

At a glance



This *At a glance* explains how generic skills might best be fostered in vocational education and training (VET) programs and workplaces. It includes the views of a variety of groups and focuses on what research has said about describing, teaching, learning, assessing, recognising and certifying these important skills.

In the Australian VET sector and workplaces, the term generic skills now refers to the set of eight major skills and various personal attributes developed recently by the Australian Chamber of Commerce and Industry and Business Council of Australia (2002), and which they referred to as employability skills. These employability skills are: self-management, team work, communicating, planning and organising, using technology, problem-solving, learning skills, and initiative and enterprise skills. The personal attributes include loyalty, honesty and integrity, enthusiasm, reliability, personal presentation, common sense, adaptability and ability to deal with pressure.

Key findings

- Fostering the development of generic employability skills needs to be a joint responsibility of individuals, teaching institutions and workplaces, with the various groups working in partnership where possible. These skills are developed throughout life and are fostered in a wide variety of contexts essential for sustained employability.
- Teaching and learning generic skills requires processes based on real experience in a variety of contexts. A number of different approaches are currently being used to teach, learn and foster these skills, and these are outlined in box 1 (p.4).
- Much of the assessment of generic skills is unreported in the formal sector. Better assessment and certification of generic skills are critical. If generic skills are not assessed and reported, learners will not see them as important, and employers will be unable to access relevant information about their employees. Four possible assessment models, including their strengths and weaknesses, are identified (see box 2, p.5).
- To improve current efforts at fostering generic skills in VET programs and workplaces, several steps need to occur. These include:
 - documenting generic skills more clearly in training packages, based on the outcomes of national pilots currently being trialled
 - promoting the importance of generic skills to all relevant groups, and encouraging them to foster their development
 - sharing real practice in the teaching and learning of generic skills, including learning from past experiences of trying to implement the Mayer key competencies
 - developing policy and processes that will certify and record the attainment of generic skills
 - providing ongoing professional development for teachers, trainers and assessors.

Introduction

The focus on generic skills in Australia first began with a review of education in the 1980s, which culminated in 1992 with the development of seven key competencies essential to preparing young people for employment (see NCVET 2003a). These were commonly known as the Mayer key competencies, named after the committee who helped to develop them. Interest in generic skills was then re-invigorated in the late 1990s by Australian industry. The Mayer key competencies were expanded into a set of eight major skills and a variety of personal attributes required for working life, and were referred to as employability skills. This is the current focus for VET providers.

As the Australian Chamber of Commerce and Industry and Business Council of Australia (2002) report shows, employers in Australia now focus on adaptation, cost reduction, increased productivity, new products and services and the increasing need for a workforce which is highly skilled. Employers see employability skills as important because jobs today require flexibility, initiative and the ability to undertake many different tasks. They are not as narrowly prescribed and defined as in the past and generally they are more service oriented, making information and social skills increasingly important. Proficiency in the broad range of employability skills has become a key requirement for the modern worker. As the sector with a direct relationship to the world of work, vocational education and training is adopting the industry-identified employability skills as the generic skills to be focussed on in future.

Who is responsible for fostering generic skills?

Research commissioned by the National Centre for Vocational Education Research (NCVER) has found that the development of generic skills requires a partnership between the learner, education and training providers, and workplaces.

The learner's role

The individual learner needs to recognise the importance of generic skills, and be motivated to both learn and assess themselves. Many are employed on a part-time or casual basis, and thus have to be responsible for their own development and career path. This level of responsibility could almost be seen as another employability skill. Individuals also need to be adaptable enough to use their generic skills in new and different work environments. They have to be able to assess their own level of skills, create and manage experiences to develop them and, increasingly, play a role in documenting their skills and achievements.

Smith and Comyn (2003) examined the development of generic skills by young 'novice' workers beginning their working lives. They found that novice workers use a range of approaches to develop their own employability skills. These are mainly based around pro-active communication: they ask questions, practise active listening, seek out more helpful staff as mentors, develop working relationships with managers and mix socially with other staff. They also try to make a good impression: maintaining a cheerful demeanour, arriving at work early, asking for extra tasks, seeking feedback, and learning when to offer suggestions and when to listen to others. They develop systems for organising their work and take advantage of off-the-job training opportunities. Novice

workers who fail generally do so because they have not given work priority over their social life, and have been afraid to ask questions for fear of appearing stupid.

