COMPETENCY BASED TRAINING

HOW TO DO IT
FOR TRAINERS

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by

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A GUIDE FOR TEACHERS AND TRAINERS
ON APPROACHES TO COMPETENCY BASED TRAINING

Developed for the COMPETENCY BASED TRAINING WORKING PARTY, of the Vocational Education and Employment Training Advisory Committee (VEETAC)

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1. Introduction

COMPETENCY BASED TRAINING (CBT) is being introduced into vocational education and training in Australia with the key objective of raising the efficiency of the Australian workforce.

The decision to adopt a competency based approach to training in Australia was made by the Ministers of Vocational Education, Employment and Training (MOVEET) in 1989. This follows considerable research both in Australia and overseas. The decision was aimed at making vocational education and training more effective, closely directed at industry needs and able to compare favourably with that of Australia’s trading partners.

The essence of CBT is that it is concentrated on the end product - on what people can do as the result of training. That concept is not in itself new. What is new is the wholehearted attempt to introduce CBT into all areas of vocational education and training. At the same time, the decision was taken to underpin this approach with a national system of industry competency standards endorsed by the National Training Board, which was set up specifically for that purpose.

The decision was indeed a bold one. The task of setting up a nationally consistent system of vocational education and training based on industry-developed competency standards was never going to be easy. To do so in a federation where each State and Territory had its own operating system and procedures, and at the same time to open up a training market where private providers could compete on an equal footing with the publicly-funded systems, was a momentous task.

It will take time, but it is proceeding and gradually the required changes are being made. The most difficult of all the changes required is the mind set change which teachers and trainers in particular will have to undergo, but which relates as well to other participants in the training scene.

Not least among these other participants are the trainees. Many of these have been in the workforce for some time and are looking for their existing competencies to be given credit towards vocational education and training awards. They, and others, are finding it necessary to re-enter training in response to change in the technology, the organisation or the structure of the workplace. For more than a few, their educational background has included experiences they look back on poorly. The new world in vocational education and training must serve them better.

This book is written with all these factors in the background. It is intended to be a practical guide for those who have to prepare and deliver vocational education and training in the new and reformed order. Their role has changed forever, and the ideas and practices outlined are intended to help them make the most of the exciting opportunities their new role offers.
2. What is meant by Competency?

In pursuing a competency based approach to vocational education and training, it is fundamental to establish a clear understanding and a sound working knowledge of what is meant by competency.

The National Training Board has adopted a definition which focuses on what is expected of an employee in the workplace. It is consistent with the definition used in the UK and other countries that have adopted CBT. It is reproduced here from the NTB publication *National Competency Standards, Policy and Guidelines*, 2nd Edition, October 1992.

This definition of competency has significant implications for the teacher/trainer and for the trainee/learner in the development of competencies. Clearly it extends well beyond “training” that develops simple (or complex) manual skills. It also involves knowledge, reasoning and a positive and responsible attitude towards one’s role in the workplace.

The teaching/learning process that is required to achieve competency as defined below has to answer a number of questions, namely:

**WHAT END?** What is the end product of the behaviour or practice that one is learning? If the job is done correctly, what is the result?

**WHAT MEANS?** How does one do the job or perform the task correctly? Efficiently? Effectively? Meeting the task requirements in terms of quality, timing and appropriate use of materials, facilities, equipment?

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**COMPETENCY**

The concept of competency focuses on what is expected of an employee in the workplace rather than on the learning process; and embodies the ability to transfer and apply skills and knowledge to new situations and environments. Competency is a broad concept that includes all aspects of work performance and not only narrow task skills.

Competency encompasses:

- the requirement to perform individual tasks (task skills);
- the requirement to manage a number of different tasks within the job (task management skills);
- the requirement to respond to irregularities and breakdowns in routine (contingency management skills);
- the requirement to deal with the responsibilities and expectations of the work environment (job/role environment skills), including working with others.
WHAT REASON? Why does a person perform a task? Why perform it in a given way? Why follow particular patterns or guidelines? Why plan the task?

WHAT IF? What if problems occur? What if faults arise? What if the unexpected happens? What if one tries alternative approaches? What if one tries to bend the laws—say of physics?

WHAT ROLE? What role is a person in this function expected to fulfil? What is the expected level of involvement, commitment, creativity, responsibility? How do people at a particular level know what the expectations are and meet them?

WHAT PEOPLE? Who is dependent on one’s performance? One’s assistance? One’s co-operation? One’s contribution? How do people interact collaboratively with each other? What does that mean in the workplace?

This list is not exhaustive, but it does give a good indication of the consequences of adopting the agreed definition of competency.

It indicates that education and training in a competency based system are intellectually challenging and the content, the inputs to training, the training methodology are all vitally important if one is to achieve the outcomes.

There is a danger that an outcomes-based approach, which is the essential nature of CBT, and an input-based system come to be seen as mutually exclusive. Nothing could be further from the truth. The inputs, in terms of content and methodology, are vital to achievement of the desired outcome. And if the desired outcome is that the learner achieves competency at a given task, then that result which is sought guides the inputs. It does not replace or deny them. It guides them.
3. Teaching and Learning to become Competent

COMPETENCY in a job is developed. It does not suddenly happen with a flash of insight. Nor does a person achieve competency by knowing what to do and being able to talk about it. Ultimately the gaining of competency requires practice in the work.

It is interesting that we accept the notion of "going into practice" in a number of the professions, through which practitioners gain competence. At the same time we have not always been as ready to recognise the need for, and the value of, practice as a fundamental part of gaining competency in the performance of jobs at all levels. Perhaps this has been brought about by an unwillingness to undertake the assessment of performance rather than the more simple assessment of knowledge, leading to assumptions about the likelihood of performance matching knowledge. While there is little doubt of the correlation between lack of performance and lack of knowledge it is dangerous to assume the same level of correlation between performance and knowledge.

To return to the main theme. The development of competency can usually be plotted through a sequence of training which requires:

- **Demonstration**
- **Explanation**
- **Practice**
- **Review**
- **Application**

The amount of repetition required depends on a number of factors, such as the complexity of the work, the learning ability of the learner, the teaching ability of the teacher, the quality of feedback from assessment steps during the learning process and the motivation of the learner, among a whole host of environmental and other factors.

Most of these factors are not new, nor are they confined to CBT. They have always been inherent in the learning process. What is different in a CBT system compared to other approaches is the emphasis on doing things to show competency, rather than just knowing about them. This brings a very different perspective for both the learner and the teacher/trainer.

The learner needs to know, from a very early stage in the process, exactly what is eventually going to be required of him or her, primarily so that he or she can begin to prepare mentally, emotionally and physically to perform at the level required for competency. **The teacher/trainer needs to tell the learner what will be required.**

This simple action marks the beginning of a whole new relationship between the trainer/teacher and the learner. Through it
starts the empowerment of the learner and putting of control of the learning process much more in the hands of the trainee/learner then has ever been the case before.

A teacher discussing CBT recently commented that the most significant change for teachers would be the role they would play under the CBT system. Once teachers could simply present the theoretical concepts and pass the application to the learner. Under CBT, teachers have to base their process on the application of concepts so that the learner works on the basis of knowing what are the competency standards to be achieved. The learner gains more control of the learning process than ever before.
COMPETENCY BASED TRAINING – HOW TO DO IT FOR TRAINERS

Competency Standards — the Base

COMPETENCY STANDARDS are statements of the level of skills, knowledge and attitude expected of people in various functions, positions and roles in the workplace.

Competency refers to a person’s ability to perform at a satisfactory level in the workplace. It includes a person’s ability to transfer and apply skills and knowledge to new situations and a new environment.

Competency is a much broader concept than simply skill at a task. It includes a set of skills, underlying knowledge and appropriate attitude.

Competency covers:

- performance of individual tasks (task skills);
- managing a number of different tasks within the job (task management skills);
- responding to problems, breakdowns and changes in routine (contingency management skills); and
- dealing with the responsibilities and expectations of the workplace (job or role environment skills).

Competency standards form the base for many workplace activities. They are particularly at the heart of three key elements—training, performance and job allocation.

Because they are statements of real expectations of the way people will behave in the workplace, competency standards can be used for a number of purposes within the three groups noted above:

- the basis for developing training programs;
- the basis for job instruction;
- setting up individualised training plans;
- establishing enterprise training plans;
- recognition of prior learning;
- performance reviews;
- selection and promotion reviews;
- a guide for planning job rotation;
- developing job descriptions; and
- work organisation and job design.

In the training area, competency standards form the basis of the material to be learned, the way it is learned and practised and the assessment which confirms the learning.

