Occupational Psychology and Training

1.1. Learning outcomes

After studying this unit, you should have an understanding of:

- The main strands of training as it relates to occupational psychology.
- An understanding of the wider picture of training and development in order to provide insight into how occupational psychology may be applied.
- The ways in which a specialist might incorporate ideas from occupational psychology to support training and development.
- The definitions of training and development.
- The functions of training.

1.2. Introduction

This learning unit discusses training within organisations and how knowledge of occupational psychology can contribute to this. Expertise in occupational psychology may be employed in different situations. Practitioners applying this expertise will have to work differently with respect to training in order to adapt to the requirements of their employment. Working out how to do this is something that each practitioner needs to address for themselves when they undertake work and whenever they change employment. There is no standard methodology for training that companies endorse that must be followed, although all good training is guided by principles and good practice that have evolved over time and in accordance with research findings. Above all, it is necessary to learn to think for yourselves in accordance with the knowledge and principles that underpin the discipline.

To make a useful contribution to organisations it is important to understand training requirements in the context of the work situation where they will be applied. It is also important to appreciate how solutions to problems involving training relate to other ways that occupational psychology can be used to assist an organisation. For example, it is inappropriate to prescribe a training solution to a problem if personnel selection, ergonomics or organisational development are more likely solutions or are part of a wider solution – just as it is inappropriate to ignore the importance of training through bias toward other solutions to problems.

For those people formally employed as occupational psychologists it is also necessary to comply with the British Psychological Society practitioner’s code of conduct. Even people not employed in this capacity are advised to abide by these standards as they represent an ethical approach to dealing with these issues.
1.3. Definitions of Training and Development

Proper understanding of terminology is important to enable sense to be made of what we read so that we can convey ideas in a consistent manner. A big problem we face in defining terms is that different people in different organisations use terms in different ways. Specialists working within organisations need to be sensitive to these variations. They need to know what a client means and then to translate any findings or recommendations into terms that the client understands.

Definitions help us to clarify our area of interest and provide us with scope – what to deal with and what to leave out. Definitions are also important because different words are often used to describe what is, in essence, the same thing. For example, the words instruction, training, development (and others) are often used interchangeably. But sometimes a particular word is favoured in specific organisational contexts and sometimes different words are used within the same context. For this reason and for brevity, the word training will tend to be used generally throughout this learning unit to describe each of these. But definitions of training are less straightforward than one would imagine.

1.3.1. Some definitions in the literature

Patrick (1992), in one of the best books available on the psychology of training\(^1\), starts his discussion of the definition of training by referring to its aims – to develop new skills, knowledge or expertise. He then cites two definitions of training.

The first of these appeared in the Glossary of Training Terms (Department of Employment, 1971): This is an excellent and detailed source, well worth examining for a deeper understanding of the psychology of training.

> “Training is the systematic development of the attitudes/knowledge/skill behaviour patterns required by an individual in order to perform adequately a given task or job.”

Patrick gives a second definition from Goldstein (1980):

> “The acquisition of skills, concepts or attitudes that result in improved performance in an on-job situation.”

The UK Department for Employment and Learning’s definition of training sounds like it is the sort of thing that an Occupational Psychologist should be interested in, speaking, as it does, of attitudes, knowledge and skills. Certainly, attitudes, knowledge and skills contribute to competent performance, but the suggestion that training should systematically develop a pattern of these things is wide of the mark. Research psychologists strive to explain behaviour in terms of attitudes, knowledge and skills,
but different job-holders work in different ways, especially in terms of their psychological functions. A person responsible for training cannot simply rely on a knowledge of psychological principles to specify how, in detail, a task is learned or carried out by everyone they will have to train. Nor would they want to. Trainers within organisations are mainly concerned that people become competent to carry out their duties effectively and not that they will do things in a certain way. The professional trainer’s concern is that learners can perform reliably and effectively and not that the learners’ cognitive strategies conform to a particular pattern. This is a generalisation, though. There are areas where attention to cognitive processes is important in order that people perform in a way that is most beneficial to their situation, for example, when required to perform in stressful situations or respond in a versatile way.

