them in the software, or may have found a
laborious way to accomplish a task that has a much quicker solution available. The purpose of
structured training is to ensure that everyone learns the most effective methods of performing
the required tasks, and learns them faster than by trial and error.

The process of analysis is one of breaking down operations into component parts. How small
these component parts should be is a matter of judgement which should take account of the
existing knowledge of the learner. Will he or she already know the procedure for ‘Open File
Manager’? If so, it would be a waste of time analysing that operation further. On the other
hand, if the learner does not know what is meant, then right at the beginning of the training you
will have needlessly created a feeling of inadequacy and confusion. It is usually best to analyse
in full detail and skip unnecessary explanation at the time of training if it is clearly not required.
The analytical process itself is good preparation for instruction; it makes sure you know all
there is to know before you start trying to teach someone else.

To continue with the example already given for a telephonist, the duty of ‘Sends messages by
fax’ could end up as:

1. Loads document
2. Dials number of destination
3. Returns document and confirmation of transmission to originator

and so on.

This depth of analysis may be adequate for training purposes – that is, to act as a sequential
series of prompts for a competent person to use in the instruction of someone else. If more
depth is required, the analysis may be more detailed:

1. Loading documents
   1.1 Place the document face down on the tray
   1.2 Adjust the document guide to match the width of the document
   1.3 Slide the guide to ensure that the document is centred on the feeder
   1.4 Gently insert the leading edge of the document into the loading slot until you hear a
      beep
   1.5 Select desired resolution

and so on.

Even now, more detail may be required. In the above example, 1.5 might be expanded to:

1.5 Select desired resolution
   1.5.1 Press TX.MODE to cycle through FINE, SUPERFINE, or STANDARD modes
   1.5.2 Press PHOTO if sending photographs

and so on.

It can also be appreciated that the above, although giving a sequence of operations, does not
give the trainee any information about when it is appropriate to use different modes, or the
consequences of each action (for example, that ‘fine or superfine modes are slower and
therefore more costly’).
Often extra information is useful. There are many approaches to presenting the information from task analysis. One is to use the four headings shown in Table 4.

**Table 4** Checklist of task analysis

<table>
<thead>
<tr>
<th>What is done?</th>
<th>How is it done?</th>
<th>Points to ensure</th>
<th>Extra information</th>
</tr>
</thead>
<tbody>
<tr>
<td>List the stages in a task starting each one with an active verb</td>
<td>Describe briefly how the operation is performed</td>
<td>Register factors that will affect performance</td>
<td>Note any other information which may be helpful or necessary</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Register factors that will affect performance</td>
<td>Note any other information which may be helpful or necessary</td>
</tr>
<tr>
<td></td>
<td></td>
<td>List pointers that will show the trainee whether the operation is proceeding correctly</td>
<td>Note any other information which may be helpful or necessary</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Use sensory words like 'see' or 'feel' to describe signals which must be recognised</td>
<td>Note any other information which may be helpful or necessary</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Note any other information which may be helpful or necessary</td>
<td>Note any other information which may be helpful or necessary</td>
</tr>
</tbody>
</table>

**Example:**

Set up directory defaults

- Select 'Setup' from the main menu
- Select 'Defaults'
- Press Tab
- Type 'C:\' and the name of the directory containing your spreadsheet files

Save any work in progress before commencing

- The Default Settings screen should now appear (see Fig.5)
- Using the arrow keys and pressing 'Enter', and clicking on either side

Another way is to incorporate all the information into discrete steps:

1. Select 'Create New Chart' from the main menu.
2. Select 'From Gallery' from the Create New Chart menu to display the Chart Gallery.
3. Select the chart type by pressing the number in the upper left …
and so on.

Always remember to include any necessary information regarding safety, whatever format is used. This is necessary to do a good and complete job. If you do not do so and someone is injured following your instructions, then not only could you be liable for prosecution, but you will have failed someone who had put their trust in you.

**Faults analysis**

The key skill in many jobs is recognising when something has gone wrong and knowing what to do to put things right. Fault-finding procedures can be analysed systematically and a faults analysis chart produced (see Table 5, overleaf). Good examples of these can be found in popular car manuals.
Table 5  Faults analysis chart

<table>
<thead>
<tr>
<th>Fault</th>
<th>Causes</th>
<th>Remedies</th>
</tr>
</thead>
<tbody>
<tr>
<td>File name invalid</td>
<td>Space, comma, or other character used</td>
<td>Remove the character and replace by letter or number</td>
</tr>
<tr>
<td></td>
<td>More than 8 characters</td>
<td>Rename with 8 or fewer characters</td>
</tr>
</tbody>
</table>

