



Assessment of Ability

Knowledge, skills and competence!

Knowledge

Knowledge is viewed as the result of interaction between intelligence (capacity to learn) and situation (opportunity to learn), so is more socially-constructed than intelligence and includes underpinning theory and concepts, as well as tacit knowledge gained experientially. A distinction can be made between declarative or propositional knowledge (know-that), holistic knowledge or understanding (know-why) and tacit or procedural knowledge (know-how).

Skill

Skill is usually used to refer to a level of performance, in the sense of accuracy and speed in performing particular tasks (skilled performance). Skilled performance has long been a subject of psychological studies which consider both physical psychomotor abilities and mental cognitive abilities. The early finding that (diminishing marginal) performance improvements continue indefinitely has been confirmed in later research, which led to the conclusion and learning can be described as a linear function of the logarithms of times and trials. Recent skills research has included broader cognitive skills such as problem solving and decision-making, demonstrating the difficulty in regarding such cognitive competencies as 'knowledge' rather than 'skill'. Proctor and Dutta (1995), in what is arguably the most authoritative text on skill acquisition and performance, define skill as ***'goal-directed, well organised behavior that is acquired through practice and performed with economy of effort.'***

Competence

Competence is a term that is subject to such diverse use and interpretation that it is impossible to identify or impute a coherent theory or to arrive at a definition capable of accommodating and reconciling all the different ways that the term is used. After exploration of these many different interpretations by 'Winterton 2005', he espouses that the common and accepted position is that if intellectual capabilities are required to develop knowledge and operationalising knowledge is part of developing skills, all are prerequisites to developing competence, along with other social and attitudinal factors. It could also be argued that people

do not have competencies independent of context. Therefore competence is governed by the context in which it is applied, so worker and work form one entity through lived experience or work.

A broad view of what competency might mean in Australia was originally characterised in the following definition of competency by the previous National Training Board:

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. This is a broad concept of competency in that all aspects of work performance, and not only narrow task skills, are included. It 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 work environment (job/role environment skills), including working with others.

Current definitions for 'competence' or 'competency' and 'competency standards' provided in recent ANTA documents are reproduced below:

Competency:

'the specification of knowledge and skill and the application of that knowledge and skill to the standards of performance required in the workplace.'

(definition in Learning and Assessment Strategies (2003) ANTA)

Competency standards:

'define the skills and knowledge, and how these are to be applied to operate effectively in the workplace'

(definition in Training Packages @ Work – Back 2 Basics (2003) ANTA)

Or alternatively:

'define the competencies required for effective performance in the workplace. Standards are expressed in outcome terms and have a standard format comprising unit title, unit descriptor, elements, performance criteria, range statement and evidence guide.'

(definition in Learning and Assessment Strategies (2003) ANTA)

What is Competency Based Training?

Competency-based training programs are often comprised of modules broken into segments called learning outcomes, which are based on standards set by industry, and assessment is designed to ensure each student has achieved all the outcomes (skills and knowledge) required by each module (pre-1990 position).

However, this broad view has proved difficult to implement and a simpler view has been adopted, involving a less holistic approach and requiring the enumeration of many **units of competence** making up any qualification. These units of competency are defined by **elements of competence** (identifying the assessable outcomes or actions with a unit), **performance criteria** (the characteristics by which performance on the elements and the unit as a whole can be judged as demonstrating competence), **range of variables** (defining the industrial context of the performance criteria) and the **evidence guide** (covering specific requirements such as underpinning knowledge and skills) (Wheeler, 1993).

Attainment of the overall qualification (certificate of diploma) requires demonstration of competence on all the elements of competence. Despite the attempt by several analysts to expound the theory that competence is an inherent characteristic which cannot be observed directly, that is, drawing a distinction between performance and competence, in practice it appears that competence is assessed in terms of successful performance on tasks which represent the element of competence being assessed. Overall competence is therefore not viewed holistically but as a collection of elements of competence.

