

The Competency Standards for Assessment and Workplace Trainer: A needs assessment study ®

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ABSTRACT

The changes that have altered the government training policies in Australia in the past decade have been numerous and substantial. While many reports have been influential in the framing of current thinking, implementation can arguably be said to have begun with the formation of the former National Training Board and the introduction of National Competency Standards in 1991. The assumption that underpins this approach is that 'industry' is the best agency to determine training needs. Since 1991 there has been a steep learning curve for all concerned; many employers and some training providers, need additional opportunities to become familiar with the purpose and content of the standards. This study undertook a needs assessment of workplace trainer and assessment programs and standards. The paper reports on findings from a national study that investigated how industry, government bodies and training providers were using and interpreting the two sets of standards for Assessment and Workplace Trainer. The end result of the study was a revision, expansion and combination of the workplace trainer and assessment standards. It informed the development of specialist units that lead to a diploma in training and assessment systems. This research underpins the nationally endorsed Training Package for Assessment and Workplace Training.

Introduction

In an attempt to achieve an internationally competitive economic structure, Australia has implemented a new system of Vocational Education and Training (VET). The development of a national perspective on skill formation and training led to a National Training Reform Agenda. The Agenda agreed by Federal and State governments and supported by unions and employers, aims to improve and expand vocational education and training in Australia. Underpinning the introduction of the Training Reform Agenda was the need to introduce nationally consistent competency based training; national recognition of competencies, however attained; an open training market; fair participation in vocational education and training; and an integrated entry-level training system (National Training Board, 1992).

The National Strategy for Vocational Education and Training for the period from 1998 to 2003 has, as its centre point, four inter-related concepts. These are competency standards and training packages, flexible delivery, a training market and a training culture, and the so-called "new apprenticeships". This paper relates primarily to the first of these notions, namely the training package with competency standards as an essential core component.

Training packages are developed for, and on behalf of Industry Training Advisory Bodies (ITABs), usually with funding provided by the Australian National Training Authority (ANTA). The guidelines for training packages were determined through an ANTA Committee in 1996 and specify that these packages are to contain endorsed and "non-endorsed" components. The endorsed component comprises industry defined competency standards, assessment guidelines and recommendations for packaging competencies to form a national qualification.

To develop training packages, ITABs normally commission consultants to conduct research and draft materials for the consideration of the industry body. Once materials are drafted, it is normal for consultations to be held around the reported research and the draft materials.

The National Assessors and Workplace Trainers Body (NAWTB) were responsible for the development of a Training Package for Workplace Training and Assessment. Training Packages are to provide comprehensive national resources for trainers and assessors to use. Like all other training packages the Training and Assessment package was expected to consist of the two components- endorsed and a non-endorsed.

To ensure the new Training Package for Workplace Training and Assessment met the needs of both industry and vocational education, training and assessment providers, the NAWTB commissioned the study to review both the existing Competency Standards for Assessment and the Workplace Trainer Competency Standards. The objective was to determine the best means of establishing and maintaining national standards in training and assessment across both industrial and vocational education and training settings.

This paper describes the procedures used to establish the data that underpinned the development of the draft endorsed components of the Training Package for Workplace Training and Assessment (Gillis, Griffin, Catts & Falk, 1997). As the Training Package was to have cross industry application it was anticipated that there would be a large range of vested interest groups involved in using the standards. Dealing with the wide interest base would provide a valuable breadth of expertise and experience in competency standards but it could also be expected that there would be difficulty in achieving consensus. The project team proposed to the NAWTB that the data for the development should be based on accurate information reflecting the national population of users of the current standards. This meant that a rigorous approach to data definition and collection would be used to ensure that the standards were based on requirements for effective practice, rather than on

sectional preferences dominated by small, vocal lobby groups or individuals. The NAWTB endorsed this approach.

Revision of the standards required several steps. In essence, a needs assessment of workplace training and assessment competencies at a national level was required. Classical needs assessment defines a need as a gap between what is (the current status) and what should be (benchmarks/ideals) (Kauffman and English, 1979; Soriano, 1995; Witkin, & Altschuld, 1995). Kauffman and English identified four levels of needs assessment that essentially addressed the gaps between the ideal and actual status of the entity being examined. The first was referred to as 'an alpha level assessment'. This takes a similar approach to Scriven's (1968) goal free approach to evaluation. That is, the system is examined without prior assumptions, and redesigned from a completely new beginning. This approach was not feasible in this research investigation, given the two sets of competency standards had been in existence for several years.

The second approach involves an initial analysis of the goals of the system prior to identifying status and gaps. In this case it would involve the delineation of goals of competency-based training. The next steps would investigate goals fit with this approach to the development of training and assessment competencies and then examine the efficacy of such a system for these competencies. In essence it involves questioning the system before making decisions about how to improve the system. This level of needs assessment still does not accept the system as it is.

The third approach also requires an examination of the goals of current system (i.e. a goals based approach) and then examines the status of the system with respect to these goals. This approach started from the assumption that competency-based training and assessment are part of the national agenda and that policy implementation will be improved if the current approach can be fine-tuned.

The fourth is a shorter method. It simply involves identifying the problems and benefits of the current system, fixing the problems and maximizing the benefits. It is in essence an adjustment of a system of competency based assessment and training and has an underlying assumption that such a system is adequate as currently defined.

This project did not allow for a completely new system of CBT to be developed, nor was it sensible to approach the project from that standpoint. The goals of the system may indeed be flawed, but the commissioned study was not expected to investigate at that level, nor was the commissioning agency prepared for such an eventuality. Hence the approach taken was to assume the goals were established and accepted by policy makers and to some extent by the users of the system. As the problems and benefits approach (i.e. the level four needs assessment) would have resulted in what would be little more than an editorial task of the existing standards, the level three needs assessment (Kauffman, and English, 1979) was adopted and a range of data sources and types were identified.

Four major steps follow from the adoption of this approach.

- The first is to establish the current status of the existing standards. This, in turn, involves several steps, including the appraisal of physical presentation; the content; the awareness of users and potential users; as well as their understanding, use and satisfaction.
- The second is to establish what the benchmarks should be and thus is more problematic than establishing current levels. The most widely accepted practice would be to establish benchmarks using specialists to define the ideal levels of use, understanding, presentation and so on. Benchmarking can also be done using other

endorsed and approved components of training packages as models. It is also essential to explore the literature in the fields of both training and assessment as they relate to the vocational and industrial settings, and examine the legal and official requirements of training packages as they have been promulgated in the policy documents of the Australian National Training Authority.

- The third step is to establish what are the expectations of audiences, users and consumers of the products of the training package implementation and then to identify the gaps.
- Finally these gaps are used to prioritize change objectives developed in consultation with the NAWTB and written into the form of recommendations for change and implementation.

Having adopted a needs assessment approach it was necessary to clarify the specific questions to be addressed. These were:

1. How were the two sets of standards (Workplace Trainers and Assessment) being used?
2. Who was using the standards and did the standards meet the needs of the users?
3. What would be the characteristics of an ideal set of standards and how would this be established?
4. Where gaps were identified, what improvements would be needed in the structure and content of the standards?
5. Once changes were identified and introduced, what were the implications for the development of the Assessment Guidelines?
6. How would the competency standards link to the Australian Qualifications Framework and what qualifications would be issued to those who demonstrated competency against the standards?