Training based on well-stated outcomes is focused, efficient and effective. Because it focuses on training people for actual jobs in the world of work, it is relevant to them and has an inbuilt motivational factor.
Competency Standards and the NTB

The National Training Board (NTB) has been established to guide the development of competency standards in Australia as part of the vocational education and training reform agenda. The Board is responsible for endorsing national standards of competency and for recognising the competency standards bodies (CSBs), the industry bodies set up to develop and maintain national competency standards.

The NTB has published its policy and guidelines on the development of competency standards. It has also published a binder of technical guidance notes and assigns advisers to work with competency standards bodies in developing standards. The writing of competency standards is a task in which the practitioners develop skill, and no doubt the revised standards which the Board requires after a two-year review period will reflect experience in writing and using the standards.

In its most recent communications, the National Training Board has moved to break any link between competency standards and award classifications, real or perceived. It has also moved to provide a more generous approach to the development and endorsement of enterprise competency standards, although its original goal was for standards to be primarily industry based.

Standards have been endorsed by the NTB which have application across industries. These include the competency standards for assessors, for trainers, for clerical functions and for some areas of occupational health and safety.
4. The Framework for Competency Based Training

Competency based training is a system of training which rests on a series of interlocking steps or processes. In their simplest form, these consist of:

- establishing the end product (the competencies to be gained);
- providing training and practice opportunities (the learning/training process);
- checking that the final performance meets the requirements (the assessment process).

If those steps are successful the training works. They are the basic elements to return to whenever the process looks complex and the tasks seem overwhelming. Whatever is added, and the full sequence is about to be displayed, those three elements remain the key.

The full sequence consists of:
1. identify the need for training
2. design and develop training
3. organise training resources
4. deliver and evaluate training
5. assess performance of trainees

The Extras:
- do the paperwork associated with training;
- promote a learning culture.

Each of these in turn has a range of activities associated with it. The guide that follows will discuss each of the steps in this sequence in turn in some detail. That will constitute, together with these initial points and some pointers to further reading and information, a useful and usable compendium on CBT for practical providers of training. For the moment, this section will conclude with a brief statement of the tasks of each step.

1. Identifying the Need for Training

The necessary element in this task is the development of competency standards to provide a reference point. Competency standards provide the measure of the workplace requirements. In the reform of the Australian system of vocational education and training, competency standards are generally being developed on an industry basis, following approaches and formats laid down by the National Training Board to ensure nationally consistent final products which are subject to endorsement by the Board.

The Board's guidelines make provision for enterprise specific competency standards and for competency standards that apply across industries.

The general principle is that the competency standards will be developed by representatives of the industry group. The
Board facilitates that process by recognising competency standards bodies as the official voice of the industry and allocating an adviser to help the body. All the competency standards bodies (CSBs) are tripartite—representatives from employers, unions and government.

2. Design and Develop Training
In a CBT system, competency standards form the base on which training is developed. The design and development of training is frequently referred to, particularly among educationalists as curriculum development.

Curriculum covers the full range of work in preparation for training, covering the preparation of training objectives, course or program outlines, learning materials, teacher’s guides and assessment strategy.

In a public and publicly funded system, where the intention is to recognise the achievement of competency for general employment purposes, a system of checks and reviews operates to ensure training standards and public confidence in the system. These goals result in requirements to have courses accredited by authorised agencies.

Accreditation is intended to grant official endorsement of the quality of the proposed training. The accreditation process is administered by recognition bodies set up by State and Territory training authorities. The recognition bodies review the quality of the material, particularly in relation to educational principles and the extent to which courses are able to articulate into other facets of education to make lifelong learning possible and attractive. Accreditation is not compulsory, except insofar as it relates to the public system.

There is a vast body of training material available in the community. In many cases, it may well be possible to find that the required training can be developed more readily from existing material than would be the case if entirely new material were to be developed.

Even material that is not in a competency based format may be readily transposed, provided that the content is appropriate. It would be a waste of resources to disregard all pre-CBT material because of incorrect formatting without first examining the context for usefulness.

The possibility of linking new material to accredited courses, for instance, should also be kept in mind in considering how to provide training to fulfil the identified need.

3. Organise Training Resources
Training is a physical process as well as a mental and psychological one. And yet the three aspects are interrelated. As McLuhan is often quoted, or perhaps misquoted, “The medium is the message”. A powerful message is given to those people who find that training is not organised. Equally, they are given a powerful message when the trainer is organised, the training place is organised and training and learning materials are organised and ready for use before the training commences. To add to that, if their work environment and supervisors are supportive of the training, then its value is enormously enhanced.
4. Deliver and Evaluate Training
The delivery of training may take many forms. In the more detailed discussion of training delivery, attention will be focused on the need for a mindset change, to think in terms of the facilitation of learning.

Evaluation of the effectiveness of training in terms of helping people become competent, and equally in terms of helping people to want to become competent, is a vital part of training. Without careful and collaborative evaluation between trainers and learners, there will be no possibility of continuous improvement in the provision of training.

5. Assess Performance of Trainees
Assessment may be classified into two main types by function. These types are summative assessment and formative or diagnostic assessment.

Summative assessment is the final step in the process of developing competency to the standard required. It serves to confirm that a person has achieved the competency standard sought. There should be no surprises at the final assessment. It is a confirmation, not a hurdle to overcome.

Formative or diagnostic assessment, which are simply variations on the same theme, are an inherent part of the learning/training process. They are the means through which the learner and the teacher/trainer track progress. The analysis of performance can then serve to guide the succeeding phases of learning.

The different functions of these assessment types calls for different approaches, which will be discussed later.

The Extras:

- **Do the Paperwork Associated with Training**
The recording of competencies achieved by trainees will assume increasing importance as the value of a job or skills passport becomes more readily recognised. People will need to be able to rely on records of attainment both for internal job and placement requirements and for seeking new fields whether in employment or in continuing education.

- **Promote a Learning Culture**
Teachers and trainers have a very clear function, indeed a deep-seated responsibility to be advocates for training. Their influence in shaping people’s attitudes towards training is unchallengeable. But the direction of those attitudes can swing towards a highly favourable view of training or with vehemence of equal measure towards an unfavourable view.

The way that teachers and trainers behave, on the job and in their relationships with their clients, the learners, is the most powerful single factor that motivates people to want to participate in training, or motivates them to get as far away from it as they can as quickly as they can.

The guides in the following pages will expand each of these main steps towards implementation of CBT.
5. Identifying the Need for Training

The distinguishing feature of competency based training is that it is focused training. Focused training is, by its nature, directed towards satisfying an identified need. It is quite important, therefore, for trainers to develop and use skills in identifying the need for training.

These skills will include communication skills, interpersonal skills such as interviewing and negotiating, problem solving and analytical skills and a knowledge of the workplace and empathy with the people in the work situation.

The first step is for the trainer to talk to people to see if a training need exists. This means consultation with the people responsible for supervising the work and people who are responsible for doing the work.

Sometimes training will be required to equip people with competencies for the job because the people are new to the job or because the job has changed for whatever reason. Training may be required when the work is not being performed correctly. There is a general rule which says that training is often the answer for “CAN'T DO” situations. It is rarely the answer for “WON'T DO” situations.

The decision on whether training is needed should be based on information. The trainer needs to gather the information from appropriate people. One useful question might be to ask whether anybody has ever done the job correctly. The job may well need to be re-designed, for instance. Other useful questions relate to information about the extent of instruction or training provided, if any.

When jobs are not being done correctly, they may well be “WON'T DO” jobs. People know how to do WON'T DO jobs. They just don't do them the way they should. The corrective action in this situation is rarely

<table>
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<th>&quot;CAN'T DO&quot; SITUATIONS</th>
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<td>Test Yourself: Is Training Required?</td>
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<tr>
<td>- The person can't do the job correctly because he/she does not know how to do the job.</td>
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<tr>
<td>- The person can't do the job correctly because he/she does not have the right equipment.</td>
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<tr>
<td>- Nobody has ever shown the person how to do the job correctly.</td>
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<tr>
<td>- The person doesn't do the job correctly because he/she does not have enough authority.</td>
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<td>- The job is too hard for one person to do properly.</td>
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training, for the operator anyway. The cause is usually an unsatisfactory reward system, or perhaps even a negative reward (punishment) for doing the job properly, which discourages people. Not training, but changes in the work structure and relationships are usually indicated in these situations.

If analysis of the situation shows the need for training, where does the trainer go next? In a competency based system, the answer is always to look up the competencies required in the job in question. If that seems too easy, it is at least the starting position.

