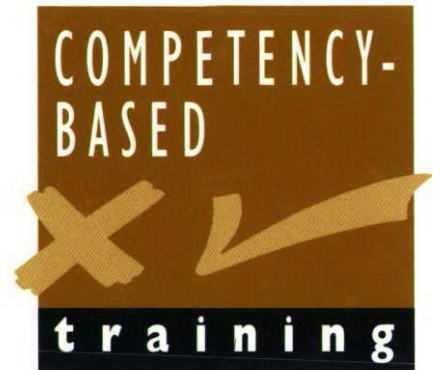


**NOT JUST FALLING OVER THE LINE?
A snapshot of
competency-based assessment**



Michelle Dickson
Barbara Bloch



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OVER THE LINE?

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MICHELLE DICKSON
BARBARA BLOCH

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Competency-based training

Other publications on competency-based training

Assessing in VET: Issues of reliability and validity, Review of Research series, S Gillis, A Bateman

The CBT decade: Teaching for flexibility and adaptability, S Billett, C McKavanagh, F Beven, L Angus, T Seddon, J Gough, S Hayes, I Robertson

Competency-based training, Review of Research series, J Misko

Competency-based training: A staff development perspective, T Lowrie, E Smith, D Hill

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Evaluation overview

The overall aim of this evaluation was to provide indicators for improvement in competency-based assessment (CBA) policy and practice. A model was used to evaluate its effectiveness for a range of users.

What is competency-based assessment?

Under Australia's National Training Framework (NTF), competency-based assessment is defined as demonstrating:

whether a person has the skills, knowledge and experience required to perform specific tasks in the workplace, or to gain credit towards a vocational education and training qualification or course. Assessment is based on industry determined competency standards.¹

This evaluation was framed on the premise that the implementation of the NTF (including CBA) continues to evolve. Our interpretation of CBA acknowledges this evolution. The research therefore includes some respondents within vocational education and training (VET) who were not yet assessing against industry standards, because they had not yet been developed and/or endorsed.

Thus, the view of the researchers was that, in order to answer the research question 'CBA—is it meeting needs?', it was necessary to adopt a broader definition of CBA practices based upon a wider interpretation than nationally-endorsed industry competency standards. Under this definition, assessment may be based on industry standards, competency-based curriculum outcomes or enterprise standards.

Surveys were sent to over 300 users of CBA. Case studies were conducted from three industry sectors. They covered 45 site visits, interviewing approximately 310 people from across all States and Territories. This

¹ ANTA (July 1998) *About competency-based assessment*, The Australian Training Information Network (TRAIN)

data provided an evaluation, with judgements about the value, of CBA. Although our respondents were generally satisfied with CBA, they nonetheless considered that certain aspects required improvement.

Strategies to improve competency-based assessment

The following is addressed to the main players, and suggests strategies to:

- strengthen the quality of CBA's impact on VET
- increase its uptake with a broader range of users

Policy makers

Competency standards

Competency standards are the foundation of CBA. In some industry sectors, competency standards were considered to reflect good minimum standards but did not reflect the best standard. Respondents in other sectors did not think that competency standards accurately reflected the complete range of skills required at work. Additionally, some standards did not adequately include essential underpinning knowledge, making the CBA process less relevant to the needs of those industries.

Some respondents found means of adding value to existing competency standards in their CBA policy and practice. This value often took the form of enterprise standards or customised assessment resources.

A review of competency standards for their value and relevance to industry was suggested as a strategy that would improve CBA practice.

The language of assessment

A number of respondents expressed concern with the language of CBA. Difficult terminology, constant changes and an increased use of jargon impressed upon them the need for an overhaul of assessment language.

The language of assessment is an important starting point to participation, and it is at this point that people are seeking a more refined, user-friendly strategy.

Marketing of CBA

Most respondents in this evaluation confirmed that there was a wealth of information about assessment in circulation. In fact, for most, the amount of material available was overwhelming. Yet, despite such a

plethora of resources, information and suggestions, many still felt the need for more targeted marketing. For many, CBA could be improved if information was more clearly focused on the needs of particular industry users and learners.