The Goldstein definition is not really a definition of training, but of learning. As a description of applied learning it is useful, emphasizing that we are interested in performance in the applied on-job situation and that this improved performance is brought about by the acquisition of skills, concepts or attitudes – this is like the Department of Employment definition. It is acceptable to suggest that training is concerned with these things but this does not mean that, in order to train someone, we need to understand what these skills, concepts and attitudes are and how they interact to result in effective performance.

1.3.2. The definition of training for this learning unit

For the purpose of this learning unit we shall depart slightly from both of these definitions. Here, training will be defined as:

“\textit{The manipulation of conditions to enable a person or team to develop the competency required to fulfil their work responsibilities or undertake some other purposeful activity.}”

An important feature of this definition of training is that it is operationally defined. That is, it is defined in terms of what training sets out to achieve – competency at work or at some other task-related activity, rather than prescribing the psychological components that lead to competency.

1.3.3. The link between training and learning

\textit{Learning} is a natural process, whereas \textit{training} is a managed or engineered process. The words ‘managed’ and ‘engineered’ emphasize that \textit{training} is effective to a greater or lesser extent by virtue of what a person in control of that training – who might be called a training officer, an instructor, a supervisor or a manager – does to ensure that the conditions that the learner experiences are suitable to enable learning to occur. Trainees learn when these conditions are appropriate. Training is concerned with manipulating those conditions. This does not mean that in order to train it is necessary to understand how people learn in any scientific sense. Music teachers, driving
instructors and parents are often successful in helping others to learn without possessing knowledge of the psychology of learning.

*Psychologists* have played a significant role over the years in identifying what needs to be learned by trainees, effective conditions for learning and how learning can be evaluated. Some people dismiss learning theory as too theoretical and as having no relevance to the practicalities of training. However, a theoretical understanding of learning can help in generating training hypotheses (see below) in order to deal with less familiar problems. So, it is useful to be acquainted with learning theory even though it would be naive to extrapolate from learning to training without extreme caution.

### 1.3.4. Hypotheses in training

Despite this link between learning and training, there is a risk in assuming that learning principles established in one context will apply to another context – as was discussed in the introduction to this learning unit. Work situations vary enormously. Most settings for occupational tasks are unique and will involve factors that were not taken into account during earlier learning research. Therefore, it is by no means certain that a person would learn to do something novel according to the same principles that applied in situations that were researched previously. This means that when we apply learning ideas to a training situation, we cannot logically know for certain how things will turn out – so we are dealing with training *hypotheses*. Careful examination of tasks and behaviour, followed by the application of training principles will get us closer to a useful solution, but we cannot know for certain how things will turn out until they have been tried. This is no different from any other design activity and should not be a cause for concern. This is why evaluation of training methods is an important issue and an application of methods from psychology can play an important role in organisations in this respect.

### 1.3.5. Development

A word commonly encountered in organisations, especially in conjunction with management, is ‘development’. The operational definition of *training* above applies equally to that of *development*, although the word *development* has nuances that need to be appreciated by people applying occupational psychology in practice.

*Development* is used in the occupational setting to imply a longer term and more durable change to the behaviour of the individual. It is often used in preference to the word training in the context of *management development* or *staff development* to imply processes that change the individual’s capability to deal with events in the future in a more flexible and profound way than merely replicating standard pieces of behaviour. In a *development* programme we would aim for a person to be able to deal effectively with circumstances that had not been anticipated. Such capability entails less tangible aspects of performance such as attitudes, perceptions, judgements, diagnosis, insights,
discretion and flexibility.

Development may be used to describe programmes to enhance a manager’s capability to accommodate wider issues in decision making, such as gender, diversity and racial issues, health and safety, leadership, team dynamics, and the need for better monitoring, quantification of production, human factors, human resource management issues, and so on. Management skills often cannot be judged against a defined ‘standard’ by any explicit formal measurement and often have to be judged by someone suitably experienced in the tasks themselves. So, a manager responsible for the development of a junior colleague might judge that the colleague being developed is working appropriately in the given circumstances with respect to providing fair and effective leadership to a team, rather than simply saying that the new colleague knows about diversity issues and how good leadership affects the performance of team members. Development is generally something that is supervised in the context of the real job where the person being developed is required to confront real issues. The word ‘coaching’ is often preferred to ‘instruction’ in these situations.

