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# Assessment: Assessing the key competencies in the Electronics and Information Technology Program at Torrens Valley TAFE

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This 'story from the field' describes the experiences of working with the Mayer key competencies or the new Australian Chamber of Commerce and Industry/Business Council of Australia employability skills and attributes. It is one of a series published on the National Centre for Vocational Education Research (NCVER) website at <<http://www.ncver.edu.au/generic.htm>>. These stories are designed to help advise and foster better teaching practice.

## Context

The Electronics & Information Technology Program at Torrens Valley TAFE has been widely recognised for its approach to developing and assessing generic skills developed over the past 12 years. This program delivers Electrotechnology Training Package qualifications from certificate II to advanced diploma.

Since the program's inception in 1991, we have been trying to develop an optimal learning environment for developing 'work-ready' graduates for the workplace. This resulted in the creation of a highly developed *flexible learning* environment emulating the workplace and incorporating learner-centred, self-directed, flexible learning methodologies to encourage students to take progressively more responsibility for, and control of, their learning. The learning environment is open from 9.00am to 9.30pm and students are responsible for managing their own learning. Staff work closely as a team to facilitate students through the learning process and also act as mentors providing course guidance and support. We believe that empowering learners in this way allows them (in fact, requires them) to develop and demonstrate key competencies crucial for effective performance in the workplace and the community. We have now implemented a comprehensive key competencies assessment strategy to formally recognise these skills *and* to nurture their ongoing development. In fact, this helps students to systematically identify and LINKUP<sup>1</sup> their key competencies to form a powerful generic skills framework for life. This 'LINKUP' concept has become the icon for key competencies implementation at Torrens Valley TAFE.

A video highlighting the electronics and information technology flexible learning environment can be viewed online at <[www.tvtafe.com.au/electronics](http://www.tvtafe.com.au/electronics)>.

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<sup>1</sup> A corporate brand developed for the Torrens Valley TAFE key competencies initiative, based on the concept that empowering students through self-assessment of the key competencies assists them to systematically identify and LINKUP a generic skills framework that will equip them to perform effectively in all aspects of life.

## What did we want to do?

The electronics and information technology flexible learning program offers students a learning experience rich in opportunities to develop key competencies in an *integral* way with their technical skills. We have found that students engaging in this flexible learning environment (especially for the first time) require significant orientation and mentoring to develop an effective self-directed approach important in this learning environment—and in the workplace. Throughout their course students progressively improve their self-directedness, ‘work-readiness’ and key competencies. The problem was that we had no way of giving them formal recognition for this effort or this valuable skill development. We needed to find a way to assess and formally recognise these key competency skills.

Our goal...

To create a workplace-like flexible learning environment (rich in opportunities for development of Key Competencies) AND make the Key Competencies, and their developmental processes, *explicit* in order to systematically assess and certify them and accelerate their development.

## How did we try to do it?

In close collaboration with local electronics and information technology workplaces and through research projects, focus groups, action learning teams, state and national research forums we gradually formulated and developed an explicit key competencies assessment strategy. For example, in the early stages we participated in a national key competencies action learning project (1996) which placed a strong focus on ‘industry collaboration’. An informative outline of the findings is available online at <[http://www.tafe.sa.edu.au/vet\\_div/irsi/key\\_comp/htm/activities/rob.html](http://www.tafe.sa.edu.au/vet_div/irsi/key_comp/htm/activities/rob.html)>. (Note the spelling of ‘activities’ in this web address!)

On 13 June 2000, we took the plunge and formally launched our explicit key competencies assessment strategy as a *voluntary* initiative offering students a means of receiving recognition for the development of these skills in the context of their electronics and information technology technical training.

More recently, on 3 June 2003, we introduced a very significant change by making this explicit key competencies assessment *mandatory* as part of our training package assessment strategy. This involves establishing minimum key competency performance level assessment requirements for each qualification while continuing to offer *voluntary* opportunities for students to assess additional key competencies performance levels beyond the minimum requirements to achieve extra recognition.