The task, having looked up the standards of competence required, is to find out the actual performance of people on the job. If it is a CAN'T DO situation, then training should be provided to help people reach the standard of competence required. If it is a WON'T DO situation, the appropriate action needs to be worked out.

In time, competency standards will be endorsed for most functions in Australian business and industry. The competency standards will show what people are expected to do at work and the quality of performance required. For specific jobs, the trainer will need to discuss with the people intimately associated with the job, and reach agreement, on the units of competency applicable and those to which the training should be directed.

These initial analytical steps are critical to successful training and are fundamental to CBT. Too often training endeavour is misdirected. It requires quite strongly maintained discipline to work through the analysis phase before rushing into training. But the analysis stage is not yet finished.

Before starting to prepare for training, the trainer should note the outline of the analysis and have the key players agree with the position. The value of this step is that it
both relies on the people in the affected function to give the analysis a final review and gets them both committed to it and involved in the next step.

Preparing to Train:
When the analysis indicates that there is a need for training, the work of preparing for training can begin. There are three steps in this preparatory stage:

(i) identify the competencies required—in the performance of the specific task, or the job, or in fulfilling the role in the workplace;

(ii) identify the competencies already held by the people or the person for whom training is proposed; and

(iii) the difference between steps (i) and (ii) should highlight the competencies on which the training will need to be focused.

If only the practice were as simple as the steps (i), (ii) and (iii) might make it appear! However, if the process is clear and logical, then the practice has a good chance of succeeding. Certainly practice (no pun intended) will help the trainer become much more proficient in following the process.

In working through the process, it is quite important to work closely with the stakeholders, who are primarily the potential trainers and their supervisors. Other key players in the situation may include experienced workers in the area or the peers or team mates of the trainee.

As well as this process of uncovering the things that people need to learn to do prior to developing the training, the trainer should also examine the work and learning environment. There may well be barriers to learning, or to training, which need to be taken into account. As far as possible these should be uncovered and strategies developed to circumvent them. Potential problems that are exposed are more likely to be overcome than those which pop up unexpectedly.

As with all these preliminary steps, the trainer should make maximum use of the expertise of people on the job in identifying
potential problems and working out remedies. The plan to achieve the goals of the training is much more likely to be successful with a strong foundation of that sort.

The preliminaries are highly important. They provide the context and the focus for the training. Sometimes they can be as exciting as the training itself, particularly if one likes being sleuth. The next step allows for creative activity based on that detective work.
Training Plans

There may be occasions when ad hoc training is necessary to fill a short-term need. A policy or process change, for instance, might require training in new ways of operating for the people affected by the change. A problem in terms of product, or relationship with customers, might best be fixed with training for the people involved. More frequently training is a longer term function which needs to be planned over a period of time, extending to years.

Three sorts of training plans are common—industry training plans, enterprise training plans and individualised training plans.

Industry training plans are usually a broad aggregation of the extent and type of training that can be predicted for an industry. They are usually put together by a body formed to represent at least key players in the industry. The plans are intended to provide information to government authorities in particular to guide budget planning for instance, and the planning associated with infrastructure development and personnel arrangements in the public education and training systems.

Enterprise training plans must support the business plan of the enterprise. Not infrequently they are incorporated into the business plan, at least in a broad form. They are commonly developed as a means of fulfilling parts of the business plan.

The enterprise training plan may well go into some detail, outlining the sort of training that will be provided, for people in various parts of the organisation, for instance, or for people at various levels, such as technical personnel or supervisors. The plan may also extend some time into the future in parallel with the business plan.

The functions of the enterprise training plan are to set up the context within which training activities ought to take place and to serve as the basis for detailed training program content and timing. It provides a basis on which to organise facilities, personnel and other arrangements for training both within the enterprise and externally and it provides a framework within which individualised training plans can be developed.

Training plans for individual employees in an enterprise are a fundamental part of the human resources management and development activity for all supervisors and managers. They should be developed in consultation with the employee as part of the regular review of employee performance, personal development objectives and career goals.
Well-developed personal training plans for individual employees will indicate proposed training activities over a period of time. They will include both training programs and other learning experiences such as reading of specific texts. They should also provide some pointers to appropriate work assignments and career moves.

Both enterprise training plans and the individual plans are of particular value and interest to trainers. In identifying the need for training, for an enterprise, for a section or unit of the enterprise, or for individuals, the trainer needs to co-ordinate the evidence presented for the need for training with the guide provided by the various levels of training plans. Co-ordinated, organised, planned training activities avoid many of the pitfalls of scattered, ad hoc approaches—the "butterfly" approach to training—which frequently lead to management's calling the value of training into question after the event.

### IDENTIFYING THE NEED FOR TRAINING

**A CHECKLIST**

- Can't do/Won't do Analysis Done
- Problem is known
- Supervision involved in discussions
- Purpose of training agreed
- Fits in with enterprise training plan
- Related to corporate goal
- Participant group known
- Related to training plans for group
- Related to individual training plans
- Options for training discussed
6. Design and Develop Training

The most useful and most effective training is usually that which forms part of a coherent whole—a training plan.

The training plan should set out clearly the outcomes that are being sought, relating them to the organisational objectives and the requirements of the individuals concerned. Sample pro formas are attached for guidance.

As well as the goals of the training, the training plan should set out details such as the time allocation, the timing sequence and the sequence of training activities and practice. Estimates should also be made of the costs of training.

The finished product may be a spreadsheet or it may comprise a series of individualised training plans depending on the depth and complexity of the training proposed and the organisation’s approach.

The plan provides the overall map of the intended activity. It facilitates development of training programs in an organised way. Some of the training required might be already developed—"off the shelf". Others may be purchased or available through some agreement with a supplier, for instance. Part of the trainer’s function is to seek and review alternatives.

This section will not address the requirements involved in developing curriculum documents for accreditation of a course or program in line with the National Framework for the Recognition of Training. Those requirements are spelt out in the ACTRAC-sponsored work, *User’s Guide to Course Design for competency based Curriculum*. Rather it addresses the preparation of training for delivery and review on the job in a step by step process.

A recommended set of steps is as follows:

(i) Establish the outcomes expected in terms of the competency standards for the job.

- The outcomes might be competencies. They might be the background or necessary knowledge under-pinning the performance required. They should be built on action verbs.

(ii) Breakdown complex outcomes into simple steps.

- It is quite important that participants can follow very directly the outcomes they are trying to achieve through the learning process. This need requires careful thought on the trainer’s part to both explain the outcomes and to show their relevance in terms of their relationship to the standards of performance expected on the job.

...
(iii) Choose the assessment approach.

This step involves establishing statements of the evidence that will be required to assure both progress toward the learning outcome and indicators that the desired standard of performance has been achieved. Assessment must be seen as a diagnostic tool (formative) and a confirmation of achievement (summative). In either case, assessment that is open, non-threatening (in that it is not perceived as a hurdle to be overcome), and planned and carried out in a joint activity with the learner, will fit in with the requirements for a learner-centred approach to training that is fundamental to CBT. It is enhanced by a system of self-checks to encourage participants to learn to assess their own progress.

(iv) Plan the sequence of the learning program.

The sequence in which items are presented in a learning program is not always greatly significant. Some steps in learning are pre-requisite to others, and the two should follow in close proximity in that circumstance.

There are some general rules that might be followed, such as the relationship between the whole and the parts, movement from theory to practice or leading from simple to complex, even following a consistent pattern, but in every case arguments can be mounted to move either way. Often the participants, whether in a group or as individuals, will share meaningfully in suggesting the sequence that suits them. One principle always worth considering is to ensure that action learning occurs as early as possible in the process.

(v) Review the process with the participants.

During a training program or course, both at appropriate points and at the end, the trainer should evaluate progress and the response of the participants. Both understanding and enjoyment should be probed. People learn best when:

- they know where they have been;
- they know where they are going; and
- they enjoy the learning experience.
Check Existing Training Programs

When the trainer has identified the need for training—that is analysed the situation and can show that training is required, and what sort of training would be appropriate, at least in general terms—then it is time to step back from the situation and review the training scene.

The objective of this exercise is not to slow down the process. Nor is it simply to have a rest. It is to provide the opportunity to see if there are training programs available in the community that would help fulfil the requirements.

The development of training programs can be a very time-consuming task. It may be the only way to ensure that the training meets the need, but there may well be training materials available in the community which, with little adaptation or perhaps some customisation, will meet the current need. In this case, the better and more economical course might be to work with previously developed, available material.

Even where there is not material readily available a search may well identify some accredited training where it may be possible to link in new training activities in some sort of credit transfer or articulation arrangement. The value in this linkage lies in the possibility that the proposed training might contribute to a vocational education and training award for some of the participants. In these circumstances they would have additional motivation to participate in the training.