The end result would be recommendations for the development of the endorsed components of the national *Training Package for Assessment and Workplace Training*.

Method

The Populations and Samples for the study.

The knowledge and skills required for training and assessing in the workplace were defined initially in the Workplace Trainer Competency Standards (CSB - Workplace Trainers, 1992) and the Competency Standards for Assessors (CSB - Assessors and Workplace Trainers, 1993), and subsequently revised in 1996 and 1995, respectively (NAWTB, 1996, NAWTB, 1995). From 1995 to 1997, approximately 20 000 copies had been sold to 2858 purchasers. Records kept by the distributing agency were used to establish a sampling frame.

The target populations for the needs assessment were identified as: -

- **Purchasers** of either the Competency Standards for Assessment and/or the Workplace Trainer Competency Standards
- **Providers** of training against either or both sets of the standards
- National Industry Training Advisory Bodies (**National ITABs**) and Competency Standards Bodies responsible for developing industry Training packages.
- State Industry Training Advisory Bodies (**State ITABS**)
- State/territory Training/Recognition **Authorities**
- **Specialists** in workplace assessment and training.

Given these populations, a series of status surveys were undertaken to establish current levels of use, satisfaction, understanding and implementation of the two sets of standards. As only one population was sufficiently large, samples were drawn only from the purchasers of the standards. Details of both the populations and samples drawn are presented below.

1. **The Purchasers:** The sampling frame consisted of all records on purchasers. The sampling method first required determination of the number of standards purchased per individual/organisation (N=2858), which was then used as the key variable to establish the sampling fraction. As the project established a tolerable sampling error of 5%, sampling techniques developed by Ross (1997) were followed to obtain a simple random sample equivalent of 400. A 95% accuracy meant that a 20% simple random sample (n=436) was needed to be drawn from the population of the purchasers. A parallel replacement sample was also drawn to cater for non-respondents and withdrawals. Marker variables for the sample were set as state and territory numbers of copies purchased. Given these checks, the accuracy of the sample was of the order of 5%. However, this level of accuracy depended on returns of the questionnaire and a minimum of 87% was then required to be accounted for in the data (Ross, 1997). This meant that the survey results could provide accurate estimates of opinion, use and involvement of purchasers and that this data would accurately reflect one level of the data required.
2. **The Providers:** A census was conducted with providers. Because of the small population (N=277), there was no statistical reason to take a sample. However, regardless of the population size, it was essential that all instruments were accounted for to avoid implications of a distortion of the respondent sample in reporting the results.
3. **Authorities:** A census was conducted with the state/territory training/recognition authorities (N=10) to establish them as the regulatory bodies and to establish what was expected of the standards in terms of content, use and qualifications of users.
4. **State ITABs:** Because of the importance of state training boards in implementing the standards, a convenience sample survey of state Industry Training Advisory Bodies and Competency Standards Bodies was conducted (n=53).
5. **National ITABs:** A population survey of national Industry Training Advisory Bodies was conducted because of the small numbers involved (N=21).
6. **Specialists:** Specialists identified by the NAWTB were interviewed, seeking comment on the content, competencies, presentation and implications of the standards. (n=15). These data were combined with those from the regulatory bodies, state authorities to establish benchmarks for the variables of interest among purchasers and providers of training against the two sets of standards.
7. A series of **case studies** was undertaken to explore experience and familiarity with the standards and any modifications or customization undertaken to meet local needs (n=7). The case studies provided base data on implementation of the standards and recommendations for change based on experience in the field.

The range of data collection procedures implied in the above list of populations and samples are summarised in the table below.

Table 1. Data collection procedures used.

	Workplace Trainer & Assessment Competency Standards
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<p>Literature Review</p>	<p>Analysis of standards to determine compliance with the criteria and recommendations specified in the Standards Best Practice Guidelines (ANTA, 1996), and the Guidelines for Training Package Developers (1997).</p> <p>Mail-out surveys of users of the standards and key stakeholders to identify their attitudes, beliefs and behaviours associated with the standards (i.e. purchasers, accredited providers, National ITABs, State ITABs and State/Training Recognition Authorities).</p> <p>Follow-up of non-respondents via reminder letters, and where necessary, telephone calls.</p>
<p>Mail-out surveys</p>	<p>Telephone Interviews with respondents to gather more in depth information and to validate mail out findings.</p> <p>Case studies and benchmark criteria.</p> <p>Consensus and validation of advice from Steering Committee.</p> <p>External moderation and validation through Validation Meetings held within each State/Territory.</p>
<p>Telephone Interviews</p>	
<p>Case studies</p>	

Validation	
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Benchmarks

The first step was to review the criteria for endorsed standards as stipulated by the Australian National Training Authority (MINCO, 1996). Then, a review of the most recent versions of the two sets of standards was conducted to determine their match to the agreed quality criteria. This enabled the first examination of gaps to be undertaken and an identification of any changes that would be required in content or presentation in order to maintain national endorsement. This involved analyzing the standards for consistency with ANTA's quality criteria (i.e. content, technical and process), as documented in the Standards Best Practice Manual (ANTA, 1996) and the Guidelines for Training Package Developers (ANTA, 1997). Previously endorsed industry/enterprise training packages were also reviewed as models and frameworks for the development of the endorsed components of the Training Package for Assessment and Workplace Training. For example, available training packages for the emergency services (eg. Chubb, 1997), administration (Admin Training Company, 1997), information technology (InfoTech, 1997), creative arts (CREATE, 1997), the quarry and extractive industries (National Mining ITAB, 1997) and community services (Community Services and Health Training Australia, 1997) were reviewed. The AQF Implementation Handbook (MCEETYA, 1995) was also reviewed to determine appropriate requirements and expectations of the different levels on the Australian Qualifications Framework.

Existing Standards

Data on the existing standards was collected using three approaches. First a series of mail out surveys was conducted with each of the populations listed above. Second, a series of telephone interviews was undertaken with trained interviewers using the data from the mailed questionnaires. Third, a series of case studies helped to explore in depth the extent to which the current standards were implemented in the workplace.

Instrument development

Questionnaires

To identify the current levels of understanding, implementation and satisfaction with the current standards, data was collected from the users and from other key stakeholders. The data collection addressed various aspects of the standards such as - familiarity, satisfaction with content and format, application and recommended revisions and/or improvements to the standards.

In preparing the questionnaires, a pool of statements was developed addressing each of the above areas for both Workplace Trainers and Assessment. The items were designed to measure underlying attitudes, beliefs and behaviours associated with the existing competency standards, as well as obtain suggestions and recommendations for the development of the assessment guidelines and qualifications. The items were derived from a combination of literature and consultations with the project steering committee. The item pool eventually included measures of

- The use of the standards
 - purpose (training, assessment, curriculum design)
 - frequency
 - role of user
 - level of familiarity with the standards
 - specific use of units, and for what purposes
 - past experience with the standards

- Attitudes toward the standards
 - appropriateness of the specified knowledge, skills and attitude of users
 - level of relevance and meaning in the workplace, within and across industries
 - the ability to meet the National Training Board's definition of competency (task skills, task management skills, contingency management skills, job/role environment skills and transfer)
 - level of understanding of the language used to end users
 - concerns about any bias or discrimination in the current standards (eg. language used in defining standards)
 - level of satisfaction with each of the components of the standards (unit description, range of variables, evidence guide, elements & performance criteria etc)
 - identification of gaps and need for further development or refinement
 - recommendations for improvements
 - identification of innovative strategies

- Training adherence to competencies
- Information to assist in the development of the Assessment Guidelines and Qualifications
 - Preferred packaging arrangement of the units to the Australian Qualifications Framework
 - level of satisfaction with the existing document titled "*A Guide to the Competency Standards for Assessment*" (NAWTB, 1997)
 - recommendations for improvement to the Guide
 - recommendations for the minimum qualifications and training of assessors to assess against the Standards
 - guidelines for determining the currency of assessor qualifications
 - recommendations for design of materials used for assessment of the standards
 - Current assessment procedures and training assessment practices in the workplace and training environment.