Skills analysis

Once the task breakdown has been completed to the required depth, each operation may be examined to determine what skills or background knowledge are necessary for its successful completion. In the examples given under Task analysis above, the operations are mainly procedural and do not require particular skills or knowledge. However, if we look at an aspect of the job of the telephonist such as ‘Receiving calls’, this could be considered to require a number of skills and considerable knowledge (see Table 6):

Table 6  Knowledge and skills breakdown

<table>
<thead>
<tr>
<th>Task</th>
<th>Knowledge</th>
<th>Skill</th>
</tr>
</thead>
<tbody>
<tr>
<td>Answers incoming calls promptly and courteously</td>
<td>Company procedure for greeting callers</td>
<td>Switchboard operation Assertive and courteous telephone manner</td>
</tr>
<tr>
<td>Ascertains the nature of the call and directs it to the most appropriate person.</td>
<td>Functions within the company Extensions</td>
<td>Questioning and listening techniques</td>
</tr>
<tr>
<td>Takes messages accurately when required.</td>
<td>Company procedure for recording messages</td>
<td>Judging when to offer to take messages Memo-writing proficiency</td>
</tr>
</tbody>
</table>

When completed for all tasks, this stage is sometimes referred to as a ‘job specification’. It may form the basis for the design of a training programme which will be discussed later in the book. Otherwise, the completed task analysis or job specification may be used as a yardstick against which to assess current performance. If someone cannot do all the required tasks, then a training need is indicated. This approach has been developed extensively in the UK in the National Vocational Qualification system.

SKILL MATRICES

A quick and effective way of identifying training needs at an occupational level is to construct a skill matrix. For example, if we were to look at a workshop involved in the modification of light vans for a specialist purpose, we might arrive at a list of operations (perhaps at the ‘duty’ level) such as:

- cut off roof
- cut out windows
- cut out vents
Techniques for the identification of training needs

- fit high roof
- fit windows
- fit vents
- fit panelling
- thread wiring.

We might have nine employees in this workshop whom we know well enough to be able to ascertain whether or not each one is capable of doing each operation. A matrix (Table 7) may in that case be constructed.

Table 7  Skill matrix

<table>
<thead>
<tr>
<th>Name</th>
<th>Cut off roof</th>
<th>Cut out windows</th>
<th>Cut out vents</th>
<th>Fit high roof</th>
<th>Fit windows</th>
<th>Fit vents</th>
<th>Fit panelling</th>
<th>Thread wiring</th>
</tr>
</thead>
<tbody>
<tr>
<td>R. Amos</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>B. Borg</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>D. Cox</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>H. Dawes</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M. Earl</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>F. Fry</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G. Grant</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>S. Hunt</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>J. Joyce</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>

From this matrix, it can readily be seen that we have some possible problem areas.

There are many operations which can only be performed by two people.

The line manager may or may not be aware of this situation. Often the problem will be overlooked until, say, Dawes goes sick while Amos is on leave. On the other hand, this may not be an issue if ‘roof cutting’ is a once-a-month job and we can always get a subcontractor to do it if stuck.

But Cox, Earl, Fry and Joyce can each only perform one operation.

Again this may or may not be a problem. Perhaps they are all new to the job, or perhaps have some limitation which stops them learning other operations. The reasons must be investigated.

If there is not an acceptable reason, what should the desired skill situation be? If we discuss the matter with line management, they might say: ‘We want everyone to be able to do at least three operations. We want at least three people capable of doing each cutting operation, and four people capable of doing each of the other operations.’

Our matrix can now be amended (see Table 8, overleaf).
Table 8  Skill matrix with gap indications

<table>
<thead>
<tr>
<th>Name</th>
<th>Cut off roof</th>
<th>Cut out windows</th>
<th>Cut out vents</th>
<th>Fit high roof</th>
<th>Fit windows</th>
<th>Fit vents</th>
<th>Fit panelling</th>
<th>Thread wiring</th>
<th>Total</th>
<th>Need</th>
<th>Gap</th>
</tr>
</thead>
<tbody>
<tr>
<td>R. Amos</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>7</td>
<td>3</td>
<td>-</td>
</tr>
<tr>
<td>B. Borg</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td>3</td>
<td>-</td>
</tr>
<tr>
<td>D. Cox</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>H. Dawes</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td>3</td>
<td>-</td>
</tr>
<tr>
<td>M. Earl</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>F. Fry</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>G. Grant</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>S. Hunt</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4</td>
<td>3</td>
<td>-</td>
</tr>
<tr>
<td>J. Joyce</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>2</td>
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<td>4</td>
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<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Need</td>
<td>3</td>
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<td>3</td>
<td>4</td>
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<td>4</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gap</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td>2</td>
</tr>
</tbody>
</table>