Despite the fact that the word development is often preferred in specific domains which may favour different training methods and different assessment methods, it is important to recognize that the purpose of development complies with the purpose of training as described above.

1.3.6. Contrasts between ‘training’ and ‘development’

Preference in adopting the word training or development is not always consistent. Mastery of specific skills is often labelled training, while the processes of learning to handle less tangible judgements may be labelled development. There are other nuances. For example, learning tasks to interact with technology and equipment is often regarded as training, while learning to deal with people is often regarded as development. This might reflect the fact that the functioning of equipment and technology is often reasonably predictable, whereas the behaviour of people is not.

Such distinctions can be misleading. Tasks such as controlling a nuclear power plant are often specified in advance by an engineer and these tasks are certainly concerned with interacting with equipment. Tight specification is necessary because such plant needs to be controlled in a particular way to avoid production and safety problems. Because the actions are prescribed, it is sometimes assumed that this sort of skill is straightforward and so teaching it is often referred to as training. This is misleading, because while much of the task can be prescribed, industrial processes do not necessarily function in a wholly predictable fashion. The characteristics of materials change, equipment may not respond according to design, colleagues may make mistakes that have to be taken into account, other events suddenly take precedence and the standard operation may need to be modified. The task will be carried out under the conditions of stress, including the fear of making serious mistakes. While there might be an initial well-structured set of learning objectives and activities that might be referred to as training, there needs to be
a later phase of gaining experience on-job, to adapt the learning gained from initial training to cope with the variety of things that can happen in reality. To include off-job training and neglect development in this situation would be bad training practice.

Equally, while for a manager learning to weigh factors in order to determine how to allocate resources requires a period of development, a new manager may well benefit from training concerning the factors that need to be taken into account. This taught element might include systematic and focused training on maintenance requirements, equipment functionality, equipment reliability, and the importance of human resource management in considering flexible ways of operating. Supervisors and managers of air traffic systems need to understand the dynamics and rules of air traffic management, before they can properly oversee operational teams employed to make air transport safe. To concentrate on development and neglect specific training in these contexts would, therefore, also be poor practice.

The distinction between training and development made in this section are really just different stages or methods in the process of helping someone to learn to be competent and effective at their job. To train someone to do a job skilfully, reliably and with confidence, whether manager or operative, invariably entails a range of phases and learning activities. This includes teaching basic skills and knowledge in the classroom; providing opportunity to practise in a safe environment; providing opportunities to work closely under the guidance of an experienced colleague; providing the person being trained with opportunities for independent work where the trainee can call on or review progress with an experienced colleague; or encouraging group working where team members can learn to work together and help one another overcome difficulties and adapt to the norms of the group.

1.3.7. Products and processes of training

Behind much of what has been discussed so far is the distinction between the product of training and the processes of training.

The product of training refers to the outcome of a training intervention. Training will be undertaken to teach new capabilities or to improve performance in order to serve the interests of the organisation – to improve productivity, flexibility, accuracy, trainability, attitude, response, good practices, reliability and so on. It is to ensure or improve whatever aspect of performance the organisation values. The resultant performance in the context of work demands is the product of that training.

The processes of training refer to the things that are done in order to attain this training product. This means the conditions that are specified in order to ensure that a person being trained learns what is required and to the required standard. The processes of training will expose the trainee to a number of different methods before competency can be assumed.
1.4. Two perspectives for Training in Occupational Psychology

There are two important strands to the topic of training and development of which we must be aware. These are the human factors strand and the human resource management strand, although this labelling may not be acknowledged widely.