The item type contained a combination of checklists and rating scales. The questions were panelled by the project Steering Committee consisting of assessment and training specialists, providers, and administrators, consumers and policy body representatives. Trials were conducted with a representative group of each of the target populations. Modifications and additions to the item pool were incorporated into the final instrument as a result of the trials and panelling. The instruments were then agreed to and approved by the Steering Committee.

Separate questionnaires were developed for each of the samples and target populations. There were common sections dealing with the structure, format, guidelines and content of

the standards. In all, four questionnaires were developed seeking information about the structure, format, comprehensiveness and utility of the standards.

Interview Schedule

General trends noted in the analysis of the mail-out survey data were used to develop the interview schedule, which was to be the same for all groups of interviews. It was designed to explore the following issues with the current two sets of standards: -

- What were the recommended additional units/elements/Range of Variables?
- What, if any, were the recommended changes?
- What were the recommendations for on-going professional development of workplace trainers/assessors?
- Were there any suggestions for overcoming some of the problems raised in responses to the questionnaire?
- Could they identify any additional job functions and roles of workplace trainers/assessors that need to be included in the revised standards?
- Could they recommend improvements in the format of the standards?
- How appropriate was the language and literacy requirements in the existing standards documents?
- Which assessment practices were used for assessing against either set of the standards within their own organisation?
- Who should assess the assessors and workplace trainers?
- What additional requirements and qualifications would these people need?
- Were they aware of unacceptable assessment practices against the standards?
- What recommendations could they make for minimising the costs of assessing against the assessment and training standards?

Case Studies

The data collected from the two survey formats were supplemented by seven case studies of industries and providers. The seven sites were chosen because of known experience and familiarity with the standards and/or because they had customized or modified the standards to meet their own, or their client's differing needs. The Institute for Working Futures undertook the case studies. The details of the case studies are reported elsewhere.

Administration

Mail Survey

Questionnaires were mailed to: -

- All national Industry Training Advisory Bodies (ITABs) and a selection of state ITABs (n=74).
- All training organisations registered to provide training to the Competency Standards for Assessment and/or the Workplace Trainers Competency Standards (N=277).
- The random sample of enterprises or individuals who had purchased either set of the standards since 1995 (n=436).
- All state/territory recognition authorities (N=10).

- The assessment and training specialist group (n=15) nominated by the steering committee.

All questionnaires were sent by registered mail. This meant that the recipient had to sign on receipt of the mail or the letter would be automatically returned if the survey subject could not be located. This eventually became an important aspect of data collection in and of itself. Given the required signature, non-prompt return of a questionnaire meant that the target or a representative of the target had taken delivery of the survey instrument. After one week a follow-up letter was mailed to non-respondents. After two weeks a telephone follow-up was conducted to encourage non-respondents to return the questionnaire. A second and third telephone follow-up was used in some cases. After four weeks the project team had traced and accounted for 86% of all mailed-out questionnaires, which ensured the desired accuracy level for the study. Eventually only seven questionnaires (0.8%) were unaccounted for by the time data analyses was completed.

Telephone Interviews

As part of the initial survey, respondents were asked to indicate if they were willing to be interviewed for elaboration of the data they provided initially in questionnaire responses. The subsequent telephone interviews enabled the self-reported attitudes; experience and beliefs associated with the standards to be further investigated and verified. Only those who indicated they were willing to be interviewed were approached. This resulted in 87 individuals being interviewed, of whom approximately half were providers and half were purchasers. The targeted group of specialists (n=15) were also approached to be interviewed by survey even if they had been included in the initial sample. The telephone survey therefore collected feedback from all populations, but was voluntary, and hence not representative of the population of stakeholders in the training package for Workplace Training and Assessment. The data was used more to establish benchmarks from some respondents and to elaborate on the structured mail-out questionnaires from others.

Telephone interviewers were trained and allocated a series of interviews to conduct in each of the three centres: The Centre for Vocational Assessment Research (both The University of Melbourne office and the office located within the NSW TAFE), the Work Education Research Centre (Central Queensland University) and the Centre for Research and Learning in Regional Australia (The University of Tasmania). The time taken to conduct the entire interview, using the Interview Schedule, ranged from a minimum of approximately 15 minutes to a maximum duration of 1.5 hours. Several interviewees took the opportunity to express opinions at length.

Results

Response rates

Survey returns were low and at first were feared to be unrepresentative of the target populations. However, after an exhaustive follow up, it became clear that the target populations were inappropriately defined. Table 2 indicates the number of respondents, the number of completed and incomplete returns.

Table 2 - Distribution and responses according to target populations.

Population	n	Complete	Not complete	Total used	Valid Non	Valid N	Data Bas	Valid %	Untracked
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			e		returne d		e Error		
Purchaser	43 6	134	30	164	18	182	254	90	8
Provider	27 7	110	10	120	139	259	18	46	
National ITAB	21	8	1	9	12	21		43	
State ITAB/CSBs	53	16	1	17	31	48	5	35	
State Recognition Authority	10	3	0	3	6	9	1	33	
Specialists	15	2	0	2	12	14	1	4	
TOTAL	81 2	273	42	315	218	533	279	59	8

Table 2 shows that 273 mail-out questionnaires were returned completed. A further 42 were returned with incomplete data. The 273 completed forms included those individuals who did not respond directly to each item on the questionnaire, but alternatively, provided written extended responses that raised general concerns and recommendations for improvements to the standards (n=5).

A descriptive analysis of the response patterns and the reasons for non returns was undertaken and this revealed that an additional population existed, particularly among providers of training in assessment and workplace training. The exhaustive telephone follow up and interview of non-respondents revealed, first of all that the error rate in NAWTB's databases was of the order of 60%. Approximately two thirds of the persons recorded as having purchased the competency standards did not remember purchasing them, did not work at that enterprise and never had, the enterprise did not exist, or could not be traced.