Existing training could come from the stocks of private or public providers. It might be found to be on the national register of accredited courses maintained by the National Training Board, or it might be on the listing of the Australian Committee for Training Curriculum (ACTRAC) which commissions each year a range of publicly available training.
7. Organise Training Resources

TRAINERS ARE OFTEN recognisable from their long arms—the result of years of carrying boxes of manuals and other training equipment to training sessions. On a more serious note, the need to organise resources and prepare the training materials and facility to ensure smooth running, high performance training is a fundamental requirement to facilitate learning.

The motivational effect on participants who find that their training has been prepared for in an efficient and business-like manner makes the effort worthwhile. Conversely, the demotivating effect of an ill-prepared training session outweighs by far the value of the material itself, however much thought has gone into its preparation. A number of suggested items to consider follows.

1. The trainer needs to make sure that enough suitably competent staff are available to provide training and assistance for learners. These people might be subject or job experts. They might have a training or mentoring role. They might work with groups large or small or they might be required on a one-to-one basis. They may well provide assessment, either formative or summative, or both. They may need training or advice on how to train and/or how to assess, guide and advise participants in their care. They will certainly need to be briefed on the task they have to perform and the role they have to perform. Participants need to be made aware what they can expect from staff involved in the training.

2. The place where training is to take place, be it a classroom, a training centre, a vestibule or a work location, needs to be organised beforehand. It needs, in the first instance, to be available, and if booking is required, then the trainer should ensure that bookings have been made. It is important that a suitable choice of location be made, if a choice is available. Factors to be considered include noise, proximity, comfort, security and the general ambience which gives the learner a strong feeling that the training is important in the affairs of the business or the institution.

3. Added to the suitability of the location, and an inherent part of it are the facilities at the place. Learning will at best be difficult if not impossible and the training effort ineffectual if the facilities do not support the learning opportunities that should be provided. Particularly where equipment is required, there must be enough, it must
be the right equipment and it must be freely available for efficient training and effective learning to take place.

4. Tools and other resources need to be in good working order, appropriate for the learning process and available in sufficient quantity. The trainer is responsible to ensure that the learning process is enhanced by the work that is expended in preparing the people, the location, the facilities and the other resources that are required.

A USEFUL CHECKLIST

Preparation for Learning

- Trainers ready and briefed
- Mentors ready and briefed
- Assessors ready and briefed
- Training area(s) booked
- Written materials ready
- Handouts prepared
- Course Leader guides ready
- Assessment planned
- Evaluation materials ready
- Visuals prepared
  - Overhead transparencies
  - slides
  - diagrams, pictures, charts
  - video material
  - audio material
  - films
  - sample products/parts
  - breakdown sheets
  - job instruction guides
- Materials and tools ready
- Equipment ready
- People notified
Supervisors in the Training Process

In many instances, supervisors will be the people responsible for conducting the training. Indeed, training people, particularly on a one-to-one basis, how to do specific jobs, is an inherent part of the supervisory role. Where the training is to be done by specialised trainers, either internal or external to the enterprise, then the role of the supervisor changes—in function but not in importance.

It is important that the trainer enlists the aid of the supervisor in an endeavour to create an environment that will support the trainee, if such an environment does not already exist. The supervisor is the key person in forming that environment. A supervisor who makes it obvious that training is low in his/her esteem to an employee who is attending training does not have to do much to demotivate the employee. Consider the supervisor comments below to an employee going off to a training session.

On the other hand, a supervisor who is supportive, who makes it obvious that training is valuable and encourages his or her employees to participate in training, is an invaluable support to a trainer. This sort of supervisor:

- helps prepare employees for training by discussing the program beforehand and clearing the decks at work so that the employee can attend the training with a mind free of work worries;

TEST YOURSELF: MOTIVATING OR DEMOTIVATING?

a. Let's know how it goes.
b. Off to Mickey Mouse land again.
c. I wish I could get away to school for a while.
d. We'll talk about the course when you get back.
e. Don't worry. We'll manage ... somehow.
f. Just as well Fred's in today or we'd be in real trouble.
g. See if you can put our time problem as a case study.
h. Enjoy your holiday. Ha Ha.
i. You must have got the big boss at a weak moment to get him to agree to this.
j. Anything you need us to do?
- may be useful as a reference or supporting expert in the training itself, particularly where assignments or practical work are required between sessions;
- helps the application of the learning by supporting the work that needs to be done on the job after the training. This assists the participant to gain full value from the learning process; and
- supports the trainee in developing competency in the workplace based on the learning achieved through training.
8. Deliver and Evaluate Training

CBT is essentially a learner-centred and learner-based approach to training. This imposes a set of conditions on the trainer in relation to the delivery of training which may well be quite different from the experience in a different approach—particularly a trainer-centred approach.

The role of the trainer becomes very much more that of a facilitator of learning than anything else. If highly-developed presentation skills assist the learning process and provide inspiration for learners, then that is the measure of their value. But presentation skills are transitory in that they die with the passing of the presenter. The greater gift that the trainer can impart to the learners is the guidance which teaches them how to learn.

Following from this, it is axiomatic that the trainer seek and provide suitable opportunities, resources and guidance for participants in the training experience to manage their own learning. This includes the full gamut of learning, from preparation to seeking resources to self-evaluation and self-assessment. There used to be a saying which was perhaps questionable: “If the learner hasn’t learnt, then the teacher hasn’t taught”. However, if one substitutes “then the teacher hasn’t done his/her job”, then the saying is apt.

The following items will provide a useful guide for trainers who seek to do their job well.

**Explain the objectives and the outcomes of the training to the people being trained.**

If they are to be truly participants in the training process as learners, then at the very least they must be known where they should be going and what the outcomes are supposed to be. By sharing in the understanding of the goals, they will better understand the relevance of the activities in the learning experience and be motivated to want to learn. They are owed the confidence of the trainer as partners in the training/learning process.

**Explain the learning and assessment process to the trainees.**

There should be no surprises to learners and they can participate more fully as partners in the experience with the trainer if they know what to expect and why it is being done. Adult learners, indeed, have the right to expect that the trainer will take time to explain the learning and assessment processes to them. This explanation is part of the empowerment of the learner which is a significant feature of CBT.

**Ensure that presentation and training methods are appropriate.**

To do this the trainer needs to develop a good understanding of the trainee’s background and aptitudes. Inappropriate presentation style and training methods are counter-productive and inhibit learning. They may
well cause lasting damage to participants by making them cynical and suspicious of training of all sorts as not for them. The ultimate test is whether competencies are developed, but if they are developed in spite of the influence of the trainer rather than because of it, then the trainer is a failure on many counts.

**Provide ample practice opportunities.** Learning and the gaining of competency are contingent upon knowing what to do, how and why to do it and then being given the opportunity for guided practice. There are several aspects to guided practice. One is that the practice is appropriate for the specific learning situation and leads to the desired competencies. A second aspect is that, initially at least, there is guidance to ensure that the practice reinforces the correct approach to the task. And then there are the feedback and diagnostic aspects of guidance through which the trainer maximises the quality of the practice to the learning process and the gaining of both confidence and competence.

**Monitor trainees' readiness for assessment.** The trainer has a role to play in preparing trainees for assessment. This not only consists of instruction and ensuring that the trainee is aware of the sort and extent of evidence of competency required. It goes further, too, than the feedback on performance during training. It includes helping the learner realise his or her level of capability so that the final assessment decision is both anticipated by the learner and approached in the full knowledge that the summative assessment will be confirmation of competency and not a potential failure situation. The experienced trainer will perform this role easily. The inexperienced trainer will need to work on his or her learning in this important area.

**Use training equipment and materials correctly.** Correct use of training equipment and materials adds to the value and efficiency of the learning experience. If learning is enhanced by it and learners are conscious that they are seeing good practice, then the lessons learned are valuable. Training equipment and materials are available to assist learning. They should be used thoughtfully and appropriately. Visuals such as films which only provide a break for the trainer, for example, are valueless and usually seen as a waste by the learners. To use or not to use can be a vexed question, and should be subject to frequent review.

**Provide frequent advice and feedback to facilitate the learning process.** The trainer should be an active facilitator. Facilitation is not a passive role, nor is it contained only in sound preparation and introduction activities. Learners need the regular and frequent contact a trainer can provide to reinforce their learning, to provide feedback and to guide them in the learning processes.
Follow up trainees' performance on the job.
The main value of training in economic terms is that it helps people improve their performance. The task of the trainer is an ongoing loop that starts at the workplace and then comes back to the workplace with follow up and support for trainees back on the job.