1.4.1. Strand 1: Human Factors (HF)

The HF strand addresses the conditions within a situation that describe how people learn new material and the processes underpinning learning. If these things are understood, then it becomes easier to provide conditions that will help people master new skills and capabilities. These HF issues had their roots in experimental and social psychology and where basic studies of learning and social interaction established rudimentary concepts and paradigms that could also provide insights for dealing with more complex material. Later, this area was characterized as cognitive psychology with the aim of helping better to understand the complexities of skills in terms of cognitive structures and processes.

This HF strand is concerned with judgements about how best to present the conditions to the person being trained to lead them to master a task, skill or competency. It would be wrong to imply that experimental and cognitive psychology provide all of the answers to practical training issues, but learning is a psychological issue and identifying conditions for learning is an important part of training design and development with roots in occupational psychology. When people are required to master complex ideas and novel skills, applying principles of applied cognitive psychology often provides a way forward.

1.4.2. Strand 2: Human Resource Management (HRM)

The other main strand to the psychology of training concerns how an organisation manages its processes and resources to ensure that training is appropriate to requirements and is delivered effectively. People within the organisation must support training in different ways and so there is a need to manage training as a key part of personnel management or human resource management. HRM has addressed the requirement to deal with the need to train people, who are short of the skills required to do the jobs and to develop people for their future role in the organisation, in a pragmatic way.

This HRM strand is concerned with how people are allocated responsibilities regarding training and how these responsibilities are enshrined within their job descriptions.
1.4.3. Linking the strands

It would be fair to say that the human resource management (HRM) perspective dominates how training is managed in organisations. However, in the absence of insights gained through the human factors (HF) perspective, the host organisation may not be able to deal most effectively with some of the more complex challenges it faces. The two strands are linked within occupational psychology. By linking these two strands, training requirements are examined in terms of identifying the conditions best suited to enable learning to take place. Then the resources necessary to provide these training conditions can be addressed and provided through the processes of HRM.

The predominance of the HRM strand in organisations means that some training is less effective than it otherwise would be, because it under-emphasizes aspects of skilled performance. In many cases, the HF strand is only really in evidence when someone working within an HRM framework or from a managerial perspective acknowledges that present provision in the organisation is not having the required effect. Training may be well managed, but if the conditions for learning are not well thought out, then it will be less effective. There is a role for a specialist who can provide more suitable solutions to training problems. For example, complex cognitive tasks are difficult to master simply through basic instruction and experience, no matter how well the basics are taught and the development managed. A specialist approach might indicate that simulation training is required to provide the practice required to master skills.

These two strands and how they are linked need to be understood in an appropriate application of occupational psychology. An intervention will be less effective should either of these strands be neglected.

1.5. Making Training decisions in a systematic way

When we consider the conditions in which work is undertaken, it becomes clear that our knowledge about human behaviour in different work situations is limited. We must appreciate that ideas that worked in one context must be applied with caution in other contexts. Logically, we are always left with hypotheses (as discussed earlier) that need to be applied and tested. Working systematically in a principled way is the best that can be achieved with respect to identifying training needs and developing training design solutions. But we must also always evaluate the outcome of training to establish whether it was effective, then modify it accordingly. Evaluation also leads to improving the principles and methods to guide training decisions.

A way forward, then, is to treat training in a principled way. There are several areas that should be considered. These are summarized in Figure 1.

Figure 1: Main components of a training system
1.5.1. **Instigating training and development**

There are a number of reasons why an organisation might consider training its staff. These include:

- Preparing new staff for their jobs.
- Dealing with redesign of working practices and other changes to the organisation, including emerging safety and productivity issues.
- Preparing staff for dealing with new product lines and services.
- Adapting to new equipment.
- Responding to incidents.
- Maintaining skill levels and general staff development.
- Developing staff including preparing staff for advancement and promotion.
- Preparing staff for retirement and redundancy.
- Helping to resolve organisational problems.

1.5.2. **Identifying training needs**

When the need for training has been instigated, it is necessary to establish who needs training and the behaviours to be mastered.