We are now in a position to discuss how the various gaps should be addressed and develop a training plan accordingly. However, so far we have only considered the question ‘Can he or she perform the operation?’ and have answered that question by using a tick or not. In other words YES or NO. Often, the position is more complex. Grant can do wire threading, but is very slow. Borg can fit panelling, but the quality of her work is not up to standard. A variety of ways of adding detail to the picture are possible. In Table 9 below, grades are given:

A = Quality to required standard
B = Quality below required standard
1 = Speed to required standard
2 = Speed below required standard

Table 9  Skill matrix showing gradations of competence

<table>
<thead>
<tr>
<th>Name</th>
<th>Cut off roof</th>
<th>Cut out windows</th>
<th>Cut out vents</th>
<th>Fit high roof</th>
<th>Fit windows</th>
<th>Fit vents</th>
<th>Fit panelling</th>
<th>Thread wiring</th>
</tr>
</thead>
<tbody>
<tr>
<td>R. Amos</td>
<td>A1</td>
<td>A1</td>
<td>A1</td>
<td>A2</td>
<td>A1</td>
<td>A1</td>
<td>A1</td>
<td>B2</td>
</tr>
<tr>
<td>B. Borg</td>
<td>B1</td>
<td></td>
<td></td>
<td>A2</td>
<td></td>
<td>A1</td>
<td></td>
<td>A1</td>
</tr>
<tr>
<td>D. Cox</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>B2</td>
<td>B2</td>
</tr>
<tr>
<td>M. Earl</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>A1</td>
<td></td>
<td>A1</td>
</tr>
<tr>
<td>F. Fry</td>
<td>B2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>A1</td>
<td></td>
<td>B2</td>
</tr>
<tr>
<td>G. Grant</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>A1</td>
<td>A1</td>
</tr>
<tr>
<td>S. Hunt</td>
<td>B1</td>
<td>A1</td>
<td>A1</td>
<td>A2</td>
<td>A1</td>
<td></td>
<td></td>
<td>A1</td>
</tr>
<tr>
<td>J. Joyce</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>A1</td>
<td>B2</td>
</tr>
</tbody>
</table>

A more complex picture has now emerged. Other coding possibilities include the use of percentages to indicate speed, or more sophisticated definitions of competence such as:

A = Fully competent, including fault rectification
B = Fully competent for straightforward operations
C = Competent to deal with straightforward operations with assistance
D = Competent to assist others

E = Not yet competent

One retail organisation I know of developed a system whereby competence was denoted by the use of red, silver and gold stars. This positive and motivating approach was made ‘user-friendly’ by the skill matrix being displayed in the staff room at each branch. Not only were the training needs easily determined by the line manager, but achieving competence was rewarded by a certification system which was in turn linked to pay.

INTERVIEWING

Interviewing is a technique that can appear to be very simple when used by an experienced practitioner. Although some people are naturally better at interviewing, the key skills of a good investigative interviewer are all capable of being learned. The first two skills are common to all types of interview – questioning and listening.

Questioning and listening

These two investigative skills are inseparable; one supports and reinforces the other. For trainers these skills are crucial not only at the stage of identifying training needs but also during instruction and evaluation. Many trainers who recognise that the ability to talk well is vital often underestimate the importance of questioning and listening. Hearing, which is an ability that may be difficult to improve, is not the same as listening which is a skill that can be significantly enhanced by training. Questioning is something that everyone can do, but which some people learn to do much more effectively than others.

In an interview to determine training needs, the interviewer may be delving into very emotive and sensitive areas. To ensure that the interviewee feels comfortable in talking about these issues, the interviewer must appear to be listening. To ensure that full understanding is attained, the interviewer must not only appear to listen but must actually do so with real concentration.

We let people know we are listening in two major ways: non-verbally and verbally.

Non-verbal cues

- eye contact
- smiling and nodding
- responding facially
- attentive posture.

Verbal cues

- encouraging inputs such as ‘Yes’, ‘I see’, ‘Then?’, and so on
- asking for repetition of any word or name that has been missed
- checking understanding by paraphrasing what has been said and asking if the interpretation is correct
- making notes
- asking questions which show that previous replies have been absorbed.
Questioning appropriately may involve using a number of types of question. Some questions will be prepared in advance, but others must be constructed during the interview in response to what has been said. There are a number of different types of question which may be used:

**Types of question**

*Open questions* leave an ‘open’ field for the person to answer:

- ‘Tell me about …’
- ‘What kind of work do you like?’
- ‘How do you see the future?’