There is a special relationship which develops between trainers and those with whom they work. It means a lot to trainees that the trainer finds time to visit them on the job. It rounds off the training when the trainee can show how the learning is able to be applied on the job. The trainer also gains. In the first place he/she is able to monitor that competencies are being used. There is also the feedback and evaluation element. The direct feedback from application experiences is probably the best there is and enables the trainer to fine tune the training approach. Finally there is the aspect of the trainer remaining close to the job. It is both a concern and a possible criticism that trainers gradually become remote from the workplace. Following up on trainees is a pleasant way to keep close to the job.
Continuous Improvement

All training should be dynamic in that it is continually evolving to meet the changing needs of the learners. Part of the drive for continuous improvement will come from looking ahead and calculating what requirements are likely to be in the future. Part will come from examination of experiences with the training and adapting future behaviour based on the results of that analysis. The trainer should gather the information for analysis of the experience by using some of these evaluation approaches.

A. Seek expression of satisfaction with the training process from the trainee(s):
   1. orally
   2. in written form on a scale
   3. in written comments

B. Examine his/her own perception of the success of the training process:
   1. own satisfaction
   2. apparent satisfaction of trainee(s)
   3. review comments made by trainee(s)

C. Examine success of the training program in light of subjective criteria:
   1. response of trainee(s)
   2. interaction between trainee(s) and self
   3. interaction between/among trainees on perceived basis

D. Examine success of the training program in light of objective criteria:
   1. number of attempts needed to reach required standard on assessment
   2. success rate in assessment
   3. average length of time, following training, before trainees maintain a satisfactory level of performance

E. Review success of training program in meeting enterprise goals:
   1. gain oral comments from management on their perception of success of training
   2. follow up to confirm performance after training and practice period
   3. have participants report on application plans made during training
   4. measure effects of training on work performance

F. Examine own performance:
   1. preparation
   2. timeliness
   3. thoroughness
   4. attitude to trainee(s)
   5. closing off the training session
Changes in the Trainer’s Role

A number of changes in the role of the trainer have taken place in recent years. Not all of these changes are directly related to the introduction of CBT, but CBT has speeded up the process of change quite dramatically and it will continue to do so.

One aspect of change is the change from being a teacher/instructor to being a facilitator of learning. This is partly a result of the change in emphasis, mentioned above, from the teacher to the learner. The trainer’s role is to set up a situation which encourages people to pursue their own learning and development.

An extension of this role is advising people in establishing their own learning goals and the development of individualised training plans. In the relationship between the trainer and the trainee, there is an emphasis on teaching the trainee to learn rather than teaching the trainee things.

A different aspect of the change in the role of the trainer is the increased emphasis on the trainer’s function as the one who actively co-ordinates and supports the involvement of others, particularly supervisors and subject or content experts in the training process. As training becomes more and more recognised as a continuing function of work rather than as a specialised activity, the co-ordinating role of the trainer will increase in importance.

Beyond the co-ordinating role, there is also a specialised role as the guide, mentor and teacher of people who provide training incidental to their main role. A recent ILO study (G F Pillay, 1992) concluded that the largest task confronting trainers in the rest of this decade is likely to be the training of part-time trainers. The report claimed that, in developing organisations, everyone had a training role at times. For these people, training involves not only learning how to train, or how to assess performance, but also learning to appreciate and exercise their rapidly expanding training responsibility.

The task is probably more straightforward for training staff employed within an organisation. They are more likely to be in contact with supervisors on a regular basis. The trainers are most likely to have had ongoing input to the training and organisational policies that have been developed to involve enterprise personnel such as supervisors directly in training.

For external trainers, such as TAFE teachers or private consultants, the first task will be to set about establishing sound relationships with supervisors and likely trainers. This will be important in working with enterprise personnel, and it will also be important in planning the nature and extent of involvement of in-house personnel. Finally, sound relationships will help in integrating the training into the work and life of the organisation. Only when a comfortable rapport has been established with an organisation and its culture can an external trainer provide the quality of facilitating which is so necessary to build training into
the organisational ethos. The facilitation and review efforts of the trainer are more likely to be effective in a receptive environment than otherwise.

The trainer who has established good rapport with those on the ground will do his or her bit to create a learning culture within the organisation:

- by listening to them;
- by taking an interest in what they are doing;
- by avoiding the temptation to preach solutions rather than indicating how to approach problems; and
- by being ever ready to acknowledge the skills, knowledge and experience of others.
Some Thoughts on Delivery

The nature of competency based training, with its emphasis on the primacy of the outcome, puts the learner into focus as the centre of the process. This has a significant effect on the delivery methods for training.

(a) One of the effects is an increase in the value and appropriateness of individually-paced learning programs. People learn at different rates, and always have. That differential learning rate is the chief justification for individually-paced, or self-paced learning programs. The introduction of CBT brings with it, because of its emphasis on predetermined outcomes, the opportunity to develop more or less standard programs which the learner can tackle alone. Motivation to continue, always a problem with programmed learning materials, is assisted because the learner can move through a series of outcomes and be buoyed up by successfully completing the sequence of known goals. In group sessions, the different learning rates tend either to inhibit faster learners’ progress or confuse slower learners. CBT lends itself to self-paced learning programs. The newest technology, with interactive computer assisted learning, helps make the learning programs even more lively, effective and palatable.

(b) Another effect is that, where the goal is competency, rather than competition, trainees are more likely and able to work in a team or group. The experience of those people who have worked in teams in the workplace reinforces the expectation that people who train in teams, and are not competing with each other for results, will help each other to learn and to gain the necessary competencies. This tendency should be used by the trainer in planning the approach to delivery of training, to practice and review. People work better in groups, by and large, and the non-competitive element of competency based training facilitates group activity and co-operation.

(c) If the outcome of training is to help participants gain competency, then the integration of off and on-the-job learning achieves a level of importance and demands a level of commitment that is quite new. Directing training at the achievement of competency gives it a much tighter focus than training with a different base. Focus is one of the key words associated with CBT. This tight focus means that the relationship between theory and practice needs to be very closely maintained. It would be generally inappropriate to provide a significant amount of training in theoretical concepts over a period of time and let
the application happen as it may. Certainly no one would become competent without opportunity to apply learning and to practise application. If competency is to be achieved, the nexus between theoretical understanding and practical application must be strong and must be maintained.

Based on these premises, a number of points follow:

- There must be a limit to the amount of time spent in block release away from the job. The amount of time is a point to consider in planning block release and the work to be done in that period.

- It is quite critical that the trainer establishes a firm relationship with the trainee and with the trainee’s workplace. If the trainer has a good working knowledge of the workplace and can, in conjunction with the trainee relate theoretical understanding to the job, then integration of off and on-the-job learning becomes likely. In cases where the trainee does not come from a job, then the trainer’s knowledge of current practice in the workplace becomes doubly important. Simulation is a bridge to practice, but it is at best a pale imitation.

- The trainer must maintain up to date and close familiarity with, and understanding of, the competency standards and the way they are interpreted and used in industry. Trainers also need to liaise with enterprises as the use of the competency standards might well extend beyond the vision of the overall industry body. Integration of off and on the job training will demand the development of close relationships between trainers and people in the workplace. The resulting training will, however, be better focused, far more obviously relevant to the trainees and richer in consequence.

(d) The introduction of CBT brings with it the need to spell out to trainees the outcome of their training in specific terms. Many trainees will undoubtedly have achieved the competencies associated with these outcomes already.

It is not in any way uncommon for trainers to recognise that the people they are training have a considerable body of knowledge, understanding and experience pertinent to the topic under review. This is particularly true for adult trainees, but is not restricted to adults. Moving into competency based training highlights the necessity of acknowledging the experience of the learners and planning to use it in the delivery of training.

Acknowledging the experience of the learners is a form of RPL. RPL is usually thought of as a means of providing formal recognition for experience through advanced entry to courses, qualifications, movement in award structures and the like. It also
applies at an informal level in training. The trainer should work with the trainee, using the competencies as the base, to identify and acknowledge what the trainee knows and can do. This need not be a time-consuming or highly formalised, rigorous process because the risk level of assigning too much credit is low. The outcome should, however, have a direct effect on the delivery approach adopted by the trainer.

Options to use the experience of trainees in a group session include the following:

- pair an experienced trainee with one less experienced;
- have experienced trainees make presentations;
- use a number of experienced trainees to talk about their practical experience in a forum;
- integrate trainees' experience with theoretical information;
- refer to experienced trainees for illustrative examples;
- use them as syndicate leaders; and
- involve them in leading discussions.
9. Assess Performance of Trainees

ASSESSMENT is the thread that binds together the three key elements of CBT leading to effective performance—competency standards, training and practice.