*Training needs analysis* (TNA) examines where and what training is required in an organisation. TNA is often discussed as though it were a commonly accepted technique, so it is advisable to be cautious about what a client means when they refer simply to ‘TNA’. It could refer to what individuals need to learn. Or it could refer to what an organisation requires in terms of manning – i.e. how many people need to learn things.
It could refer to identifying those aspects of jobs that need to be trained as opposed to aspects that entail a redesign of an interface, the job or the team configuration. It could refer to several of these decisions.

If asked to conduct a TNA, it would be necessary to establish what the client actually wants, then follow this with an examination of who needs training and what this training should seek to achieve. We consider TNA in greater detail in Unit 8.

1.5.3. Establishing training content

When the areas where training will be applied have been identified and justified, then the content of training must be established.

Establishing training content means focussing on what the job actually entails. Task analysis methods are important for this. These methods were developed within occupational psychology to ensure that what is trained is what is required. This is one of the most important areas in the psychology of training. If performance requirements are not identified, then training judgements may be inappropriate.

Task analysis is also important because it helps the trainer to engage with the client and the client’s agents. Establishing training content entails making technical judgements about the nature of tasks. Left to their own devices, training specialists cannot deal appropriately with these decisions because they do not have direct knowledge or experience of the jobs that they are examining, nor the responsibility for how they are carried out. It is important to master methods that engage with subject matter experts in order to establish what is involved in a job, and with managers who are responsible for specifying training objectives in the form of capabilities, performance standards and priorities.

It is important to be systematic and listen carefully to managers and subject matter experts. Through this process, managers and subject matter experts often come to realise that there are aspects of their system that they do not themselves properly understand. Helping the client realise these things is often a very useful by-product of a training intervention and helps gain the client’s commitment to the present work and credibility for further work.

The purpose of training should be made clear as soon as possible and task analysis helps us to do this. A training objective is a statement of what a person or group should be able to do and the standards they should be able to achieve.

For a more complete training objective, we need to take a step further and specify a standard of performance. For example, we might need to specify

- How quickly a person must carry out their task,
- How much resource is expended in carrying out the task and
What pattern of errors can be tolerated.

Armed with this information, we have a training objective from which to specify training content, method and media, and establish the basis for assessing the quality of performance deriving from that training.

1.5.4. Designing instructional activities

When training content has been identified, we must address how training should be conducted in order to meet the identified training needs. This entails making decisions about what information should be provided to the trainee and how it should be delivered. Training design generally requires four issues to be dealt with. These are shown in Figure 2.

**Figure 2: Steps in the design of training**

Designing training processes and designing the training media and resources have to be done in conjunction with one another, because the choices made in one generally affect the choices made in the other. Then it is necessary to decide how to fit the bits of training together within a training programme. Then, the whole programme needs to be evaluated to ensure that it will serve the required purpose.

a. **Designing training processes** includes making judgements about any basic knowledge and concepts that a trainee would benefit from when acquiring new competencies and the sorts of practice the trainee would benefit from in order to develop practical work related skills.

b. **Designing training media and resources** entails making decisions concerned with how the training processes in (a) will actually be delivered. There are many forms of media that could, in principle, be used to deliver training, including: classrooms, the real work situation, audio-visual equipment, face-to-face communication, computer-based learning, simulators, work groups. Training also requires that people with sufficient expertise are able to facilitate these processes, including training analysts, training designers, instructors, assessors and mentors.
In judging training media, it is important to think about the psychological issues affecting learning. However, it is also important to recognize that choices made have cost implications. It makes no sense for occupational psychologists to prescribe methods that are not cost-effective in terms of what the organisation is trying to achieve. On the other hand, it makes no sense for managers to make costs paramount and, thereby, destroy any training benefit. Often the OP must confront the client who is excessively concerned with minimizing costs whilst still expecting to obtain satisfactory training benefit.

c. Prescribing the training programme deals with determining the order in which different training events are scheduled in order to obtain the required training benefits. Invariably, several things need to be taught and it is likely that these are best done in a sensible order, so that later material can build on earlier material. For example, in hazardous tasks, it makes sense first to train people how to take safety precautions, respond to accidents and evacuate the premises. Then attention can be directed towards learning how to do the job.

d. Evaluating the training programme is concerned whether the plans for providing training actually work as intended. That is, if trainees are exposed to the prescribed set of learning activities, presented using the specified training media will they then be able to do what they are required to do?