*Probing questions* fill in details from generalised replies:

- ‘What exactly caused that?’
- ‘You referred to an unpleasant incident a few moments ago; can you tell me exactly what was involved?’
- ‘Who was it caused these problems?’

*Reflective questions* repeat what has been said or implied to encourage further disclosure. They show an awareness of feelings:

- ‘You sound frustrated about that …?’
- ‘Does dealing with customers often upset you?’
- ‘You say he actually made you cry?’

*Closed questions* are used to establish specific facts:

- ‘Did you ask to be transferred?’
- ‘How old were you?’
- ‘Which machine was that?’

*Comparisons* are useful as a preliminary to more probing questions:

- ‘Which do you prefer – writing or selling?’
- ‘Which did you find easier, WordPerfect or Word?’
- ‘Who is the better manager?’

Some questioning approaches are not appropriate, particularly:

*Leading questions*

- ‘You’d like that, wouldn’t you?’
- ‘You’ll need training in that, won’t you?’

**Other aspects of the interview**

- Ensure that interviews are conducted out of earshot of other people.
- Maintain confidentiality.
- Make good use of silence, allowing the other person time to think and reply.
Maintain an appropriate distance from the interviewee.  
Make lots of notes.

You will also need to plan the interview, to some degree, in advance. It is sometimes worthwhile to prepare a standard list of questions to use with a group of people. Clearly the questions will vary according to the organisation and the types of job in question. Some possible questions are:

- What aspects of your job do you find satisfying?  
- What would you change about your job if you could?  
- Which aspects of your work interest you least?  
- Which aspects of your work do you find most difficult?  
- Have you sometimes found it difficult to do your job because of a lack of technical knowledge?  
- What training have you had?  
- What training do you think would be useful in your present position?  
- What training do you wish you had received in the past?  
- Have you any skills or knowledge that are not being used in your job?  
- How do you know if you are doing a good job?  
- What do you think other people think about your performance?  
- When do you feel most pressured?

Another possible approach is to concentrate on the anticipated changes in the job. An example of this approach is given in the exercises following this section.

**SURVEY METHODS**

Surveys can be very useful in the gathering of data, including information on attitudes. People usually participate willingly if the completion of a survey form is not too complex or lengthy and if they think some good will come out of the exercise.

When designing a survey you must decide on:

- the size and nature of the sample  
- the format of the questions  
- exactly how the survey is to be conducted.

**Sample**

How many people will you ask? All of them or just 10 per cent of them? If not 100 per cent, how can you ensure fair representation? Make sure that you do not end up only asking grade 4 people, or only those in Scotland, if you are going to present the results as applying to the whole organisation. Political considerations often mean that it is better to survey everyone so that nobody feels left out.
Question format

The main formats available are:

**Freeform**
‘What do you think of the training in this company?’

**Multiple-choice**
Which best describes the current position?

- Excellent
- Satisfactory
- Unsatisfactory
- Awful

**Yes/No**
Do you think training has improved over the last two years? Yes/No

How

Certain decisions have to be made in terms of how the survey is to be conducted. If you are just trying to get a global picture, you may choose to make the responses anonymous. More often, you will want to know the job or name of the person concerned so that any identified needs can then be met. If the survey says it is anonymous, but then asks for grade, age and length of service, people will assume that they will be identified from these particulars anyway. Make it clear when and how the form should be returned.

An alternative approach is to ‘walk’ the survey round. Delivering and collecting by hand will improve the response rate, but at a time cost. You may even want to ask the questions orally and write down the responses, as market researchers often do in shopping centres. Again, this is a slow method best suited for low numbers.

In order to get continued co-operation from people, publish the results and ensure that there is no negative comeback on participants.

A sample extract from a survey form constitutes Table 10.

**Table 10  Extract from a training needs survey**

<table>
<thead>
<tr>
<th>Training Needs Survey</th>
</tr>
</thead>
<tbody>
<tr>
<td>This is a survey to determine how well your manager communicates with you. The results will be used to help us determine training needs for managers. All responses will be treated as confidential and no attempt will be made to identify either respondents or their managers.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>1 How well does your manager keep you informed of what is going on within your own division?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very well □  Fairly well □  Not very well □  Not at all □</td>
</tr>
</tbody>
</table>

| 2 How well does your manager keep you informed of what is going on within other divisions? |
|-------------------------------------------------------------------------------------------------
| Very well □  Fairly well □  Not very well □  Not at all □ |
### Techniques for the identification of training needs

#### 3 How often does your manager organise team meetings?
- Daily
- More than once a week
- Weekly
- Twice a month
- Monthly
- Quarterly
- Every six months
- Less than every six months
- Never

#### 4 How effective are the team meetings?
- Very effective
- Fairly effective
- Not very effective
- Ineffective

Please add any comments that you feel would be useful:

#### 5 How often does your manager discuss objectives with you before you undertake any training or development activities?
- Always
- Usually
- Sometimes
- Rarely
- Never
- No training

### APPRAISAL SYSTEMS

Many organisations see performance appraisal schemes as an integral part of their employee development strategy. Schemes vary considerably from one organisation to another, and nowadays may have a variety of names, but almost all of them include the identification of training needs as a key component. Most also consider the longer-term career options available to employees, and allow them to express their preferences. It follows that anyone with responsibility for training and development should influence the design of the scheme and ensure that notice is taken of the information generated by it.