Whether competence is viewed holistically or atomistically makes no difference for selection decisions based on the qualification.

Successful completion of the qualification required demonstration of overall competence, that is, with all components of the qualification being recorded as 'competent'. This means that everyone who gains the qualification has the same profile of results and differentiation among them is impossible on the basis of that profile.

The issue in selection, whether for employment or education, is how to differentiate among the applicants and whether such differentiation should be provided within the qualification itself.

How to conduct assessment?

Assessment methods are the particular techniques used to gather evidence and may include:

- Direct observation, e.g.
 - real work/real time activities at the workplace
 - work activities in a simulated workplace environment

- Structured activities, e.g.
 - simulation exercised/role plays
 - projects
 - presentations
 - activity sheets

- Questioning, e.g.
 - written questions
 - interviews
 - self-assessment
 - verbal questioning
 - questionnaires
 - oral or written examinations

- Portfolios, e.g.
 - collection of work samples compiled by the candidate
 - product with supporting documentation
 - historical evidence
 - journal/log book
 - information about life experiences

- Review of products, e.g.
 - products as a result of project
 - work samples/products

- Third party feedback, e.g.
 - testimonials/reports from employers/supervisors
 - evidence of training
 - authenticated prior achievements
 - interview with employer, supervisor and/or peer

Assessment Tools

Assessment tools are the instruments used for gathering evidence. For example:

- a profile of acceptable performance measures, templates/proformas
- specific questions or activities
- evidence/observation checklists
- checklists for evaluation of work samples
- candidate self-assessment materials

(Training Package Assessment Materials Kit contains many examples of assessment instruments)

What is Recognition of Prior Learning?

The often cited VEETAC definition (1991) refers specifically to the 'acknowledgement of the skills and knowledge held' and excludes 'informal training' from the definition. Whether the assessment outcome relates to recognition in accredited courses or in all contexts (i.e. industry) is unclear.

Recognition of Prior Learning (RPL) was defined by the NTB (1992) as the:

Determination on an individual basis of the competencies obtained by a person through previous formal or in-formal training, work experience and/or life experiences. It can lead to advanced standing that a learner is entitled to in relation to a training course.

Rumsey's (1994, p. 15) definition is also often cited:

Recognition of prior learning or experience is a form of assessment used to determine whether a person has achieved, through informal and formal learning and experience, the required competence for entry and/or credit in a recognized course or training program.

The recent introduction of the AQTF Standards for registered training organisations negates the RPL/Recognition of Current Competency (RCC) debate by providing a definition that encompasses both RPL and RCC. This definition emphasises both RPL and RCC. This definition emphasises both currency and competence, as well as recognising the context of learning.

On this basis then RPL means the recognition of competencies currently held, regardless of when or where the learning occurred competencies may be attained in a number of ways. This includes through any combination of formal or informal training and education, work experience or general life experience.

ANTA Glossary of Terms

- **Competency** (also competence) the ability to perform tasks and duties to the standard expected in employment.
- **Competency-based assessment** (or CBA) the gathering and judging of evidence in order to decide whether a person has achieved a standard of competence.
- **Competency-based training** (or CBT) training which develops the skills, knowledge and attitudes required to achieve competency standards.
- **Competency standard** an industry-determined specification of performance which sets out the skills, knowledge and attitudes required to operate effectively in employment.

Competency standards are made up of units of competency, which are themselves made up of elements of competency, together with performance criteria, a range of variables, and an evidence guide. Competency standards are an endorsed component of a training package.

Bibliography

Bateman, A., & Knight, B., 2003, Giving Credit – A review of RPL and credit transfer in the vocational education and training sector, 1995 to 2001. National Centre for Vocational Education Research

Rumsey, D., 2003, Think Piece on the Training Package Model. Australian National Training Authority

Winterton, J (2005) 'From Bologna to Copenhagen: Progress towards a European credit transfer system for VET', International Journal of Training Research, 3, 2, 47-61