Given that the instruments were delivered by registered mail, target respondents were required to sign for receipt of the questionnaire. Exhaustive telephone follow up of non-returns established a scenario among users and purchasers that made the development of benchmarks and current levels of use and satisfaction problematic from any data base derived from records of purchasing copies of competency standards. Although the four populations were all assumed to consist of individuals who were familiar with the standards, (due to having purchased them), 70 target subjects reported that they could not complete the questionnaire due to a lack of familiarity and experience with them. Another 137 individuals reported that the competency standards in assessment and training were neither relevant nor important in their context to make a response meaningful. Hence, the database provided by the distribution agency and used as a sampling frame provided an unusual insight into the impact and penetration of the competency standards for assessment and workplace training. The follow up interviews revealed that some 60% of those assumed to be users were in fact not only non-users, but were totally unfamiliar with the topic of competency standards. Data on the training providers was also error prone. There is no accurate national database on providers of training in assessment or in workplace training against the initial sets of national standards. This was therefore the first issue to be

addressed in the implementation of competency standards in assessment and training. Complete databases of training providers could have been obtained from state training authorities, but this would not have been the population of interest in this investigation. Those asked to comment on the standards had to have purchased the standards booklets to be assumed to be familiar with them. State training authorities did not, at that time, require the use or possession of the two sets of standards for registration and it appeared that these standards were by and large insufficiently addressed in training programs for assessors and workplace trainers. Using the population of purchasers and providers as a source of advice was fundamentally flawed if the advice was to focus on the revision of the existing standards. Obviously the population could be a valuable source of advice on a range of other matters pertinent to the training of assessors and workplace trainers.

Although it was not possible to trace all of the purchasers, contact information for the providers and all other populations not listed in the NAWTB database, were available. Return rates therefore were calculated against sub populations and follow up telephone calls sought to establish reasons for non-returns in the adjusted samples. The exhaustive follow up of the sample did, however, establish that the respondent group was representative of the group who had purchased and used the standards and thus was appropriate for the definition of status and benchmarks for the needs assessment. More than 90 % of valid purchasers were accounted for. Less than half of providers of training completed the questionnaire but telephone follow up revealed that the standards were not in use by many providers. In many instances, it was reported that the national training modules were being used as an alternative to the standards. The proportions reported below refer to the valid percent in the table above.

Use of the Standards

Small business operators represented 31% of the response group. (i.e. had less than 20 people employed) and 36% represented large organisations (i.e.. had more than 500 employees). The enterprise respondents were from all industry sectors. Fifty nine percent (59%) of the providers delivered training in the Standard and Extension Units of the Competency Standards for Assessment; 81% were accredited providers of Workplace Trainer Category 1. A group representing 70% were accredited deliverers of Workplace Trainer Category 2. Approximately 1/3 of the providers indicated that they were accredited to deliver training against the specialist units of the Competency Standards for Assessment. The remainder were delivering training programs based on their own curriculum or 'off-the-shelf' training materials/resources.

The following industries were represented among the State/Territory and/or national ITAB samples: - seafood, automotive, business services, community services and health, construction, manufacturing, telecommunications, transport & distribution, manufacturing engineering and related services, finance, food, mining, wholesale/retail, public safety, rural, tourism and utilities.

The industry bodies who were not using training and assessment competency standards included the National Cement and Manufacturing Concrete Products (VIC.), Electro Tech & Utilities Training Enterprise (NT), McDonald's Australia Ltd. (NSW), Australian Information Industry Association and Insurance Training Australia.

Knowledge and familiarity with the Standards among users.

All members of the specialist and expert groups interviewed held the common assumption that, in order to provide training and assessments against standards, the providers must be competent against those standards. This is a basic requirement of competency-based

training and assessment. In industry settings assessors must be competent in the technical competency as well as assessment competencies. If it is assumed that this requirement means that the assessor must be thoroughly familiar with the standards and able to design assessments against them, it is unlikely that providers unfamiliar with the standards and not delivering assessments against them could be considered as competent against the standards themselves. This requirement is a fundamental benchmark for assessing against industry competency standards for national recognition purposes (ANTA 1996, 1997). Conformity to this requirement is clearly not evident for a large proportion of providers who assess against both the Workplace Trainer and Assessment Competency Standards. No evidence could be found on whether other industry or training package areas had a similar level of lack of understanding of the industry specific standards, but then none had investigated their industry standards to this extent. Inasmuch as assessment and training could be described as an 'industry', this could be interpreted as a serious situation and raises cause for concern about the efficacy of competency based assessment as an improvement tool for industry. There is a very serious gap between the levels of familiarity and competency against the standards among assessors and trainers. No data was gathered from other industries about the use of the standards in developing other training packages and so no definitive statement can be made about the resources being used in the assessment guidelines of training packages in general. The inference to be drawn from this project is not confidence inspiring.

Many purchasers of the standards were not sufficiently familiar with the standards to complete the questionnaire or to provide meaningful data that could be used for the redevelopment of the endorsed component of the training package. Of more concern was the finding that course accreditation did not necessarily mean familiarity with the standards. Only 25% of the providers had sufficient experience to justify confidence that they were familiar with the standards. An 'informed group' of providers was therefore identified using the assessment activity self-reported in the survey. The lack of knowledge and understanding reported or diagnosed by 75% of the training providers in assessment and/or workplace training was perhaps due to the existence of a national learning resources for Assessors as well as Workplace Trainer Category 1 and 2 (ACTRAC, 1994; NSDC, 1995). Most reported using packaged training materials and making little or no reference to the competency standards. Alarming, it became evident that some of the providers, who were accredited to deliver training against the standards, had purchased and used off-the-shelf training materials, and therefore, rarely, if ever found the need to refer to the standards. It appears that many providers purchase and use these national learning resources to train assessors and workplace trainers without necessarily referring to or applying the competency standards, despite reporting their use in course design. Instead a set of training materials developed to meet the requirements of the initial standards (CSB - Assessors and Workplace Trainers, 1993, and NAWTB, 1994) were used, with the assumption that these met the requirements for training workplace assessors and trainers. For many reasons, they did not. A more detailed discussion of this is reported elsewhere.

Many of the providers were inexperienced in assessing against either set of the standards. For instance, approximately 60% of the providers had conducted less than 50 assessments against the Standard & Extension Units of the Competency Standards for Assessment. Even fewer had conducted assessments against the Specialist Units (approximately 2/3 had conducted less than 10 assessments against the Specialist Unit - Develop Assessment Tools, and approximately 80% had conducted less than 10 assessments against any of the system level specialist units). Similar lack of assessment activities and experience was found in relation to the Workplace Trainer Competency Standards, with 2/3 of the provider respondents conducting less than 50 assessments against Category 2 units, and 78% conducting less than 50 assessments against Category 2. Despite limited assessment activities against these standards, all of these providers had current accreditation with the

State/Territory Recognition/Training Authorities to deliver training and/or assessment against these standards. These results are consistent with the finding in earlier studies that indicated that most people who undertook assessor training did so for information only and had not practiced as assessors. More alarmingly, when the number of trained assessors is compared to the number of assessments being undertaken, it appears that many training programs in assessment and training are not subject to formal assessment against national or any other standards.

The VET sector was the most consistent sector conducting training and assessment against the standards followed by business, community services, health and retail. Some industries such as seafood, property services, forestry and the arts industries had very sparse exposure or training in either assessment or workplace training against the national standards.

The purpose of using the standards

Figure 2 displays the way in which the respondents applied the competency standards to meet their own or their organization's needs.

