

## **CBT – an evidence approach to assessing skill levels and performance**

“For an idea ever to be fashionable is ominous, since it must afterwards be always old-fashioned” (Santanya 1913)

### **Introduction**

Competency based training (CBT) has been fashionable in the Australian vocational education and training system for the past twenty five years. It was endorsed by the Australian Ministers of Vocational Education and Training in 1989 and has remained the bedrock of Australian training reform to the present.

The attraction of CBT to Governments was its links with the workplace, its promise of producing more employable graduates, of increasing productivity and of formalising existing work skills with an educational qualification framework.

The concept of competence however has always been elusive.

Industry bodies were charged with defining work place competence, of structuring qualifications from packages or collections of units of competence and the role of the educator was redefined.

The promise of CBT was that it offered greater accountability and quality in producing graduates with the work ready skills for the workplace.

CBT was predicated on **an evidence approach to assessing skill level and performance.**

CBT has been increasingly embraced by other education sectors (including universities), by commercial organisations and by government departments.

This session will explore the dichotomies, paradoxes and achievements of CBT, what needs to be encouraged and what needs to be managed or indeed regulated.

### **What do we mean by CBT?**

**Competency based training** is an approach to vocational education and training that places emphasis on what a person **does** in the workplace and how competence in this work can be formally achieved

by completing a program of training, or by recognition of workplace experience and learning.

Ideally progress within a competency based training program is **not based on time. It is self paced.** As soon as students have achieved a competency, it is immediately credited to them.

From its inception CBT in Australia has had its very vocal supporters and equally vocal critics.

Indeed the very concept of 'competence' has been elusive.

What is clear is that the construct of '*competence*' is located in the culture and politics of particular societies.

It is the product of what could be called the social settlement – the agreements arrived at by governments, employers and unions (the civil agreement) as to what constitutes skill and what constitutes appropriate levels of performance of workplace tasks.

Competence can be an elusive concept even within the same industry.

### **Supporters and critics**

**Supporters** of CBT argue that because CBT is focussed on the workplace it produces work ready graduates. It allows learners to study at their own pace, at least in an ideal training situation. It is focussed on outcomes (rather than inputs) and is efficient, cost effective **and evidence based.**

CBT enables the formal recognition of work related skills with an educational qualification.

**Critics** argue that it is narrow in its focus on performance of tasks. It is instrumental and often reflects an industrial past in its definition of competence, rather than encouraging new and innovative ways of operating.

CBT assumes that learners learn bite sized bits which they store in something akin to filing cabinets in their brains. Learning they argue should be seen as a more holistic process, located in a social context.

In today's workshop I will examine the following:

1. What do we mean by CBT?
2. Australia's adoption of CBT – What was the rationale?
3. Training Packages based on CBT
4. Supporters and critics of CBT
5. The conundrum of CBT
6. New definitions of competence

## **Australia's adoption of CBT – What was the rationale?**

Australian governments formally adopted competency based training as **the** approach for **all** nationally recognised vocational training in the early 1990s.

Governments were moving away from a system where curriculum was developed by numerous bodies with industry and educator representation.

Under this system there were no national qualifications or standards, but rather state based courses and state based licensing arrangements.

Policy makers were attracted by a concept that allowed for a quantification of skills that would ultimately offer a sophisticated system that could underpin a regime of rigorous accountability.

At the core of the Australian version of CBT was **an assessment regime that was evidence based**, that required learners to demonstrate that they were able to perform against national standards.

Assessment is defined as:

*The process of collecting evidence and making judgements on whether competency has been achieved, to confirm that an individual can perform to the standard expected in the workplace, as expressed by the relevant endorsed industry/enterprise competency standards of a training package. (General Direction National Regulator)*

Policy makers regarded the former system of skills development as inefficient and unsound as it prevented Australia- wide recognition of qualifications at a time of increasing social and workforce mobility.

Australian governments introduced a **national system of training packages** as the national products for vocational training.

In these training packages formal educational qualifications were comprised of packages of units of competence and were aligned with a national framework of qualifications (the Australian Qualifications Framework).

The system was now **nationally** focussed which meant for example that a child care worker who was awarded a qualification in New South Wales would have his/her qualification recognised anywhere in Australia.

Units of competence were nationally coded and registered and consequently if achieved by a learner were similarly recognised across Australia.

In the Australian system a unit of competence awarded by one vocational education and training (VET) college must by law be fully recognised by every other VET college. In this way mobility in work did not prevent a worker from continuing their education qualification as though they had remained in the same location.

The government also established the national regulator, the Australian Skills Quality Authority (ASQA) for vocational education and training to ensure that only colleges registered with ASQA could deliver this nationally accredited training. ASQA has a legislative base and its auditors ensure that VET colleges comply with the regulations, including whether the educators were appropriately qualified and their training and assessment complied with industry standards.