This is not always readily achieved. Sometimes the scheme will focus on short-term performance issues, and line managers may not regard the consideration of developmental issues as important. The appraisal may also be considered to be confidential within the department concerned. Sometimes the section covering training and development needs is detachable, so that the training function only gets to see the appropriate information. This approach has its merits, but excludes the underlying performance issues which contribute towards identifying the training and development needs.

There are many issues to be addressed when designing and implementing an appraisal scheme, and some of the aims of the process may conflict with each other. For example, a scheme linked to the determination of pay increases may inhibit the appraisee from being honest about aspects of the job that he or she finds difficult, whereas it is precisely these aspects that must be discussed to identify training needs. Care is required to minimise these conflicts.
Training in practice

Who should be involved?

By far the most common arrangement is that employees are appraised by their immediate bosses, but there are many variations on this. In some organisations a second appraisal is conducted by the next-higher level in an attempt to ensure that any personality conflicts are overcome, and to promote improved contact between senior and junior staff. There is a noticeable trend to include inputs from both peers and subordinates in the appraisal process. Each option has implications for the appraisal process as a whole, but also for training needs identification in particular. Senior management are looking at performance from their perspective, whereas peers and subordinates may be much more concerned with the ‘softer’ aspects of performance, such as performing as a team member, motivating others, or being receptive to other people’s ideas.

Incorporating the identification of needs into appraisal

There are very many different forms in use in very different organisations. Sometimes there is a separate section which looks something like Table 11.

Table 11  Training and development within appraisal

<table>
<thead>
<tr>
<th>Learning need:</th>
<th>Method:</th>
<th>Date:</th>
</tr>
</thead>
</table>

An alternative approach is to link each assessment of performance and the achievement of objectives to the identification of needs, as in Table 12.

Raising expectations

One very real problem with the introduction of appraisal schemes which include the identification of training needs as a core part of their purpose is that expectations are raised. On first introducing a scheme, hundreds of needs may be revealed which were previously hidden. Typically, the training budget cannot cope with all these needs in one go, and so many remain unsatisfied. The result of this is that profound cynicism quickly sets in. Should the same disappointment be repeated the following year, the reputation of the scheme as an effective and meaningful process for dealing with needs and aspirations will be permanently damaged. Accordingly, appraisers should be encouraged to:

- prioritise needs
- advise appraisees that some requests may not be met, and why
- actively seek out low-cost or no-cost solutions, such as coaching or reading.
### Table 12 Training and development linked to performance

<table>
<thead>
<tr>
<th>Performance area</th>
<th>Assessment</th>
<th>Training and/or development implications</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>etc</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Next year’s objectives</th>
<th>Measure of success</th>
<th>Training and/or development implications</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>etc</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

There are many other issues to be addressed in the design and implementation of an appraisal scheme. A number of good books are available which give help to someone who has to manage this task. The work by Anderson (1993) also includes advice on managing the relationship between performance appraisal and career development.

### DEVELOPMENT CENTRES

The use of assessment centres for selection has continued to increase to the point where students approaching graduation now expect to undergo them routinely as they search for a suitable position. Somewhat less common, but growing in popularity, is the use of centres to assist in identifying developmental and training needs.

One of the reasons that the use of development centres has increased is that many organisations now base many of their employment practices on the idea of ‘competencies’ (or similar terms). Having identified key competencies for each job, it is comparatively easy to see how to make an assessment on that competency and compare it with the level of competency required. Following participation at development centres (or workshops), people can be informed how their performance was rated compared with the standard required for progression or movement into another role. This can be extremely helpful to them. Some organisations may also use these assessments to decide who should be given training and experience – and, of course, who should not be. It must be remembered that development centres do not function in isolation. The centre is just part of a bigger performance-enhancing process which may include appraisals, 360-degree feedback, mentoring schemes, etc.

There is no single ‘right’ way for a centre to be run. The design adopted will depend upon the competencies being investigated and, ultimately, how much the organisation wants to spend. Some centres run for several days but most commercial organisations cannot afford the resources to do this, and the pressure is usually on to reduce the duration to a minimum. The most common duration is one full day – perhaps with a follow-up feedback session.
Various elements can be combined within the time available. These are usually:

- exercises
- psychometric tests
- an interview.