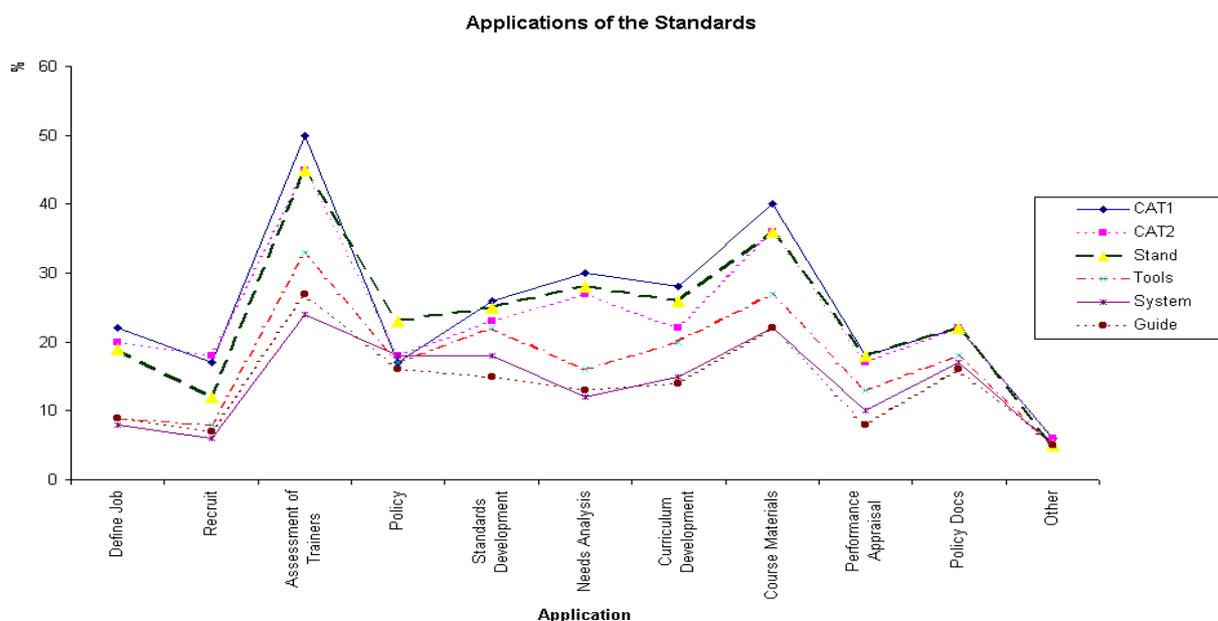


Figure 2 - Purpose of using the Assessment and Workplace Trainer Competency Standards

For both the Workplace Trainer Competency Standards and the Competency Standards for Assessment, the most commonly reported purpose for using the standards was for assessment of trainers and assessors. This was despite the large proportion of respondents who were unfamiliar with the detail of the standards and who relied on "off-the-shelf" materials. An important use of the standards emerged in their reference value, where it was common for the documents to be used as supplementary material for training (approximately 34-40%). This also emerged in telephone interviews and case studies. The standards were essentially reference materials for busy people who used them in concert with specialist consultants employed to do the training and assessment. This is not the population to provide data for the revision of the standards.

The Review of the Standards

Content

The training package guidelines (ANTA, 1997) sets the benchmarks and desired levels of content for all training packages. Hence both sets of competency standards were assessed against these stipulated levels in terms of the requirements for content quality. The standards are required to do the following.

- Cover a range and breadth of functions, meaningful in the workplace.
- Incorporate or identify overlapping industry and cross-industry standards & qualifications.
- Avoid bias or discrimination.
- Outcome-focused and suitable for flexible use by enterprises
- Full expression of competency (four components)
- Incorporate underlying knowledge and skills
- Incorporate or identify key competencies
- Incorporate language, literacy and numeracy

Analyses of users' and providers' data suggested that most were generally satisfied with content and presentation. However these results must be considered in the light of the above discussion, with the finding that many confused the standards with the 'off-the-shelf' training materials.

Figure 3 shows the levels of satisfaction for both sets of standards, where the higher the mean rating score, the greater the level of satisfaction (note that each item was rated on 1-4 scale).

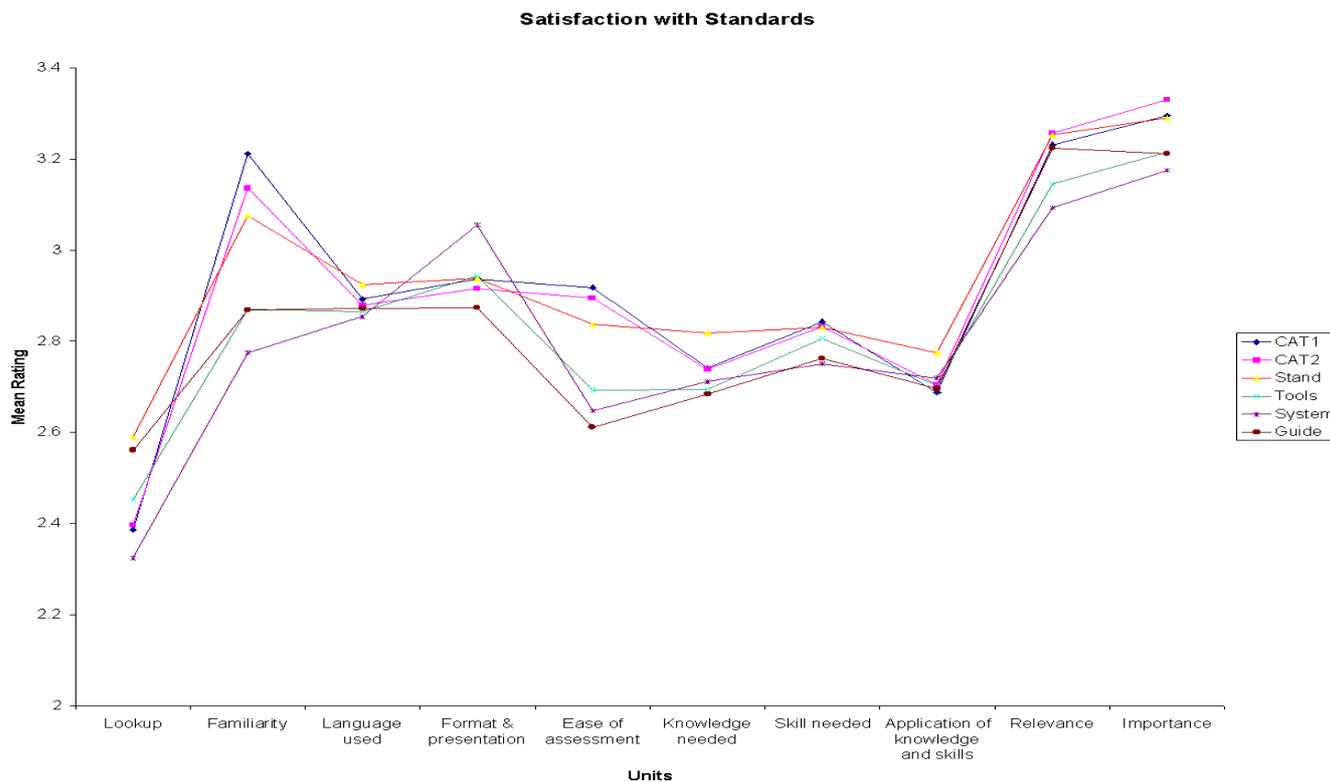


Figure 3 - Satisfaction over units - all respondents

All units, in addition to *'The Guide to the Competency Standards for Assessment'* (NAWTB, 1997) were rated as being relevant and meaningful to the workplace, for all groups of respondents (i.e.. ITABs, providers, purchasers and State/Territory Recognition Authorities). For each unit, the language was seen to be acceptable and appropriate. It is interesting to note that the specialist units of the Competency Standards for Assessment were identified as more difficult to assess than the Category 1 and Category 2 units of competency (including the Standard and Extension Units of the assessment competencies).