As Virgona et al. (2003) explain, all employees need to understand the culture of their workplace, and to find ways in which they can contribute. Knowing how much initiative to take, when and how to promote themselves, when to suggest an innovation, and when to submit to the system is an ability that many experienced workers have learned. Recognising both how to fit into the system and how to use it are important.

The teacher's role

VET providers play a key role in fostering generic skills. Research by Callan (2003) found that students believe teachers with real-life experience are very important, because they help students to develop not only specialist technical, but also broader life skills. These teachers inspired them to find not just any job, but one that was a chosen vocation. They were passionate, enthusiastic, knowledgeable, approachable and well organised. Nevertheless, the research also found that students tend to focus on technical rather than generic skills, and thus teachers need to continue to emphasise how vital generic skills are.

Teachers believe that there needs to be greater clarity about where their role and responsibility begins and ends in relation to generic skills. While providers have a role in helping to foster positive attitudes to these skills, so do employers and their workplaces, and employees themselves. The promotion of generic skills needs to be a partnership between all these groups.

The employer's role

Smith and Comyn (2003) note that employers can play a major part in assisting, or making more difficult, a novice worker's adaptation to working life. Smith and Comyn found examples of employers (usually working with apprentices and trainees) who have well-tested methods of settling novice workers into their organisations. However, they also discovered employers who paid no attention to this important stage. The particular ways in which employers and workplaces can help to foster and support generic skills will be described later.

Overwhelmingly, Virgona et al. (2003) found that the workplace is the most important source of generic skills relating to employment for older workers. Generic skills

develop throughout life and a variety of situations; they cannot simply be acquired in one instance and then applied to all situations. The transfer of generic skills to other contexts is thus not automatic; it depends both on having an environment that is open to new skills, and on learners being adaptable.

Both Hawke (forthcoming) and Virgona et al. (2003) have found that there is often confusion among employers regarding the generic skills they think they need and the ones they actually use or will allow to be used in real workplace conditions. Some of the research suggests that while employers support the need for these skills, their organisational culture does not allow for their development and maintenance.

Employees progress in environments where these skills are both supported and promoted. The development, maintenance and growth of generic skills in the workplace is therefore a matter of mutual obligation involving both the employer and employee, but these skills are also developed outside of the workplace and hence the wider community also has a role in fostering generic skills development.

What is good practice in teaching and learning generic skills?

Dawe (2002) reveals that good practice in delivering generic skills training requires the provision of a large variety of experiences and learning strategies. This ensures that learners acquire conceptual, technical and generic skills and are then capable of transferring these skills to new contexts. In enterprises and providers, good training practice emphasises a holistic approach, which involves integrating the development of skills, knowledge, values and attitudes. Box 1 summarises a range of approaches to teaching and learning generic skills.

VET practitioners report that they were required to interpret training packages, develop new learning materials and use a variety of learning strategies—including collaborative and guided approaches—with which they were not as familiar. Increasingly, practitioners will have to work as part of more integrated teaching teams, as suggested in box 1.

Training providers can promote, develop and document the level of generic skills possessed by an individual. However, the whole process becomes more effective when an individual's development is fostered through partnership arrangements with employers, as well as actively involving the worker or learner themselves. Where this is not possible, the provider can play an important role by helping the individual gather and document evidence about the nature and level of their generic skills. Other sources of information may be available from the community sector.

Industry supports the integrating of employability and technical skills outcomes, because this reflects the real experience of the workplace and thus provides an easier transfer of generic skills to the work context. Combining generic and technical skills training is more complex, but students believe it makes generic skills more relevant which increases their motivation for learning.

Enterprises which exemplify good practice display high levels of senior management commitment to training and learning. They also provide supportive structures which ensure that training, learning and assessment are promoted as normal workplace activities that can reflect and improve actual workplace performance. This includes having in place a qualified workplace trainer, or trained mentor, to support each work team and to enable a collaborative and guided approach to skill acquisition and transfer of employability skills to new contexts (NCVER 2003b).