A training programme can be defined as any prescription that is imposed on:

- The order in which training is delivered
- The amount of training given at any stage before moving on
- The learning that has to be demonstrated before progressing
- The amount of material that has to be mastered before the training programme can be said to be complete.

Training programmes are generally carefully thought through and written down. Training programmes can be flexible to take into account the progress the learner is making, the learner’s preferences in how to learn, the trainer’s judgements and the availability of events that present opportunities for learning.

In addition to assessing aspects of progress of individual trainees, it is important to evaluate an overall training programme to determine whether it fulfils or continues to fulfil its intended purpose and whether the training is cost-effective. It is pointless to persist with training methods that are not effective. There needs to be a means of judging whether investment in training is affecting performance at the job in the required manner and to identify how training should be modified.

When we are discussing training we have to discuss separately, for the purpose of
clarity, many things that need to be considered together. This risks losing sight of how these things should be integrated. So, when reading the various units in this module, you must keep in mind the whole picture and remember that many of these issues need to be understood with reference to each other. Also, coursework will require you to address how these things link together. The experience you gain in practice will help you further to understand these interactions.

1.5.5. Delivering training programmes

While occupational psychology may have been involved substantially in the analysis and design of training, training delivery is the responsibility of management and may not entail any direct psychological input. Usually, training is delivered and controlled by people with actual work experience and responsibilities, for example, line-managers, supervisors and specialist skills instructors. So, a further constraint on prescribing training methods is the need to anticipate the people who will be responsible for delivering them.

1.5.6. Assessing and accrediting trainees

There are several reasons for assessing the achievement of trainees.

First, some instruction programmes are designed to enable the trainee to progress according to how effectively they are mastering material. It means that assessment of some kind will continue informally throughout any instructional programme.

Second, as a training programme or parts of a training programme are completed, it may be necessary to assess what trainees have achieved, with a view to allowing them to progress to a later training module or graduate to a full job within the organisation. This is generally a more formal stage of assessment.

Third, some assessment is aimed at providing a qualification to attest to a person’s competence. This can be to satisfy a regulating authority to demonstrate that a person is qualified to undertake certain forms of work. Qualifications are also useful to the person moving from job to job.

1.5.7. Managing training

Training management within an organisation entails ensuring that all processes described in Figure 1 are properly managed to ensure that resources are available to deliver training – qualified staff, equipment, time, trainees – and that all of the stages in the training system are properly delivered in a safe and orderly manner.

A particular difficulty in understanding training management is that there is a wide range of choices available for how training is organised. Some large organisations employ specialist trainers and full-time instructors in specialist management
development and operations training departments. At the other extreme operational staff members may take on these responsibilities. There may be no specialist trainers at all, but training may still be discharged effectively.

1.5.8. Training as a function

In view of these variations, it is helpful to view training within organisations in functional terms. This emphasizes that training is something that must be delivered, irrespective of whether there is a person or department explicitly responsible for it. To judge whether training provision is appropriate, one must address how the various training management and delivery functions are fulfilled.

1.5.9. The Systems Approach to Training

The systems approach to training is a long-standing idea that has been very influential in the training world for nearly 50 years. A good account of background and literature is provided in Reading 2.

1.6. Using Terminology Appropriately

Earlier we discussed definitions of training and learning. We return to this theme now to emphasize the importance of trying to understand how various terms are used in practice within any organisation in which one is working. If we are outsiders, we cannot be prescriptive about how other people use terminology and labels. We must try to translate local usage into functional descriptions that we can work with, then translate outcomes back to match the language that clients understand. Life can get confusing when visiting different organisations, so the importance of thinking about aspects of training in a functional way cannot be overemphasized.