The distinction between Workplace Trainer Category 1 and Category 2 was thought to be meaningful in the workplace by 75% of telephone interviewees; the two categories of trainers were argued to have different target audiences and to meet the differing needs of industry. The differences in difficulty level between them were thought to be reasonable and satisfactory for 68%. The most common suggestion to reduce the gap was to increase the difficulty level of Workplace Trainer Category 1 by including an assessment component.

No statistically significant differences were found between ratings of providers and purchasers among the measures of relevance and meaningfulness for both the workplace trainer and assessment units. However, the providers indicated greater satisfaction than the purchasers across all assessment units in terms of the knowledge and skills needed and the application of those knowledge and skills. The Guide to Assessment was rated more favorably by the providers than the purchasers for its ability to describe the necessary skills

to assess. However the guide was also unfamiliar to most non-providers. Reference to the standards was infrequent, with some providers relying on ACTRAC and NSDC modules or other interpretations of the Standards as their source of data for this section of the questionnaire.

Given the concerns identified with the provider population, the respondents were subdivided into "informed" and "non informed" categories. A composite index was constructed from answers to questions dealing with familiarity, 'looking up' the standards and frequency of assessments against them. This allowed two levels of familiarity to be identified. When levels of satisfaction were examined according to familiarity across standards, a pattern emerged as shown in Figure 4.

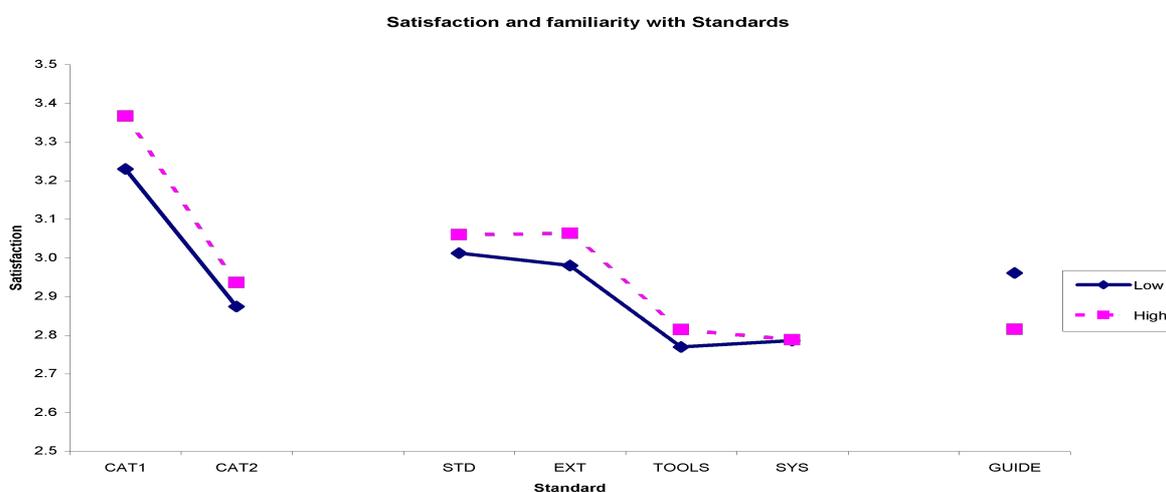


Figure 4- Satisfaction and familiarity with the Assessment and Workplace Trainers Competency Standards, - among training providers

It appears that low levels of familiarity are more aligned with lower satisfaction in the Workplace Trainer Competency Standards, but those more familiar with the Assessment Standards are less satisfied with the Guide to the Competency Standards for Assessment. This surprising result could be explained in terms of the tendency for the respondents to confuse the Guide booklet and the Evidence Guides of the Competency Standards. This was further supported during the telephone interviews. Most who reported lack of satisfaction with the standards were, in fact, unaware of their existence and had confused them with the evidence guides in either training materials or the early versions of competency standards for various industries. These were uniformly regarded as unsatisfactory.

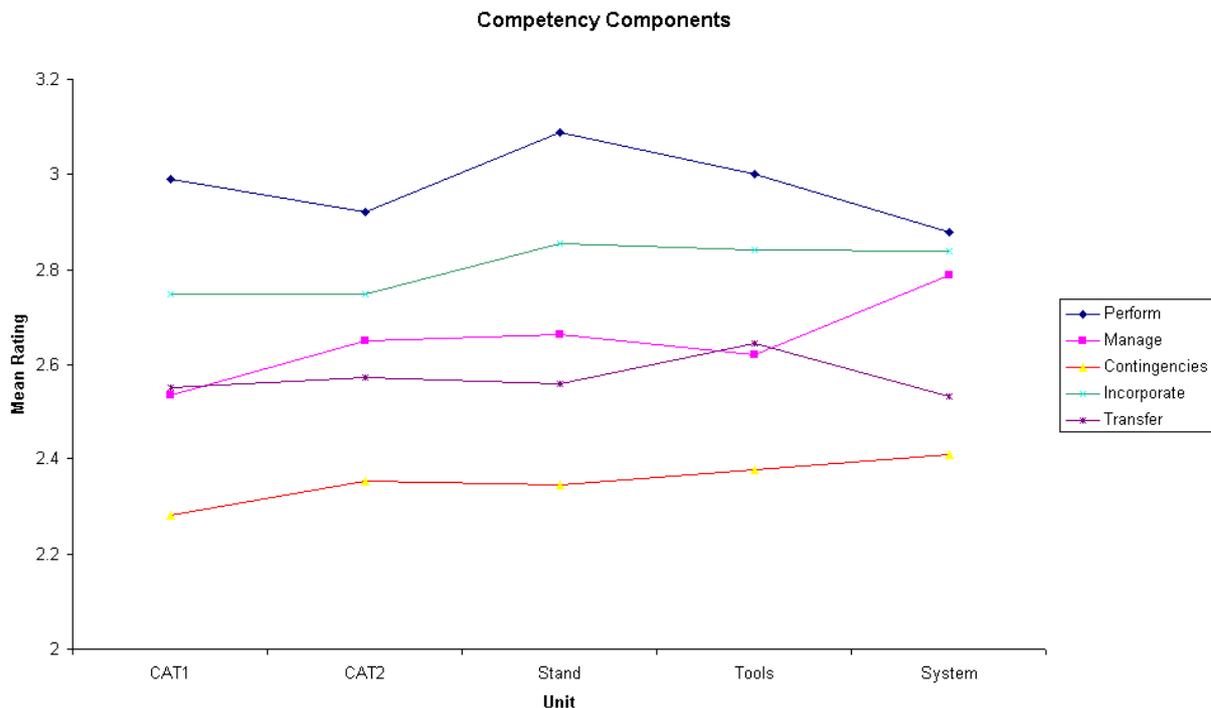


Figure 4 - Satisfaction with the components of competency for the Workplace Trainer and Assessment

Competency Standards

What was surprising was the overall evaluation of both the assessment and workplace trainer units against the full expression of competency (perform task, task management, contingency management, job/role environment skills and transferability). The findings are presented diagrammatically below in Figure 4. Despite the earlier finding that levels of awareness and implementation of the competency components in training programs were very low, the respondents showed overall satisfaction, particularly with performing tasks. However, handling problems (i.e. contingency management) was seen as the area of most concern for all units of competency. Statistically significant differences between mean satisfaction levels of purchasers and providers emerged in relation to all of the specialists units. This was most marked in the standards sufficient coverage and transfer by skills. Purchasers were significantly more satisfied than the providers. This result was also treated with caution given the general lack of understanding of the items. The providers rated the training unit (*Prepare for Training*) more favorably in terms of appropriate coverage of contingency management skills than the purchasers.