Assessment is a fundamental part of training. The trainer and the trainee need continually to assess progress towards the goal of competency. The information from this ongoing assessment will guide both the emphasis in the training and the need for amendment, re-training or more frequent review.

This is the most important function of assessment—to guide the training effort and then provide constant feedback on the direction and rate of progress. Eventually the last of this series of continuing assessments will confirm that the trainee has gained the competency or competencies.

There are constant features which are always part of the assessment process. They involve the preparation for assessment, assessment of performance itself and the need to deal with the results following the assessment.

In all these activities, it is important that the process be seen as a joint venture between the assessor and the person being assessed. The joint approach affects the way each stage in the process is handled.

■ First stage: The trainer needs to share with the trainee the nature of the evidence required in the assessment, both the type and the amount. As these must flow directly from the learning outcome or competency standards, it can be seen how directly this stage fits into the training and the empowerment of the learner. As part of this preparatory stage, the trainer would explain the nature of the assessment procedure and any requirements, rules or guidelines that are relevant. The arrangements should be, and be seen to be, transparent and freely available. There should be no surprises in the assessment process.

■ Second stage: This stage involves the gathering of evidence and consideration of its value. Clearly the participant can help in assembling appropriate evidence. Indeed, that exercise is itself a valuable part of the learning experience. The trainer who works with people and has them working towards the same goal is perhaps giving them one of the most valuable gifts a trainer can provide—guiding or teaching them to assess their own performance and to recognise the essential features of that performance.

■ Third stage: With evidence gathered and reviewed, the trainer must decide whether there is sufficient evidence that the trainee has achieved the standard of performance expected. The tasks then left are to record the results, so that they
are safe, available to the appropriate people and known to the trainee. This is the trainer’s best opportunity to counsel and help the trainee by providing feedback which is fair and friendly but at the same time analytical and frank. They need to look to the future, and further competency requirements, not to the past, except insofar as it will shape the future. As a final step the trainer should review the assessment process with the trainee in the interests of continuous improvement.

**The Key to Effective Learning**

The stages above have been adopted from the competency standards for assessors. The intention has been to show them as an inherent part of the teamwork that must develop between the trainer and trainees to assure the most effective learning possible.

The principles involved are that the trainee knows what is expected in the first instance. The trainer has to trust the trainees, and show that trust. Both parties have to make a strong commitment to the common goal of achieving competency. In a technical sense, the analysis, diagnosis and feedback are sound training practice.

Assessment is not a stand alone process. Seen in that light, as a hurdle to cross at the final stage, it is not value adding, nor can the cost be justified. As an inherent part of the training and learning process, it contributes to success and absorbs the cost in that success.
Competency Based Assessment

COMPETENCY BASED assessment is assessment that is based on the competency standards that people aim to achieve. It does not preclude gaining assurance that people have developed the background knowledge and understanding. Nor does it suggest that there is only one best way to gather evidence on which to base the judgement that the person is competent in terms of the accepted definition of competency. (See page 3.)

The definition of competency has important implications for the approach to assessing people's performance. It impacts on both the sort of information that is sought to confirm competence, or otherwise, and the approach to the assessment process, which is based on the gathering of appropriate and sufficient evidence on which to base the judgement that the person is competent. This aspect is the governing concept of validity and fairness in assessment. Equally importantly it leads to reliability.

Stages in Assessment

Stages in the process of outcomes-based assessment are:

- **Planning.** Both the assessor and the candidate (used in this context as a general word to cover trainee, learner, employee, etc) need to study the standards they are aiming to achieve and to check that they are at an appropriate level. They can then go on to look for opportunities to gather relevant evidence. They should look for opportunities in activities that the candidate takes part in as a normal part of their job or work role. On this basis it is possible to draw up an assessment plan, fully negotiated with the candidate and agreed with others who may be involved or affected, such as work colleagues, for instance.

- **Collecting.** This stage involves gathering evidence. It may come from direct observation, to finished products, to supplementary questions. It will usually come from a variety of sources. The most effective way to collect evidence is usually through some combination of planned and spontaneous activities, together with reviews after the event. Candidates should be encouraged to collect their own evidence, and, indeed training ought to include teaching people how to gather and present evidence of their attainment of competency.

- **Judging.** As with evidence in any context, the assessor has to determine whether the evidence before him or her is valid and meets the requirements of the case, in this case the performance criteria established.
If the considered judgement is that the evidence meets the requirements, the assessor should advise the candidate accordingly and note the judgement for further reference.

If the evidence does not yet satisfy the requirements laid down in the performance criteria, the assessor should advise the candidate, discuss the reasons with the candidate and plan how to help the candidate become competent in the future or to collect evidence of competent performance.

**Deciding.** When the assessor is satisfied that sufficient evidence has been gathered and judged to cover the range of activities and situations and skill areas that would indicate the candidate’s ability to meet the required performance standard consistently, then the candidate’s competency should be attested and recorded.

**Involving the Candidate**

It will be noticed in the above description as well as in the assessor’s competency standards that there is emphasis on assessment as a co-operative venture between the assessor and the assessee (the candidate). It is important that the candidate be given significant control over the process, with the responsibility that goes with that control. This approach can be a major challenge to both the assessor and the candidate, but it offers significant advantages. The candidate becomes a better operator by gaining a full and accurate picture of his or her own level of competence.

Candidates are encouraged to become actively involved in the process when they are:

- encouraged to take as much responsibility as possible for gathering and organising evidence;
- encouraged to assess their own performance;
- given informative and constructive feedback;
- helped to see the basis on which assessments are made; and
- encouraged to identify the next steps in their learning and development.

**Types of Evidence**

There are three main categories of evidence to help in competency based assessment. They are:

- **direct performance evidence.** This involves observing the candidate working normally, or taking account of products that he or she would have made irrespective of whether being assessed or not. Assessors should look for this sort of evidence wherever possible.
TESTING QUESTIONS FOR ASSESSORS

(i) Is the evidence valid?
   Is it really relevant to this area of performance?
(ii) Is the evidence authentic?
    Does it genuinely represent the candidate's own performance?
(iii) Does the evidence meet the performance criteria?
     Does it demonstrate that the candidate meets the competency standard?
(iv) Is the evidence consistent?
     Is it typical of the candidate's performance?
(v) Is the evidence sufficient?
    Is there enough evidence to demonstrate that the candidate has met the requirements
    and can perform competently across the various contexts specified in the competency
    standards?

- alternative performance evidence.
  Sometimes it is necessary, and sometimes it is desirable, to create
  situations where candidates can demonstrate their competence. This
  might happen where a candidate does not have access to the workplace, for
  instance. Arrangements might include projects, simulation or, in some
  circumstances, skills or proficiency tests.

- supplementary evidence.
  Supplementary evidence might be necessary to satisfy the assessor that the
  candidate can perform competently in various environments and in
  circumstances that are unusual. Supplementary evidence is often gained
  through questioning (oral or written) or through reports from former or current
  supervisors.

People usually can only transfer their performance to new situations if they know
why work is done in a particular way and understand the principles which underpin the
job. Often the best and easiest way of gathering evidence of a candidate's
knowledge and understanding will be through oral or written questioning or project
work. The evidence in these circumstances would be expected to satisfy the assessor that
the candidate would perform competently in a variety of circumstances.

The three types of evidence are complementary. Together they give a balanced picture of the candidate’s level of
competency. To ensure both that assessment can be kept manageable and cost effective, it
is necessary to pursue an appropriate mix of the three types of evidence.
Assessment in the CBT Framework

The article that follows is taken from the “Framework for the Implementation of a Competency Based Vocational Education and Training System”, VEETAC, 1993. It is recommended reading.

Definition:

Assessment is the process of collecting evidence and making judgements on the nature and extent of progress towards the performance requirements set out in a standard, or a learning outcome, and, at the appropriate point, making the judgement as to whether competency has been achieved.

Another way of describing assessment within competency based approaches to learning is to say it is criterion referenced. This means that it measures a person’s performance or identifies their achievement in relation to criteria and not in relation to the performance of other learners to trainees.

It follows from this definition that, in the context of competency based training, assessments will measure the range of knowledge and skills and their application against the standards developed by industrial parties and endorsed by the National Training Board for:

- a unit of competency expected in employment for a particular level of competency; and/or
- a learning outcome of a training program.

A competency based system encourages individuals to attain their full potential in that it allows them to be assessed for a particular level of competency and then to move on to achieve further competencies, should they wish to do so.