To illustrate these potential confusions further, consider the following:

- A person receiving training is often called a ‘trainee’. But sometimes, this person is called the ‘learner’.
- Doing something with the intention of helping another person to learn something is called ‘training’, but it might also be called ‘development’ or ‘instruction’.
- The word ‘instruction’ often refers to the processes of someone in direct contact with the person they helping to learn; often instruction involves explaining something, arranging circumstances to enable the person learning to practise something or assessing what the person has learned.
- Often ‘training’ and ‘instruction’ are interchangeable.
- A person responsible for delivering training is called a ‘trainer’. A person responsible for delivering instruction is called an ‘instructor’. And since training and instruction are often the same thing, ‘trainers’ may be called ‘instructors’ and vice versa. In other contexts, the word ‘coach’ is preferred in order to emphasize
the nature of the training or development that is taking place.

- Sometimes, the word ‘development’ is preferred to training. This may be because development is seen as an improvement to the whole person, while training is regarded as a relatively minor adjustment to the skills that a person is required to apply at some part of their job. Often ‘development’ is applied to managers who must acquire strategic and flexible skills related to dealing with complex situations, while training is seen as applying to operatives who are required to do specific things to carry out their jobs. The processes of development might appear less tangible than those of training; ‘development’ is often seen as managing the acquisition of experience over a long period, whereas training might be regarded as something whose content is more prescribed and delivered in a more easily specified time-frame.

Some of this may sound a bit fuzzy – and it is. In fact, rereading it, it sounds more like a comedy routine, than anything more profound. This section has been included deliberately to expose you to the patterns of terminology that you are likely to encounter. When we work in organisations, we are not at liberty to define terms exactly as we would choose to use them, because there is a world that is already populated with people with different experiences and perspectives who have adopted different words to describe similar concepts. We just need to be flexible in relating how other people are using words to various training functions. We must show appropriate courtesy to people with whom we work to use words in a way that they will understand. But we still need to use our own concepts in a consistent way to discuss the disciplines of occupational psychology.

1.7 Exploration and Research in Designing Training

The hypothetical nature of training design and development means that training remains a research or exploratory activity. Dealing with novel training issues entails dealing with hypotheses. Every training intervention is an experiment of sorts that has then to be evaluated to determine whether it is appropriate.

The design phase of training entails deciding what to include and how to teach it. Good task analysis and an understanding of training principles is the best way we know for getting as close as we can to a satisfactory outcome. But it remains our best guess.

Evaluation of training entails measuring what is achieved. This might be judged against a set standard or by comparison with an existing method or another competing training method.

In practice, training is rarely formally measured with rigour within organisations. Managers are often satisfied for a trainer to make an informed guess at what should be provided – although neither party likes to admit that these decisions are informed guesses. Where possible it is appropriate to evaluate training formally and objectively
in terms of what is learned and how it affects subsequent performance on the job.

Sometimes, conditions do not allow objective evaluation of training, but it is still important that there are systems to enable some form of judgement to be made regarding the benefits of training and possible modification. This can be accomplished by incorporating the processes of training, from analysis, through design, to evaluation and review, into the routines of managing a department in an organisation.

(*This sounds pejorative. It is not meant to be. It is just described in this way to emphasise that such judgments cannot be made with complete confidence without formal empirical evaluation. However, reality dictates that we can make the best of what is available.)*

### 1.8 Concluding Remarks: What you should have learned from this learning unit.

This unit has considered various definitions of training. It has adopted a definition of training that emphasizes its role in enabling learning. In defining training and associated concepts, it was pointed out that there is often inconsistency in how key terms are used. Often people use different words to refer to the same thing and different people use the same words in different ways.

It was pointed out that training is undertaken in organisations, whether or not occupational psychologists are involved. When we consider training, we need to consider two perspectives. One of these is how psychologists have thought about the acquisition of human skills; the other stems more from work on personnel and human resource management. Both aspects are important because training has to serve the interests of management in employing people and also with in ensuring that people are able to contribute effectively to the operation of the system in which they are employed and for which they get paid. The two aspects should integrate for best effect. If they are not integrated, then the enterprise will most likely fail to be as effective as it can be. This integration is an important aspect of occupational psychology.

### References


(Note: Although a few years old now, this is an excellent and detailed source, well worth examining for a deeper understanding of the psychology of training).

### Reading for this learning unit.