When telephone interviewers asked target subjects to identify ways of overcoming the problems associated with assessing against the full components of competency, the most common response was the need for holistic assessment, including assessment across a

range of settings (particularly workplace) and the use of multiple methods of assessment. However, 61% were unable to offer any suggestions at all, and the interviewers gained a strong impression, through persistent questioning, that there was a widespread lack of understanding of the components of competency and their implications for validity and reliability. This percentage is consistent with that obtained in other parts of the study.

Both the mail-out survey and the telephone interviews identified additional competencies required for future work practices. While there was support that Category 1 Workplace Trainers need to prepare, deliver and review one-to-one or small group on-the-job training, many were of the opinion that these workplace trainers need and were required to conduct workplace assessments. To overcome this problem, some training providers of Category 1 Workplace Trainer competency training were giving additional training in assessment to meet their client's workplace needs. It would be unreasonable to expect Category 1 Trainers to undertake training in both the Standard and the Extension Units of the Competency Standards for Assessment because it is not their primary role in the workplace. Hence a new modified Category 1 unit in conducting assessment appears to be justified. It is worth noting however, that when assessment competencies were added to the Category 1 Workplace Trainer Standards, three levels of assessor would emerge.

There was also support for the development of additional specialist units for conducting training needs analyses, designing, establishing, managing and evaluating systems. If the new specialist units were developed for training as well as assessment, this would also support the development of three levels of Workplace Trainer.

There were concerns with the Specialist Unit '*Developing Assessment Tools*'. Many argued that this unit did not cater for designing, developing, trialing and validating assessment tasks from existing unit(s) of competency where no existing assessment tools were available. The element '*Develop Simple Assessment Tools*' of the Extension Unit: *Plan and Review Assessments* was reported to be more complex than the Specialist Unit - *Develop Assessment Tools*. An analysis of the content of these elements supported this general opinion. Some adjustments to these units are warranted.

Technical quality of the Standards

The requirements for technical quality are defined by ANTA (1997) as incorporating the following characteristics.

- The national format requirements must be met;
- The range of variables statements must provide a full context for each unit assessment;
- The evidence guides must detail underpinning knowledge and skills and the key aspects for assessment; and
- The evidence guides must be linked to performance criteria and range of variables.

An examination of the current competencies revealed that considerable revision was needed to meet this requirement in spite of endorsement from users and providers. The areas that required attention included the need to add 'unit descriptors', expand the 'range of variable' statements and extensively develop 'evidence guides', particularly for the workplace trainer units. Each revised unit would also need to be reviewed to identify the unit's relationship with the Key Competencies. Given the users' endorsement of the current standards, the widespread implementation of training programs based on alternative curricula and competencies, and the worrying level of apathy with respect to the training and assessment competency standards, it appears that ANTA requirements have established expectations

above those of users. This can be interpreted as a policy thrust to raise levels of performance among competency assessors and trainers. Indeed there appears to be evidence to suggest that this is needed.

Qualifications

General impressions drawn from the interviews were that many users of the workplace trainer and assessment standards had difficulties comprehending the meaning of AQF levels, most were confused about how standards relate to qualifications, and many were not sure what the different certificate levels meant. Consequently, some caution was exercised in interpreting the recommendations of many providers and purchasers in terms of qualifications they recommended. It is feasible that some self-protection was operating here. Perhaps the situation arose from a general lack of training and/or formal qualifications in the area held by the respondents and a reticence to stipulate qualifications above those already held. Hence, a measure of self-interest may have influenced the response patterns.

The preservation of the status quo tended to prevail in regard to current AQF qualifications for the standards; 67% of providers, for example, suggested that the Specialist Units of the Competency Standards for Assessment, including the Standard and Extension Units, should be aligned to Certificate IV. Few however had more than basic competency assessor training and few had completed more than three days training in assessment. Expertise in specialist fields was almost non-existent.

Over 71% of the providers recommended that the Workplace Trainer Category 2 units should remain at Certificate IV. However, 58% of the telephone interviewees could not comment on this issue because of lack of knowledge and experience. One fifth (19%) of the informed group argued that that the qualification for Category 2 Workplace Trainers should be lower than certificate IV but 14% thought that specialist training units should be raised to a Diploma level.

Many telephone respondents could not comment on the qualification to be issued for successful demonstration of all the units within Category 1 Workplace Trainer. Of those who were able to comment (n=34), the following suggestions were provided: Category 1 units should lead to a Statement of Attainment rather than a qualification, included within a package for Certificate II and/or packages within a generalized Certificate IV. Less than half (48%) urged that successful demonstration of the Standard and Extension units should remain as a Statement of Attainment. The remaining 52% felt that it should be at least a certificate level, with the most common response being Certificate III (as it currently is in Queensland).

Assessment Guidelines

The Assessment Guidelines provide detailed advice for designing assessment materials and conducting assessments. They also specify the qualifications and training needed by those whose task it is to assess the assessor and/or workplace trainer. There was general concern among the respondents for the quality of training and assessment being delivered against the two sets of standards. Concerns were generally raised in terms of the methods used for assessment (or the lack of formal assessments) and the subsequent issuing of qualifications. To ensure the quality of training and assessment of assessors and workplace trainers, there was support for quality-assurance mechanisms being implemented. The most preferred mechanism was for record-keeping procedures and documentation of continual professional development. Auditing arrangements were also supported, provided that they were not onerous or expensive to implement. There was also support for persons

conducting assessments against the standards being at, or one level higher than, the units that they are assessing.

A shelf life for the trainer and assessor qualifications, subject to audited evidence of practice and continued professional development was considered as essential and there was general agreement that assessors must have continuous experience in assessment, although there was no agreement on the interpretation of "continuous". Alternative pathway options for assessors and workplace trainers were identified such as tertiary education in vocational education and training, subject to the standards and experience being addressed.

The most preferred methods of assessments against the two sets of standards were observation in 'real and simulated settings', project tests/assignments and work samples and oral presentations. Simple recording methods that addressed all components of competency were considered essential.

Conclusions and Recommendations

The results are clear and unambiguous. There seem to be few aspects of competencies, national frameworks, standards or assessment practices that have achieved significant market penetration in terms of understanding and application. At best, one in four of the providers are well informed about the nature, content and use of the Competency Standards for Assessment after more than half a decade. A higher level of awareness exists for the Workplace Trainer Competency Standards.

How can this result be broadly interpreted?