Purposes of Assessment

Assessments can be taken to:

- assist and support learning by advising the learner about the quality of performance and the learner’s rate of progress towards the achievement of the competency standard This is known as formative assessment;

- help learners and their supervisors determine their education and training needs. Assessment for this purpose is called diagnostic assessment;

- determine whether a unit of competency or a learning outcome has been achieved for the purpose of formal recognition of training. This kind of assessment is called summative assessment; and
determine whether a person has achieved standards of competency which have not yet been formally assessed or recognised so that they may gain entry to or credit in recognised courses. This is assessment for the recognition of prior learning.

Forms of Assessment

There are various methods of determining learner achievement. They include:

- observation, where a trainer and/or assessor observes a learner carrying out a particular task. The observation may be complemented by questions.

- demonstration and questioning, where the observation consists of a structured practical demonstration, and the observer/assessor can see both the process and finished product.

- pen and paper tests and essays, which are often used to measure the extent of knowledge; they may also be used to assess deductive powers or as a complement to practical demonstration.

- oral tests, which can be used as an adjunct to practical demonstration or to test speed and accuracy or recall when these are essential to development of particular elements of competency.

- projects, these are used on a largely unsupervised basis, though they may in some instances involve working in groups; the completed project is used as evidence from which the assessor makes a judgment.

- simulations, including computer simulations and role playing—where actual tasks and conditions are similar to real life situations.

- portfolios, these are useful for assessing skills achieved in the past. Work samples provide a similar source of evidence.

- computer-based assessment, which can take the form of question and answer, or be interactive, so that the assessor can seek further responses or clarification.

The assessment method must be appropriate to the situation, the conditions and the expected performance to be assessed. Learners should also be encouraged to use these methods for self-assessment. This will assist in their learning and help them to make judgments about their readiness for summative assessment.

Conduct of Assessment

Responsibility for arranging assessment lies with the registered provider principally responsible for the relevant integrated learning and training process.

A registered training provider is a public, commercial, industry, enterprise or community based provider who has been formally approved by a State/Territory recognition authority or its agent, as being a
competent and ethical provider/deliverer of a particular training program or accredited course. The principal registered provider will also be responsible for issuing the credential and/or statement of attainment.

Where relevant, the registered provider will negotiate the circumstances of and methods for assessment with the industry parties.

Where providers are registered by a State or Territory recognition authority they will be obliged to demonstrate compliance with the assessment principles listed under the National Framework for the Recognition of Training. These are explained in the key principles of assessment provided below.

The form of assessment used, method of conducting and recording and the assessor used will be at the discretion of the registered provider, providing these principles are met.

**Key Principles of Assessment**

Assessments should be valid, reliable, fair and flexible. The principles which follow are reflections of these four essential features.

**Validity**

Competency standards assessments are valid when they assess what they claim to assess. Validity of assessment is achieved when:

- assessors are fully aware of what is to be assessed, as indicated by the units of competency, learning outcomes and clearly defined performance criteria;

- evidence is collected from activities and tasks that can be clearly related to the unit of competency or learning outcomes specified for the course or training program;

- evidence demonstrates that the performance criteria have been met; and

- evidence is sufficient.

**Validity Principles**

1. **Assessments will cover the range of skills and knowledge needed to demonstrate competency.**

While the basis for recording the outcomes of assessment is the unit of competency, the basis for developing the assessment procedures is the performance criteria. Each unit must be assessed in a way that ensures competency can be demonstrated. There may be a need to assess groups of units together to ensure this.

2. **Assessment of competency should be a process which integrates knowledge and skills with their practical application.**

This principle reflects the CBT focus on performance and the need to use assessment methods which provide valid measures of performance. Competency should be assessed using methods which take account of the knowledge and skills underpinning performance.
Methods of assessment will need to be appropriate to the evidence sought and setting in which assessment may be logically, safely, and economically conducted.

3. During assessment, judgments to determine a learner's competency should, wherever practicable, be made on evidence gathered on a number of occasions and in a variety of contexts or situations.

In most cases it is not possible to infer competency from one successful performance. The ability of a learner to apply knowledge and skills in new and different situations usually cannot be inferred when performance has only occurred once and in one context.

Reliability

Reliable assessment uses methods and procedures which engender confidence that competency standards and their levels are interpreted and applied consistently from learner to learner and context to context. Without reliable assessments there can be no comparability of credentials.

High quality competency standards are fundamental to reliability.

Reliability principles

4. Assessment practices should be monitored and reviewed to ensure that there is consistency in the interpretation of evidence.

Training providers should establish consultative mechanisms to resolve anomalies and ensure the assessment principles set out in the National Framework for the Recognition of Training (NFROT) continue to be upheld.

5. Assessors must be competent in terms of the national competency standards for assessors.

A competency standards body for assessors has been established and has developed a set of standards for assessors.

Assessors should also have adequate knowledge of the area of competence they are assessing.

Flexibility

The assessment practices endorsed for the implementation of CBT must be flexible if they are to be appropriate to the range of delivery modes, sites of delivery and needs of learners. There is no single approach or set of approaches to the assessment of performance in a competency based system.
Flexibility principles

6. **Assessment should cover both the on and off-the-job components of training.**

The most appropriate site for the assessment of workplace competencies is the workplace itself. Here the learner will be using appropriate equipment and performing roles and tasks which are part of everyday activities. Not all trainees have access to on-the-job assessment and this should not impede their gaining recognition for training through the assessment process. There are ways of simulating workplace practices which will allow for a valid assessment of performance.

Competency must be demonstrated and assessed according to the endorsed standards and under conditions as close as possible to those under which the competency will be normally practised.

Assessment should be practical, conducted under safe conditions and create minimum disruption where carried out in the workplace.

7. **Assessment procedures should provide for the recognition of competencies no matter how, where or when they have been acquired.**

Provision must be made to assess and recognise prior learning. Competencies are gained by people through a variety of means—through formal training, work experience and life experiences. These competencies have not always been recognised.

8. **Assessment procedures should be made accessible to learners so that they can proceed readily from one competency standard to another.**

By not tying assessment to time served or leaving it until a course or training program has been completed, learners are able to manage their own learning experiences. Learners need to know what kinds of assessment methods will be used and to have access to assessment in a way that is timely.

**Fairness**

Assessment is fair if it does not disadvantage particular learners. If learners understand clearly what is expected of them and what form assessment will take, and if the assessment places all learners on equal terms, and the assessment procedure supports their learning, then the assessment should be fair.

9. **Assessment practices and methods must be equitable to all groups of learners.**

Assessment must not directly or indirectly limit or impede access by individuals solely on the grounds of age, race, sex, disability, employment status, social or educational background. Nor should it discriminate against people from non-English speaking backgrounds or people with low literacy. 
skills where English literacy communication is not critical to the competency required in the workplace.

10. **Assessment procedures and the criteria for judging performance must be made clear to all learners seeking assessment.**

Everyone involved in the assessment process should be made aware of their responsibilities through formal processes built into the design of the training program and assessment instruments. Non-compliance with this requirement should provide the basis for an appeal or for an application for reassessment.

11. **There should be a participatory approach to assessment. The process of assessment should be jointly developed/agreed between the assessor and the assessee.**

This approach will assist the learner and the assessor in that it can help both to become aware of what skills and knowledge are required for particular work processes and how these can best be developed and assessed.

12. **Opportunities must be provided to allow learners to challenge assessments and provision must be made for reassessment.**

The nature and form of the provision for reassessment will depend upon the circumstances under which the learner is being assessed. Counselling services should be provided to assist learners to understand their assessment rights and needs.

While many of the processes of assessment have already been agreed to and many of the principles have been addressed above, this should not be interpreted as a definitive statement on assessment. Many issues related to assessment are still being addressed, e.g. integrated assessment, group assessment, cost effectiveness, grading or assessment. Resolution of these issues will be the subject of further discussion and consultation.
10. The Extras

Doing the Paperwork

This will be a short section. Its importance, however, should not be judged by its brevity. The administration of the training function forms part of the job and merits attention. Things to take into account cover:

- enterprise policies and procedures;
- requirements of the Training Guarantee Act;
- information and needs of organisations such as the Australian Tax Office and affirmative action agencies;
- public education and training authority needs;
- enterprise records systems;
- the needs of individual trainees;
- matters for the budget preparation and control exercise, including expenditure and projected fund raising;
- course materials, learning materials and guides and trainer guides;
- inventory of all sorts from writing materials to training aids;
- assessment procedures and materials; and
- reports to management on training.

It is axiomatic that trainees’ personal records are secured so that they are available only to the proper people on a limited basis and at the required times.