**Exercises**

The most common types of exercises are:

- job-specific exercises
- case studies
- in-tray exercises
- group exercises
- role-plays
- individual presentations.

**Job-specific exercises**

For example: ask someone who is applying for a job as a website designer to design a website for a given scenario in a limited amount of time.

**Case studies**

For example: project managers may be asked to plan for the release of a new product. The plan may incorporate scheduling, budgeting and resourcing. This type of exercise may require the individual to display analytical thinking, planning and organising skills, etc. A case study exercise may be done by people working alone. More commonly, they are asked to work in teams. In that case, interactive skills, teamwork, leadership and persuasion might be assessed. Often there is a requirement to present the findings and the agreed plan.

**In-tray exercises**

Someone undertaking an in-tray exercise is asked to assume a particular role as an employee of a (perhaps fictitious) company and work through a pile of correspondence in an in-tray. These exercises commonly look at the ability to organise and prioritise work, analytical skills, communication with team members and customers, written communication skills, and delegation (if a higher-level position). Often participants will work on their own for a time before discussing their priorities and decisions as a member of a group.

**Group exercises**

Group exercises involve participants working together as a team to resolve a presented issue. These exercises commonly focus on interpersonal skills, leadership, teamwork, and problem-solving skills. They may be presented as a ‘leaderless group discussion’, or people may be assigned a particular role. Sometimes a problem-solving scenario may be used.

**Role-plays**

Participants may be asked to assume a fictitious role and handle a particular work situation. Customer service supervisors may be asked to respond to a number of phone inquiries,
including customer queries and complaints, or managers may be asked to provide a staff member with feedback, or to conduct a counselling interview.

**Individual presentations**

Participants may be required to bring an ‘about me’ presentation with them. This can be very revealing – not only about the individual’s personality as indicated by the content, but also about how much thought and effort has gone into the presentation. An alternative is to ask participants to prepare a brief presentation on the spot – perhaps around a topic such as ‘my role model’.

**Psychometric tests**

If you want to measure somebody’s aptitude at, for example, verbal reasoning, then using a properly designed psychometric test is the way to do it. Such tests are quick, accurate, objective and cheap. The only real problem is that you have to be qualified to buy and use them. They are dealt with in some depth in the final chapter of this book.

**Interview**

Interviews may be conducted on the same day as the rest of the centre or separately. It can be useful to give the individual a chance to air his or her perceptions of the activities undertaken, and questions are often tailored to probe why someone performed the way he or she did. Otherwise, the usual objectives of an interview are addressed, with questions selected to provide further information in relation to the relevant competencies.

**DIY or ready-made?**

It is possible to buy a range of assessment centre activities, including case studies, in-tray exercises and group exercises. However, you may prefer to write or design your own activities specific to your requirements. Some of these can be created quite simply: ‘Discuss this problem as a group and recommend a course of action’ – whereas the creation of a really good in-tray exercise may well take many hours of work. Ideally, use real-life (perhaps current) business problems, possibly presented by senior managers. Exercises perceived as irrelevant tend to be regarded as less valid by both participants and line management.

**Who should assess?**

Assessors must have good observational and analytical skill. They must also have some credibility with the participants. Often, relatively senior and/or experienced members of the line function concerned are used as assessors. Otherwise, trainers or recruitment specialists from within HR assess. Sometimes one or more outside consultants are brought in. An outside consultant can help to add expertise and credibility. Also, he or she is performing his or her core job and will not, therefore, be pulled off onto other tasks as line management might. One problem that bedevils development centres is scepticism from line management. Their involvement should quickly convince them of the merits of this approach. Participants will also value development centres more if they see that one or two respected managers have given up some time to be involved in them.

Whoever is going to assess, training is vital. This must include the development of clarity and consistency about the meaning of competencies, the need to back up assessments with evidence, and the need to maintain as objective a view as possible. Observing, recording and
classifying behaviour is not easy, and requires practice. The training may be done by a consultant or internally, but should be specific to the organisation involved.

**Writing up**

At the end of the centre assessors should discuss their observations as a group, taking into account all views. Often, someone will have seen something that the appointed assessor missed, or will put a different interpretation on it. Final decisions should be made on a consensual basis. It is important that the instances of behaviour that were used as the basis for the assessment are recorded. You may need to justify your feedback to a participant: ‘You were aggressive’ is judgemental. ‘You talked over Clive when he tried to explain his view, and told Marie that she was an idiot’ is a statement of observed behaviour. Non-verbal behaviour (e.g., head in hands, arms folded, laughing) can also be recorded and fed back.