ASQA also requires that evidence is kept by colleges to demonstrate that assessment was valid, reliable and evidence based, namely

*The actual piece(s) of work completed by a student or evidence of that work, including evidence collected for an RPL process. An assessor's completed marking guide, criteria, and observation checklist for each student may be sufficient where it is not possible to retain the student's actual work. However, the retained evidence must have enough detail to demonstrate the assessor's judgement of the student's performance against the standard required.*

## **What are training packages?**

Training packages are statements of industry standards.

They consist of units of competency.

They specify the competencies required for **effective performance in the workplace**.

Each unit of competency describes

- a specific work activity,
- conditions under which it is conducted and
- **the evidence that must be gathered in order to determine whether the activity is being performed in a competent manner and at an appropriate level.**

Training packages are primarily developed and updated by Industry Skills Councils, comprising representatives from the relevant industries. These skills councils are made up of representatives of employers, unions and industry associations.

Training packages were never envisaged as curriculum documents (to that extent the term training packages is a misnomer).

Packages do not tell teachers and trainers how to create a learning environment or how to assess student's performance (although they do provide guidance on desirable assessment practice).

Training packages are based on occupations for example Certificate 111 in Electrotechnology and Certificate 11 in Retail Operations.

Units of competency for training are developed for entry level qualifications Certificates 1 -3 through to higher level diplomas and advanced diplomas.

CBT introduced real gains for learners and employees.

CBT brought into the formal Australian educational system, qualifications for occupations that had previously not had formal qualifications, for example people working in transport and logistics, people working in retail and in agricultural industries. Often possession of these qualifications was then formally tied to wage arrangements.

CBT in its original form also promised flexibility, especially via individual self-paced learning, although as resources became tighter that concept was compromised....

In a country the size of Australia competing in the global market, a national systematic approach to industry and occupational standards, and a national qualifications framework, the emphasis on evidence based assessment have contributed to consistency of training outcomes nationally and enabled workforce mobility across jurisdictions and globally.

## **Industry led CBT**

Governments in Australia adopted CBT (and training packages) because they were seeking to have “an industry led” system, as distinct from a provider or college led system. Governments believed that the former system in which curriculum committees largely led by educators had led to education provider capture and did not sufficiently reflect the skills required by employers.

In a period when governments were focussed on lifting productivity and competing with other nations, policy makers believed that what was required was not “training for training’s sake”, but training that was industry endorsed that would give employers the skilled workers they needed, graduates skills to get employment and the economy greater productivity.

Governments were also responding to the issue of youth unemployment. They were seeking to make young people more employable.

Training institutions would be more accountable for the employability of their graduates.

The balance had shifted in who defined competence for various industries.

**Industry** bodies were now charged with that task and the role of the educator was redefined.

Educators now needed to work with the standards that had been endorsed. Their role was subsidiary and concerned with delivery and assessment.

## **Supporters and critics of CBT**

**Supporters of CBT** argue that while units of competency and qualifications specified in training packages can be improved, their strength is that they are nationally recognised and underpin accredited

training. They also argue that they are better alternative to a myriad of locally endorsed curriculum products developed by educators.

Evidence based assessment ensures that employers and the community can have confidence in the training.

As an aside you will probably have noticed the words used in this presentation indicate, CBT has led to the commodification of VET, with the language of industry being used rather than the language of education.

Supporters refer to the introduction of CBT as facilitating recognition of prior learning (widely known as RPL). RPL is defined in legislation as

*Recognition of Prior Learning (RPL) means an assessment process that assesses the competency/s of an individual that may have been acquired through formal, non-formal and informal learning to determine the extent to which that individual meets the requirements specified in the training package or VET accredited courses.*

In this way students can be credited with one or more units of competence and potentially be awarded a full qualification, without attending a single class or participating in any other learning activity.

A former university Vice Chancellor of Macquarie University in a recent article sang the praises of CBT for certain university courses. Steven Schwartz argued that the introduction of competency based learning in which students work at their own pace is “the way of the future for universities”.

Professor Schwartz claimed that “Competency based learning would shift teaching away from seat time and allow students to complete their degrees faster, saving them money. He referenced Western Governors university’s model of competency based on-line learning. Students at this university completed their degrees 25 % faster than students at traditional universities.

**Critics** offer a range of criticisms of CBT as it is currently implemented.

CBT

- is predicated on a notion of learning that assumes that people learn bite sized pieces of information. Units of competency and the qualifications specified in training packages are *products* that are

not based on an appreciation of learning as a *process* in a societal context.