- Optimistically, we can say that around one-quarter of the target population:-
 - Understand the format of competency standards
 - Understand the purpose of the standards
 - Understand and can apply the national principles of assessment (NFROT assessment principles)
 - Can accurately interpret and apply the standards to meet differing needs/purposes
 - Understand the underlying dimensions of competency
 - Have extensive experience in assessing against the Competency Standards for Assessment and/or the Workplace Trainer Competency Standards

Despite these disturbing findings, a strong, unified, useful and responsive national vocational education and training framework underpins successful learning and industry competence. It also serves longer-term lifelong learning targets. On the one hand, the authors of this report fully support such a framework, and are united around optimism for its achievability. On the other hand, there are deep concerns about the low levels of penetration of uptake of the standards. Of most concern, was the lack of quality assurance and rigor in the training of workplace trainers and assessors, which in many ways, was demonstrated to be inadequate in a significant number of settings, where training providers lacked sufficient knowledge of the standards. The evidence presented in this paper raises concern that unless the commitment, interest and expertise of trainers and assessors can be improved, competency-based training as first envisaged by the National Training Board in 1992, which is now dependent on assessment, is in jeopardy.

An extensive dissemination and user-uptake program is essential to gauge whether these levels of awareness can be enhanced. Three broad issues arise.

- First, it may be desirable to develop a professional development strategy for ensuring maintenance of current knowledge, understanding and skills in assessment and/or training.
- Second, there is a need for an extensive dissemination strategy for the standards.
- Third, the number and range of providers of workplace training and assessment needs to be closely examined to assure the quality of the training and assessment offered by practitioners.

However, the most cost-effective view of the project outcomes is one that supports a constructive reappraisal of the existing vocational education and training principles and frameworks to attempt to knit industry, individual and national needs. The research team remains supportive and optimistic about the collaborative achievement of this approach.

The major purpose of this investigation was to accumulate data that could be used in developing the endorsed components of the Training Package for Workplace Training and Assessment. The recommendations that follow represent a selection that arose from the research into the implementation and understanding of the workplace trainer and assessment standards. (Refer to Gillis, Griffin, Falk & Catts, (1997) for the more detailed report).

The Competency Standards and Qualifications

It was recommended that the Workplace Trainer Competency Standards and the Assessment Competency Standards be merged into a single set of standards (TA standards), whilst still maintaining separate strands for assessment and training. A range of entry points should be allowed after determining the compulsory units for assessment-only candidates. However, any changes to the existing units of competency should be undertaken from a minimalist standpoint and in accordance with the technical quality criteria identified by ANTA (1997).

To allow for the capacity for the Trainer/Assessor to work in increasingly complex contexts, involving high-level specialist competencies in training and assessment, it was recommended that a third level (or category) of assessors and trainers covering specialist units in training be established. The naming and terminology of the levels was not resolved as part of the study. Interim titles were based on the existing terminology of categories. The Table below summarizes the details of the three-category system.

In summary, the suggested levels, responsibilities and qualifications are represented as follows.

Revised structure of the Assessment and Training Competency Standards

rw15 Training and assessment				
Category/Level	Units	Responsibilities	Distinction between levels	Qualification
Category 1	Existing units together with changes in title name to reflect	Training and assessment in accordance with	Applies to people who deliver training sessions on a	Statement of Attainment

	<p>training sessions. A slightly modified Standard Assessment Unit: Conduct Assessment in Accordance with an Established Assessment Procedure with the competencies equivalent to functions and roles of Category 1.</p> <p>Total 4 Units</p>	<p>established training and/or assessment procedures.</p>	<p>one-to-one or small group basis, including mentoring, coaching and tutoring.</p> <p>Assessments are conducted in accordance with an established assessment procedure. Category 1 Assessors who assess for the purposes of national qualifications and are auspiced by the RTO, should have their decisions verified by a Category 2 Assessor/Trainer.</p>	
<p>Category 2</p>	<p>The first two units of Category 2 Workplace Trainer Standards should remain the same except for minor editorial and changes in Unit Title. Prepare for Training is to be replaced by Plan Training Program, Deliver Training is to be replaced by Deliver Training Program. Review and Promote Training is to remain generally as is. The next three units in assessment should be Plan Assessment Procedures,</p>	<p>Plan, conduct and review assessment and training for individuals and/or groups. Modify assessment tools and training programs, depending on the context of the assessment and/or training.</p>	<p>Applies to people for whom assessment and/or training are a large part of their job within an assessment and/or training system. These people plan, conduct, modify and review training programs and assessment activities. Assessors, working within an RTO or auspiced by an RTO, who are</p>	<p>Certificate IV</p>

	<p>Conduct Assessment and Review Assessment. There should be minor changes to the elements and performance criteria.</p> <p>Total 6 units.</p>		<p>responsible for assessing for the purposes of national recognition, should at a minimum, be competent against the Category 2 assessment units.</p>	
<p>Category 3</p>	<p>Category 3 units will consist of the Specialist Unit Manage Assessment System plus 6 new units:-</p> <ul style="list-style-type: none"> • Design & Establish Assessment System • Design & Establish Training System • Manage Training Systems • Conduct a training needs analysis • Evaluate the Training and/or Assessment Systems • Develop Assessment Tools and Procedures <p>Total 7 units</p>	<p>Design and develop training and assessment plans and programs. Develop and validate assessment tools and procedures (new unit). Identify training and assessment needs of target audience (e.g. enterprise training needs). Evaluate training and assessment programs, manage training and assessment systems, including maintaining quality assurance.</p>	<p>This applies to people for whom expertise is required in competency based assessment and/or training system design, establishment, management and evaluation. Expertise is required in developing and implementing quality assurance procedures in all aspects of the system, including designing and validating assessment tools and procedures to be used within a training and assessment system.</p>	<p>Lead to a Diploma Qualification</p>

The Assessment Guidelines

The Assessment Guidelines for the Training Package for Assessment and Workplace Training should specify quality-assurance practices for assessing against the Standards,

including validity and reliability checks and evidence requirements. This should include advice on how to conduct assessments across different contexts, such as the workplace, off the job, small business environments, and rural and remote areas and for purposes of recognition of current competencies (RCC) and recognition of prior learning (RPL).

All persons conducting assessments against these standards must demonstrate competencies at the same level as, or higher than, the units they are assessing against. They must also have current competencies in training and/or assessment and substantial experience in assessment and/or training. It was recommended that the requirement for current competencies and experience in the field of training and assessment be met through one or more of the following.

- Evidence of relevant work history (paid or unpaid),
- Attendance at, and assessment evidence from professional development activities focusing on emerging/current best practice in training and/or assessment were competency assessment is a formal part of the course.
- Colleague/peer support and testimony of competency against the competencies and
- Recent relevant training and assessment activities.

A portfolio of such evidence derived from such activities could be put together for recognition of competencies and for maintenance of registration.

To ensure current competencies in assessment and/or training, it was also recommended that there be a shelf life on the qualifications issued against the standards. Moreover, to ensure the quality of assessments, it was recommended that there should be external auditing of assessments by workplace trainers and assessors and that industry-based personnel conduct such audits focussing on the validity of the assessments. This however begs the question of criteria of validity. Unfortunately, the term '*declarative validity*' has been coined for competency assessment practices because it appears to be the most predominate type of validity in assessments by and of competency assessors and trainers.

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