If too many competencies are being considered at any one time, assessors get confused. ‘When he said that, was it customer focus or concern for accuracy?’ It is best to limit the number of competencies in any one exercise to three or four.

**Feedback**

All participants should have access to feedback. Anything you say must be substantiated with examples. Feedback about psychometric test results should be given by a qualified person. Feedback is best given face-to-face.

Feedback from development centres is all-important. It can develop into an in-depth discussion about what actions the individual can take to address his or her development needs, and can become a career counselling exercise. In some instances you may want to ask the individual to make notes and to write up the feedback so that you can be certain he or she has taken it in correctly. The assessors become coaches and advisers, helping individuals to draw conclusions and think through implications. The individual may also write a report and agree it with his or her manager.

**CRITICAL INCIDENT TECHNIQUE**

Critical incident technique (CIT) was developed by John Flanagan, an American psychologist, during World War II. He wanted to know why errors were being made in bombing missions over Germany, and to improve flight-crew training.

The underlying basis for CIT is that most jobs contain a lot of padding – routine operations that don’t matter that much. The things that distinguish someone who is particularly good in the job from someone who is average or poor are what they do in situations which may be fairly rare, but which are important in terms of outcome – critical incidents. People tend to talk about work in generalities. Asked what makes a good bar manager, they may talk about needing a good sense of humour, good judgement, and a customer-focused attitude. This may be true, but how do we train these qualities?

Using CIT we ask (for example): ‘Give me an example of when having good judgement was important.’ The person may then describe an incident involving a group of people who entered the bar but looked under-age, and tell how he or she politely asked them to leave. This can then produce a list of critical behaviours which can be taught to someone to ensure that they can cope in a similar situation. Of course, a whole range of incidents may be described which required good judgement, a good sense of humour and customer focus. It is important to get as wide a range of incidents as possible, preferably from a number of people, so that the
important skills are identified. Instances where things have gone wrong can be extremely useful in identifying the difference between effective behaviour and ineffective behaviour.

For a fuller description of CIT, refer to the contribution by Malcolm Craig in Truelove (1995).

**SUMMARY**

Methods of identifying needs have been considered under the following headings:

- Job and task analysis
- Skill matrices
- Interviewing
- Survey methods
- Appraisal
- Development centres
- Critical incident technique.

All of these methods are resource-intensive. Seldom can the trainer operate without the agreement and co-operation of the line management, and often the analysis of training needs must be devolved to the line management. The trainer must then act as the co-ordinator of information, as an adviser, and as the instigator of training activity. Time spent identifying training needs is wasted unless those needs are subsequently addressed.

**FURTHER READING**


**Useful websites**

http://adulted.about.com/od/trngneedsasst/a/needsassessment.htm Adult continuing education – a part of the New York Times Company

http://www.businessballs.com Some free material and exercises

www.cipd.co.uk/subjects/training/trnneeds/ Useful information from the CIPD
ACTIVITIES – CHAPTER 2

1 Case study: The interview

Mary arrived at the factory in ample time for her interview with Clive Roberts, the human resources manager. She had answered the advertisement for a training officer a few weeks before, and was keen to join the Parmell team. She approached the gatehouse and noticed the two security officers chatting in the corner of the room over a copy of a newspaper. She tapped on the window, but the men ignored her. She tapped again, and this time one of them looked up. He sauntered across to the window, still chatting to his colleague as he did so.

‘Yes, dear?’ he enquired.

After Mary had explained that she had come for an interview, the security officer directed her to reception, and then resumed his chat with his colleague.

‘ Didn’t think we were taking any women on,’ she heard him say.

It was a difficult job finding reception, but Mary did so eventually. As she signed in, Mary noticed that the telephone was allowed to ring for ages before, eventually, a young woman picked it up.

‘Hello?’ Pause. ‘No, this is reception. No. No, I can’t transfer you, I don’t know how. Sorry. Bye.’

‘Been here before?’ asked the receptionist. Mary replied that she had not.

‘Well, just be careful as you walk across the yard – some of the delivery drivers go at quite a lick! Anyway, I’ll point out the Personnel’s door to you.’ The receptionist propped open the side door with the fire extinguisher and directed Mary across the yard.

As she waited for her interview, Mary overheard one of the office workers calling someone on the internal telephone.

‘Ken? Thank goodness. The photocopier’s jammed again. Could you come and have a look? Thanks.’ The office worker returned to her keyboard at the computer.

Mary noticed that she was copying a handwritten manuscript of several pages and commented: ‘That looks a lengthy job.’