Box 1: Approaches to help foster the development of generic skills

In general

- Promote their importance
- Develop mechanisms for communicating the scope of generic skills
- Use authentic experiences
- Use team-based and integrated approaches to foster generic skills

In training organisations

- Use learning strategies such as
 - workplace projects
 - community projects
 - mini-companies or practice firms
 - use of critical incidents to focus discussion and problem-solving
 - investigation or enquiry-based learning
 - problem-solving learning
 - project learning
 - reflective learning and workplace practice
- Identify teachers who have high levels of experience in fostering generic skills
- Develop networks to discuss and enhance practice and/or use team-based approaches to their teaching, learning and assessment
- Share appropriate support resources

In the workplace

- Make generic skills a key feature in job descriptions and recruitment process
- Use a range of ways to help familiarise staff (including induction programs) so that they learn what the organisation expects in terms of key employability skills, standards of work and the key attributes it expects of its employees
- Model the behaviours sought (which can be made more formal by discussing the approaches being modelled at an appropriate occasion)
- Use buddy or mentoring approaches, or working alongside another employee (a less formal version of the buddy or mentor approach)
- Use rotation of tasks or working at higher duties where relevant
- Use relevant targeted training for workplace supervisors to help them develop employability skills in their staff
- Use staff or teams to role play or discuss particular procedures or issues, such as dealing with difficult customers within workplace requirements
- Use quality circles and improvement teams to examine processes and other issues in the company or work unit
- Use work-based projects to assist the development of employability skills
- Use staff assessment and the performance management system to reflect on these skills
- Use critical incidents, including dealing with mistakes, conflict resolution or performance problems
- Involve staff in appropriate community projects

Sources: Dawe (2002); Smith & Comyn (2003); Clayton et al. (2003); Curtis & Denton (2003)

How are they best assessed?

Curtis and Denton (2003) have identified four broad approaches to the assessment of generic skills in international and Australian literature. These approaches include holistic judgements by teachers, portfolios created by students, assessment based on work experience, and assessment using purpose-developed instruments. These approaches achieve similar purposes, which include documenting and certifying student achievement. Box 2 provides a description of each approach based on Curtis and Denton (2003), and documents their strengths and weaknesses.

All the approaches summarised in box 2 have value, but show that the assessment of generic skills is not easy. Clear specifications are needed and those involved in the assessment process have to understand their particular role. The

criteria and evidence guidelines used, the standards applied and the assessment approaches and opportunities available all have to be clearly understood, so that assessment is consistent across assessors and between providers. Above all, the assessment of generic skills relies heavily on the well-informed professional judgement of both individual assessors and assessment teams.

Curtis and Denton (2003) found that while most practitioners are familiar with written assessments, they are not as comfortable with evidence-based and work-based approaches to assessment. While providers play a valuable role in helping to foster the development of many generic skills, it is the workplace where employability skills in particular are developed and honed. This makes workplaces important assessment sites.

Box 2: Summary of generic skills assessment models		
Assessment model	Strengths	Weaknesses
<p><i>Holistic judgements</i></p> <p>Involves observation by panels of teachers or teaching teams of students in classroom-based and other activities, on which judgements regarding competence are made</p>	<p>Authentic, provided relevant situations are chosen for observation</p> <p>Promotes clear and consistent view of what the skills are, the criteria, approaches and opportunities to be used in the assessment process and the standards expected</p> <p>Multiple performance levels appear to be described</p>	<p>Reliable within context, e.g. in a school or VET provider, where several assessors may be used, but lacks comparability across sites</p> <p>Requires staff training</p> <p>Summative (judgemental), rather than formative (over time)—thus has limited learning potential</p>
<p><i>Portfolio assessment</i></p> <p>This approach can reveal key dimensions of generic skills, which provide a framework in which learners can document their achievements and present evidence</p>	<p>Provides a rich data source</p> <p>Compiling a portfolio may be a valuable learning experience for the learner; provided tools to assist in this task target skill development</p>	<p>Influenced by other factors, e.g. written fluency of author, which may limit content validity</p> <p>Lack of comparability among individuals (low reliability)</p> <p>Time-consuming to extract information from portfolio</p> <p>Assessing portfolios is time-consuming and has low reliability</p>
<p><i>Workplace assessment</i></p> <p>Work experience assessment appears to be a useful method and produces a simple report</p>	<p>High validity</p> <p>High learning potential if judgements are accompanied by informative feedback</p>	<p>Low reliability: influenced by training of assessors and by opportunities presented by the work context</p>
<p><i>Standardised instrumental assessment</i></p> <p>Independent assessment using standardised and purpose-developed instruments enables efficient assessment and provides a basis for reporting using a profile that is readily interpreted by learners and potential employers</p>	<p>Efficient</p> <p>High reliability</p> <p>Produces a score that is comparable across individuals and occasions</p> <p>Known precision, can lead to identification of a number of performance levels</p>	<p>Limited authenticity</p> <p>Summative rather than formative—limited learning potential</p>