Promoting a Learning Culture

Australia does not have a learning culture. A learning culture may develop, especially given the current impetus. In the meantime, it is up to the people who earn their living training to ensure that they do their best to generate enthusiasm for learning and to demonstrate the connection between training and career path development.

Motivation has its place in training delivery. The bigger picture, highlighting training’s essential character as one of the ways of achieving the sort of changes in the workplace that are required, needs continuing, concerted effort. The public perspective on the value of training can be raised, but it will take time.

The list below might provide some thought starters on publicising training in an effort to raise its image in the community.

a. Write up training activities on a regular basis in enterprise publications.
b. Develop awareness of training activities and courses through notice boards, displays of various sorts, photo collections etc.

c. Provide visibility for trainees by using the services of senior personnel on a “drop in” basis in training.

d. Maintain personal contact with trainees and their supervisors in their work environment.

e. Provide a career development advice service.

f. Provide training advice to management.

g. Take an active role in enterprise committees.

h. Serve as a focal point for information on training developments, products and services external to the enterprise.

i. Organise apprentice prize nights, for instance, or other celebratory events.
11. Bibliography

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12. Glossary of Terms

This glossary is based on the glossary provided with the National Training Board's National Competency Standards Policy and Guidelines (1992). Although the following definitions are not exhaustive, in order to avoid confusion and debate, it is necessary to agree on terminology.

Accreditation refers to the official recognition by vocational education and training recognition authorities that:
- the contents and standards of a course are appropriate to the credential that is received;
- the course and methods of delivering it fulfil the purposes for which it was introduced;
- the curriculum and assessment are based on national competency standards, where they exist.

Advanced Standing refers to the amount of exemption granted to a student or trainee from an accredited course or training program on the basis of previous study, experience or competencies held.

Articulation refers to the formal linkage between different levels or different fields of study, including enterprise and industry-based training. Articulation arrangements allow the horizontal or vertical movement between programs or between education and employment.

Assessment refers to the process of collecting evidence and making judgements on the extent and nature of progress towards the performance requirements set out in a standard, or learning outcome, and at the appropriate point making the judgement whether competency has been achieved.

Broadskilling see multiskilling.

Career path refers to the sequence of jobs or classifications in a work structure that an individual can attain through progressive achievement of competencies and other requirements. Career paths can enable a person to make a hierarchical progression in a particular industry or sector of an industry, or lateral movement and progression into other related sectors of an industry or another industry.

CODAP is a technique of job analysis based on the concept of dividing a job into tasks. Based on interviews with representative members of an occupation, a questionnaire is developed, tested and refined. Job information is collected from workers and supervisors by means of the questionnaire after which a set of computer programs is used to enter, rank, quantify, organise, summarise and report on this information.

Common competencies refer to those competencies that are used in a number of industries with essentially the same form of expression. Often they would be the competencies used in cross-industry standards.

Competency interview is a one-to-one interview carried out by a person skilled in the technique. Its purpose is to identify and list competencies of workers in particular positions. Only persons in the position under investigation or their immediate supervisors participate.

Competency standard bodies (CSBs) refers to organisations formally recognised by the National Training Board to develop, submit for endorsement and maintain national competency standards for specific industry or cross-industry application. CSBs comprise the relevant industry parties, are often Industry Training Advisory Boards (ITABs), and are partners with training providers and recognition bodies in the implementation of standards.

Contributory skilling see multiskilling

Core competencies refers to a group of units of competency within a competency standard that an industry has agreed are essential to be achieved if a person is to be accepted as competent at a particular level. All units may be core, but in many cases competency at a level will involve core units plus optional or specialisation units of competency. Core competencies are normally those central to work in that industry.

Course (accredited) refers to a sequence of vocational education and training which is consistent with the principles of accreditation under NFRO, accredited by a recognition authority and leads to a credential.
Critical incident technique
is one-to-one interview carried out by a person skilled in the technique which requires participants to focus on significant work incidents from their past and the competencies which enabled them to perform successfully. The technique focuses on the underlying attributes and individual characteristics of successful performance rather than on routine duties and tasks.

Cross-industry competency standard
refers to a group of units of competency that express common competencies across a number of industries. They are grouped to relate to certain functions of work common across those industries. They are developed by recognised CSBs.

Curriculum
refers to a plan incorporating a structured series of intended learning outcomes and associated learning experiences.

DACUM
is an information collection technique using participation from a group which is representative of the particular occupation and a skilled facilitator which identifies:
- the duties of the occupation
- the component tasks of each duty
- the knowledge, skills and applications needed to perform each task.

Delphi
is a survey technique usually conducted by mail which aims to reach consensus by repeatedly summarising participants' responses and incorporating these into subsequent questionnaires. Participants learn the opinions of others and can revise their own position accordingly, but discussion, debate and open conflict are not possible.

Endorsement
refers to the formal recognition by the National Training Board of a national competency standard and its inclusion in the National Register of Competency Standards. Endorsed standards have been agreed by Commonwealth, State and Territory Ministers to be the benchmark for accreditation of courses, curriculum development and recognition of training in the Vocational Education and Training sector.

Functional job analysis
is an information collection technique using a group participation and a skilled facilitator to establish the competency standards for an occupation. It identifies:
- the key purpose or function of the occupation in terms of outcome;
- the elements of competency which allow the key purpose to be achieved; and
- the performance criteria for each task identified as necessary for competency.

General competencies
refers to those that apply to work generally rather than being specific to work in particular occupations or industries. They tend to underpin performance in other more industry-specific competencies. The Key Competencies developed by the Mayer Committee are an example. Also may be called generic competencies.

Industry competency standard
refers to a grouping of units of competency that expresses at a minimum the requirements to be competent at particular ASF levels, and at a maximum the requirements for all ASF levels linked together in a career path in that industry. They are developed by recognised CSBs.

Key Competencies
refers to general competencies defined by the Mayer Committee as essential for all young people's effective participation in emerging patterns of work and work organisation. They focus on the capacity to apply knowledge and skills in an integrated way in work situations and are not restricted to narrow or specific application. They are also essential for effective participation in further education and life, more generally.

Knowledge
refers to two aspects:
1. cognitive skills involved in processes such as judgement, thinking and understanding; and
2. information, which is the base of factual and theoretical material that is accessed, manipulated and used cognitively.

Monitoring or verification
is the process of quality assurance involving internal, local and external validation of the integrity of the training system. It should not be confused with assessment.

Multiskilling
refers to development of competencies through training or other means that have been associated with a number of formerly discrete occupations or classification levels. This equips a worker to perform a variety of tasks or functions across traditional boundaries. It includes concepts such as broadskilling (the expansion of competency into new areas at the same level), upskilling (the expansion of competency into new areas at higher levels) and contributory skilling (the expansion of competency into new areas at the same or different levels drawn from other industries).

Nationally recognised training
refers to accredited courses and recognised training programs under NFROT. They relate to competency based outcomes, and lead to students gaining a credential or credit transfer towards a credential.
Nominal group technique
is an information collection technique using
group participation and skilled facilitator which
focuses on the generation of answers to a
specified question. Participants work
independently on the question before the
facilitator collects and records information from
each person in turn.

Optional competencies
refers to a group of units of competency within
a competency standard where a certain number
drawn from the overall group must be achieved
if a person is to be accepted as competent at a
particular level. Normally combined with core
competencies to make up the overall group of
units to achieve competency at a level. These
are also sometimes called elective units, or
specialisation units.

Recognition authority
refers to bodies authorised under State, Territory
or Commonwealth legislation and designated as
agencies under the NFROT Agreement to
accredit courses, recognise training programs
and register providers of training. They may
have other functions in relation to the
recognition of training, including determining
credit transfer and certification.

Registration of providers of training
refers to formal recognition by a State/Territory
Recognition Authority that a provider is
competent to offer a particular
accredited course or recognised training
program.

Search conference
is an information collection technique using
group participation and a skilled facilitator
which moves from generating ideas through
synthesising and analysing these ideas to action
planning. It is particularly useful in exploring
desirable environments and strategies for
achieving goals.

Skill
may be perceptual, motor, manual intellectual,
social. The nature of tasks usually requires a
combination of these and usually involves the
application of cognitive and psychomotor
functions, together with appropriate knowledge.

Skills audit
refers to a systematic process which identifies
then compares the present stock of skills held by
an individual or a workforce (at the enterprise,
occupation or industry level), whether or not
they are being actively used (i.e. what is), with
the skills needed (i.e. what should be), including
future skills needs.

Upskilling
see multiskilling.

Verification
see monitoring.

Vocational education training (VET)
refers to post-compulsory education or training
which is directed to the development of
competencies or is preparatory to or is directed
to the enhancement of opportunities for such
education and training up to and including para-
professional education and training.