- is atomistic in that units of competency are based on an occupational analysis in which jobs consist of an ensemble of workplace roles and requirements and Australian vocational education and training qualifications are made up of matching ensemble of units of competence. It disaggregates elements of work rather than emphasising their interconnectedness
- is located in the present and emphasises tradition and thus inhibits the development of innovative knowledge and new forms of practice
- does not foster the types of learning that are required in higher level qualifications especially at the higher education or university level
- The work related nature of training packages, and strong focus on workplace competencies, precludes a range of broader educational areas being included in qualifications. These include areas such as mathematics, English expression, information gathering and writing skills which, when lacking, are often a significant detriment to learning and articulation into higher education institutions both in Australia and overseas.

Additionally critics of training packages (and CBT) argue that there is not the direct correlation between what VET graduates study and the work outcomes. Only 30% of VET graduates work in jobs that are directly associated with their qualification. Something is not working!

### **The conundrum of CBT**

The introduction of CBT was intended to create a simpler, more streamlined approach to the delivery and assessment of skills.

In reality the implementation and regulation of CBT over time became cumbersome. A good idea was flawed.

As industries changed and new skills emerged Industry Skills Councils, as the developers and maintainers of training packages, continued to amend, refine, specify new tasks and redevelop their training packages.



As a consequence in a number of cases packages became large, complex documents which educators found extremely difficult to work with.

The OECD Learning for Jobs noted in 2008, that training packages are 'large and cumbersome making them difficult to use' and 'should be replaced by simple and much briefer statements of skills standards'.

While many other recommendations of the OECD at that time have been accepted and implemented, training packages remain voluminous, complex, overly complicated and characterised by high levels of specificity while the language leads to various interpretations by auditors, teachers and regulators.

Simultaneously the focus of packages on the workplace has often meant that **assessment requirements** are workplace based and are not appropriate for those who do not have employment.

Our TAFE Directors Australia members cite examples where the requirements of some training package qualifications are undeliverable and unassessable.

The divide between training package qualifications and the logistics of delivery of the training program reflects the lack of final involvement of educators in their development.

Policy makers have tried to rectify this by introducing guidelines for streamlining training packages, although these guidelines do not go far enough. They still side line educators from any decisions relating to the development of units of competency and training packages.

The Australian Government is now reviewing the efficacy of Training Packages.

Governments to date have been inclined to see colleges as the problem, rather than CBT.

So when policy makers have identified problems with skills shortages in some industries, or dissatisfaction by some employers with vocational graduates, they have seen the problem as being flat footed and unresponsive training colleges.

The solution of Australian governments was to introduce a competitive training market in which public institutes (TAFE) and private, for profit, colleges competed for the government's training dollar and all the time students paid more and governments contributing less.

### **New definitions of competence**

The definition of competency has been refined over time to answer the critics who have claimed that CBT in its focus on observable tasks has failed to recognise the importance of knowledge underpinning doing and has encouraged a 'tick the box' approach to assessment.

One of the criticisms of CBT in training packages has been that it does not sufficiently emphasise knowledge as underpinning performance.

The latest official definition attempts to redress this problem:

“Competency is a broader concept than the ability to perform individual workplace tasks and comprises the application of all the specified technical and generic knowledge and skills relevant for an occupation. Particularly at higher level qualification levels competency may require a combination of higher order knowledge and skills and involve complex cognitive and meta cognitive processes.....”

As recognition of this training package developers were required to incorporate a range of 'soft' skills or employability skills into the standards:

*Communication*

*Teamwork*

*Problem-solving*

*Initiative and enterprise*

*Planning and organising*

*Self management*

*Learning*

*Technology*

### **Another way – capabilities not competencies**

There are those however who argue that while CBT has made a contribution to the development of national VET qualifications it is time to move on to what Dr Leesa Wheelahan refers to as a “new way of thinking about skill”

Wheelahan argues for a capabilities approach in which some of the strong features of CBT are retained, but one in which educators play a much greater role.

“An alternative approach would be to have a simpler version of standards based on preparation for a broadly conceived occupation that has a number of different occupational destinations, within a broad vocational stream”

## **Conclusion**

TAFE Directors Australia (TDA) supports a vocational education and training (VET) system based on **competency standards** and qualifications that have been developed and endorsed by industry, have national applicability, and reflect the Australian Qualifications Framework (AQF).

TDA supports a robust evidence based approach to assessment that provides learners & the community with confidence that graduates are able to perform at the appropriate level in the workplace.

However, while training packages have provided a solid base for the specification of work related competency standards and work related qualifications we maintain there is still scope for improvement.

By building on the current system, Australia could improve and simplify its industry standards (CBT) by giving a greater role to educators in the development and maintenance of training products.