Source: Curtis & Denton (2003)

Key features for the effective assessment of generic skills

Given the range of purposes that have been identified for generic skills assessment, Curtis and Denton (2003) believe that several approaches to assessment are required. The main characteristics of assessment approaches are that, collectively, they should provide:

- a mechanism for communicating the scope of generic skills to learners, training providers and employers
- a means of providing feedback to learners on their acquisition of generic skills and a framework for their improvement

- a rich source of information about individual achievement, with supportive evidence
- an opportunity to undertake assessments that are authentic and occur within a work context or one that closely simulates it
- a method of assessment that is not too difficult for either the learner or the assessor
- a summary of the performance of individuals that is readily accessible by employers
- a cost-effective means of collecting performance information, individually and at aggregate (institutional and system) levels.

Assessment in practice

Clayton et al. (2003) investigated how generic skills are being assessed and certified in practice in training packages in Australia. They undertook a series of case studies of training, with sites including private and technical and further education (TAFE) providers, VET in Schools, and the adult and community education (ACE) sector. In general, it was found that a broad range of approaches is being used in the assessment of generic skills, with approaches differing according to the combination of institution- and workplace-based assessment.

They also found that technical or vocational competencies and generic skills are typically assessed in the context of 'whole work' tasks. This approach seeks to combine such elements as knowledge, understanding, problem-solving, technical skills, attitudes and ethics into assessment tasks. However, assessors are still more confident assessing generic skills when they occur as discrete units of competency, rather than when they are embedded into vocational units.

There are a number of barriers to the successful implementation of generic skills. Where training packages do not provide specific contextual advice on their development and assessment, teachers and trainers find it difficult to interpret how they are to assess these skills. At present they find that when key competencies are not being achieved by learners, their general progress does not seem to be impeded. In other words, although the demonstration of key competencies is required at specified performance levels in the units of competency, this is being ignored in practice.

Nevertheless Callan (2003) reported that many students perceive the assessment load for some existing

key competencies to be already too heavy in some training packages. A related challenge is how the additional assessment of generic skills will be built into packages where students seem to be already struggling to achieve the current competencies.

Clayton et al. (2003) and other researchers have found that there are certain critical success factors. These include providing a comprehensible definition of generic skills so that performance criteria and evidence guides are clear and easy to understand. Learners also need to be given explicit information about what is required in order to achieve a successful assessment. In addition, they need to actively participate in the assessment so that they feel a part of the process.

The approaches to assessment need to be integrated, comprehensive and quality assured. Like other forms of assessment, they should meet the principles of validity, reliability, flexibility, fairness, currency, authenticity and sufficiency. Appropriate assessors and organisational support are needed, including adequate time and resources for assessment and professional development for the assessors themselves. Collaboration between assessors within and across assessment sites and providers helps to benchmark and to improve the quality of generic skills assessment.

'Best practice' cases reveal that the training experience becomes more valuable when assessors target key competencies and other generic skills specifically, and build a curriculum that incorporates them explicitly in delivery and assessment. Students' reactions to this new form of assessment have been favourable.

How are these skills being reported and certified?

At this time there is no national policy that requires providers to formally record, report and certify generic skills, and only a few training providers have actively done so. Clayton et al. (2003) found that Centrelink was one institution which recorded the attainment of generic skills on their assessment matrices. However, none of the other organisations interviewed for this study have strategies in place to include generic skills in their formal records of learner achievement.

Torrens Valley Institute of TAFE in South Australia uses another approach. The institute produces a statement of attainment to show the achievement of key competencies, which is used as supplementary evidence to their formal academic records.