‘Yes. I keep telling the safety officer he should write his reports directly onto the computer, but he says it takes him too long.’

During her interview, Clive Roberts said: ‘Well then, Mary, you seem to know a lot about identifying training needs in theory – how about in practice? Have you spotted any here at Parmell?’

What training needs might Mary comment on?

2 Task analysis

Introduction

This activity is most suitable for use with a group of between six and twelve people, but can be adapted for smaller or larger numbers.

Aims

To give practice of the process of task analysis and of the writing of instructions. Precise objectives may be determined by the course tutor.
**Method**

Divide the class into three teams. Assign each team a task to analyse with the following brief:

‘You will be assigned a piece of equipment. Analyse all the steps necessary to take the equipment from the state it is in when given to you to the state required. From this analysis, produce a written set of instructions. This set of instructions will be handed to a member of another group who will read them out to a colleague from the same group who will attempt to follow them precisely.’

**Suggested equipment**

The actual equipment for analysis may have to be carefully selected in order to balance out the difficulty of the tasks according to the nature and usability of what is available. But see examples in Table 13.

Table 13  Task analysis exercise

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Initial state</th>
<th>Final state</th>
<th>Safety notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flipchart stand</td>
<td>Completely folded down with the pad removed.</td>
<td>Fully erected with the pad properly positioned.</td>
<td>Involves bending and lifting.</td>
</tr>
<tr>
<td>Overhead projector and screen</td>
<td>Overhead projector as folded down as possible, facing the wrong way. Screen folded down or out of position.</td>
<td>Image correctly projected onto screen.</td>
<td>Care with electricity – also avoid turning on the projector when the mirror is down.</td>
</tr>
<tr>
<td>Video recorder and monitor</td>
<td>Leads disconnected and monitor/TV not tuned in. Video cassette in case.</td>
<td>Showing a video tape with correctly adjusted volume, etc.</td>
<td>Care with electricity.</td>
</tr>
</tbody>
</table>

**Timings**

Allow 40 minutes to perform the task analysis and prepare the instructions. Allow about five to ten minutes for each activity to be demonstrated, with a similar time for discussion of the learning points that arise.

**Variations**

Specifically allow or forbid the use of diagrams. The activity is more difficult if diagrams are banned.

3 Training needs identification by interviewing

**Introduction**

This is a self-generated role-play exercise. It may be conducted in pairs or with observers.
Aims
To provide an opportunity for interviewing techniques to be practised.

Method
Every participant produces an outline job description and an interviewer’s brief. These are then swapped and the interviews are conducted either in pairs or in threes, the participants taking turns to observe, be interviewed, or interview.

Timings
About 20 minutes to prepare the briefs, followed by about ten minutes for people to study the briefs received. The interviews will typically last about ten to 15 minutes. Feedback, discussion and analysis will take a further ten minutes after each interview.

Training needs exercise
Think about some of the people where you work. Select someone who has one major or several minor weaknesses which must be addressed in order to improve performance. Some of these may be due to training needs, some to poor attitude or motivation. If necessary, exaggerate the problem(s) or combine a few individuals’ faults.

1. Prepare a brief description of the job.
2. Prepare an interviewer’s brief – as if you were looking at the situation from outside and were briefing yourself for the encounter. Use a fictitious name, please. Do this using the format below.
3. You will play the character that you have described. Someone else will conduct the interview.

Interviewer’s brief
You are going to talk to someone whose performance is less good than required. His/her manager has left you some notes, but is away from work for some time and can not be contacted. Try to identify any training needs, but also note any non-training issues.

The interviewee’s name is: ..................................................
(use a fictitious name)
He/she has been employed ...........................................
He/she works as .............................................................

His/her performance is:

4 Skill matrix exercise

Introduction
Learners prepare a skill matrix.
Aims
To consolidate learning, and to raise issues for further discussion.

Method
The group selects a suitable area for study and a list of tasks or duties generated. If
they are all from the same organisation, it may be appropriate to select an actual
department. If from different and diverse organisations, then some fairly common
activity is selected to use as a simulation. For example, operations concerned with basic
car maintenance may be analysed to produce a list ranging from ‘Fill up with petrol’
through ‘Change wheel’ to ‘Replace clutch’. Participants’ names are then listed and the
individuals identify themselves as competent or not. If required, they may use a more
sophisticated assessment system. Issues related to problems of assessment and the
definition of competence will arise and may be discussed. Other possibilities for matrix
generation are ‘Using office equipment’, ‘Looking after babies’, and ‘Preparing a Sunday
lunch’. Note that it does not matter if some of the participants have a lot of knowledge
whereas others have only a little – the matrix will be more interesting if that is so.

Timings
About 30 minutes for the whole activity.