Absolutely essential for successful implementation is the requirement for a ‘workable’ system. Considerable thought has gone into designing this strategy to minimise the burden and overheads while maximising the benefits to learners, industry and the community. Some of the factors contributing to successful implementation include:

- ✦ comprehensive orientation and induction for students and new staff
- ✦ clear and comprehensive information in many forms
- ✦ consistent assessment processes and quality assessment instruments
- ✦ integration into existing course assessments—not additional assessments
- ✦ integration into existing easy-to-use computer-based resulting system

- ✦ active support by the Electronics and Information Technology Student Representative Council
- ✦ consultation with industry to meet their needs.

## What did we achieve?

We devised a way to make key competencies explicit to allow recognition and developmental improvement without separating them from the technical competencies. The strength of this assessment strategy is that students are explicitly aware of the key competencies and their competence in them, and are therefore able to confidently discuss their competence in these areas with potential employers. This gives students an edge when applying for jobs.

Our assessment strategy is based on '*validated self-assessment*' involving:

- ✦ explicit assessment and recognition of key competencies
- ✦ specified performance levels
- ✦ participation in any existing recognised course activity
- ✦ appropriate assessment sheets as a basis for student self-assessment
- ✦ identification by students of evidence to support their assessment
- ✦ facilitator validating the self-assessment evidence
- ✦ possible inclusion of peer or industry validation.

### *Validation*

This involves two aspects:

- 1 that the student has successfully *performed* the key competency (meeting the specified performance level criteria on the assessment sheet)
- 2 that the student is *explicitly aware* of the key competency processes and their competence in them.

### *Recording and certification*

Results and a portfolio of evidence are maintained in VSMART (the local computer managed student resulting system) and a *Statement of Completion* is issued for all key competencies performance levels achieved.

### *Principles of the assessment strategy*

- ✦ **Prove and improve:** The initiative provides opportunities for students to 'prove' and 'improve' their abilities in the key competencies.
- ✦ **Integral performance, explicit assessment:** Key competencies are 'performed' as an integral part of technical competencies (making the learning authentic), but are assessed explicitly using criteria relevant to each key competency (making the learning meaningful to the learner and highlighting the generic and transferable nature of these skills).
- ✦ **Assessment as learning:** Assessment is used as the primary means of forcing the processes and practices of key competencies to become explicit in order that they may be systematically learned and developed.

- ✦ **Validated self-assessment:** Self-assessment empowers learners and helps them recognise and improve their generic skills while validation by a qualified assessor provides quality assurance and allows formal certification.
- ✦ **Developmental performance levels:** Performance levels are deliberately designed into the key competency assessment sheets making them developmental tools to nurture progressive understanding and development of these skills.

## What still needs to be done?

We are keen to continue to improve this assessment strategy and also contribute to implementation across the whole organisation (Torrens Valley TAFE). Our experience and key competencies assessment tools and processes will be combined with the experiences and resources of other programs to generate an institute-wide key competencies assessment strategy and support system.

Also, we are conscious of the proposed Employability Skills Framework as a possible successor to key competencies. This new framework does not conflict with our key competencies assessment model but will call for some refinements. It brings with it some enhancements including a much broader set of skills and attributes. A major concern, however, is the lack of reference to performance levels. The performance levels of our current system are crucial for making this a developmental process as well as an effective assessment process. Performance levels are something we cannot do without.

## Hints for success

Unquestionably, the driving force and underlying key to the success of our strategy has been our total belief in flexible learning and key competencies—not as add-ons or as separate entities—but as an *integral* factor at the very core of our strategy.

## Where can I find out more?

Denton, R 2003, *Down-to-earth key competencies assessment: A very practical student-centred perspective*, viewed November 2003,  
<[http://www.training.sa.gov.au/OVETorgs/files/links/TVTAFE\\_Key\\_Competencies\\_As.doc](http://www.training.sa.gov.au/OVETorgs/files/links/TVTAFE_Key_Competencies_As.doc)>.

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