A considerable amount of generic skills assessment, therefore, is going unreported. According to Clayton et al. (2003), the major disincentive for the recording, reporting and certifying of generic skills in every provider is that it requires them to have a student management system capable of handling the huge variety of results that would be generated. Further, given the current systems of fee payment in place within providers, the development of explicit generic units of competency would have considerable financial implications for learners, which they may be unwilling to accept. However, if generic skills become formally certified, this will provide benefits for both learners and employers. Learners will be motivated to acquire skills that are recognised, and employers will gain from knowing exactly what skills their prospective employees have attained.

Appropriate systems to document, record and report generic competencies need to be developed and more widely implemented. Such information would raise awareness about the importance of generic skills, and should result in learners and teachers becoming more committed to attaining and recognising them.

What needs to happen next?

To improve current efforts in fostering generic skills in VET programs and workplaces, the following processes need to be implemented and actions taken:

- 1 **Generic skills need to be properly documented in training packages:** Training packages need to have generic skills more explicitly documented in competency standards and assessment guidelines, with more detailed information to assist with learning and assessment opportunities and processes being provided in supporting resources.

Clayton et al. (2003) found that many practitioners experience difficulty in understanding the language used to describe key competencies and their performance levels, because the language and guidelines are not clear. They noted inconsistencies in the ways that key competencies and other generic skills are described and included in training packages. Clayton et al. also discovered that while there are advantages in highlighting particular generic skills at the unit of competence level, it is also important to put them in their context and deal with them holistically. This encourages integrated approaches to the teaching, learning, and assessment of these skills.

As part of a continuous improvement program, existing training packages are being revised, and new training packages continue to be developed. Guidelines for the developers are also being looked at. The Australian National Training Authority (ANTA) has made improved specification of generic skills in training packages a key goal from 2004.

- 2 **All parties need to gain a better understanding of generic skills and acknowledge the role they play in fostering the development of these skills:** ANTA plans to develop communication strategies to ensure that trainers, employers and students understand what generic employability skills are, why they are important and how they can be fostered, assessed and documented. While their importance and value seems to be recognised by employers, teachers and trainers, greater effort is needed to communicate their significance to learners. This communication process must be simple and clear.

Employers need to recognise the important role that their workplace culture plays in fostering the development and maintenance of generic skills. Induction programs for new staff and ongoing human resource management can show employees that general employability skills are recognised and appreciated.

In turn, individual employees and students also need to take responsibility for both developing and maintaining an awareness of their own skill levels.

The role played in developing employability skills through activities in the community sector remains largely unexplored.

- 3 **Practice in the teaching and learning of generic employability skills needs to be shared:** Training providers and employers need to develop teaching and learning approaches which foster the development of generic skills. Networks and partnerships are important ways of making sure this happens.

- 4 **Certifying and recording generic skills to help ensure that they are valued:** Better formal processes are needed to make sure that employees and learners have the best possible information about the generic skills they have acquired. Much generic skills assessment is not formally documented at present.

Providers across all sectors of education need to develop better systems for recording and reporting generic skills, and these need to be as consistent as possible. Chosen processes should be simple and have broad acceptance and utility both in educational settings and for employers. These processes also need to acknowledge the important role individuals play in reflecting on, and maintaining evidence of, their attainment and levels of generic skills.

- 5 **Better acknowledgement of the importance of teachers and trainers and more, and appropriate, professional development for them:** Teachers and trainers should be provided with opportunities for professional development that raise their levels of confidence and their abilities to promote, foster and assess the generic skill development of their learners. This is needed in both institutional and workplace settings through a variety of appropriate teaching, learning and assessment approaches. This professional development is important for both full-time and part-time/sessional staff.

The Certificate IV in Workplace Training should include how to teach and assess generic skills. The need for appropriate knowledge and skills must also be reflected in VET teaching qualifications offered in the higher education sector.

While emphases may change, the process of attempting to implement the original Mayer key competencies could provide some valuable lessons for practitioners in workplaces and training providers. It is important to look at why, despite all the effort, key competencies did not have the intended impact, and to learn from that experience when trying to implement the new generic skills.

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Where can I find out more?

Visit the NCVER generic skills page at <<http://www.ncver.edu.au/generic.htm>>.

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