It is therefore suggested that there be a creative, national marketing/communication strategy aimed at promoting the benefits of VET (and thus CBA) to users and potential users—for example employers, employees, schools and the wider community.

Industry Training Advisory Boards (ITABs)/Industry and Registered Training Organisations (RTOs)

Establishing training and assessment partnerships

Respondents identified establishment of training and assessment partnerships between industry and RTOs as being very important. Those who had already developed successful partnerships suggested that their CBA practice had improved because both parties were aware of industry realities impacting on assessment. As a result, CBA tended to be more appropriately tuned to meet industry needs.

From the RTO perspective, the evaluation revealed that those who were able to use existing resources in a more flexible way were capturing more of the VET market. This was particularly evident among private RTOs and segments of TAFE, who had successfully adapted existing systems and resources to meet the needs of their market.

Reflecting on current CBA practice

Information-sharing opportunities were seen as an effective way for industry to reflect on their current CBA approaches. Many participants suggested that a large part of their current CBA system was working well, but suggested that components of their CBA practice would be improved through an increased opportunity to network ideas, practices and policy with each other. This is already happening informally in some areas; however, respondents have suggested that more extensive formalised approaches would increase the usefulness of networking as a means of refining CBA.

CBA and Occupational Health and Safety (OH&S)

Respondents from the Construction and Community Services and Health industries linked improvements in OH&S to their use of effective CBA. For these respondents this was a major benefit of participating in

VET. Such an industry/workplace benefit should be more widely communicated as a possible outcome of effective use of CBA.

Key issues

Throughout this evaluation, four issues related to CBA emerged consistently:

- grading
- skills versus knowledge
- quality
- resources

Grading

Grading of CBA was an issue that emerged primarily from the ITABs survey and the Teacher/Trainer/Assessor survey. The major challenge facing respondents was the need for strategies to bridge the gap between competence and excellence.

In this evaluation many employers said that grading provided them with a way to define strengths and weaknesses of their employees/learners. They said they needed more than an award of 'competent' or 'not yet competent' when making staff selections and placements.

Learners saw CBA as not recognising additional effort. Although CBA removed the fear of failure for lower achievers, learners felt that it often ignored the efforts of higher achievers. Many learners, ITABs and teachers, trainers and assessors considered graded assessment as a way to motivate employees/learners.

A number of respondents suggested that percentage marks did not have to be used in grading CBA. Rather, they were interested in exploring other ways to measure and report levels of performance.

Skills versus knowledge

The key concern of respondents was ensuring that assessment was inclusive of underpinning knowledge, skills, attitudes and ethics.

A number of participants feared that they were losing the teaching and learning of knowledge through competency-based training (CBT) and CBA. This group suggested that competency standards should adequately reflect the need for assessment of underpinning knowledge, skills, attitudes and ethics. Competency standards of all three industries covered in this evaluation were identified as having gaps in their consideration of underpinning knowledge and assessing ethics and attitudes.

Practitioners suggested that effective CBA incorporated assessment of attitudes, ethics and underpinning knowledge. Although many indicated that this was happening in an informal way, it was suggested that the CBA process and documentation needed to specifically seek assessment of underpinning knowledge, ethics and attitudes.

Quality

The term 'quality' was used to discuss processes and outcomes of CBA that were perceived to be beneficial either for an individual, an organisation or an industry as a whole. These included:

- ensuring CBA systems meet user needs
- using the right assessors
- getting the paperwork right
- quality of competency standards

Participants in this evaluation considered that significant improvement could be made to their current practice of CBA. Most were able to identify specific areas for improvement, knowing what was already working well and what needed changing. This ability to evaluate their own CBA practices and processes marked a significant shift for users of CBA. Many suggested that, previously, they would not have been able to make such evaluations, indicating that time and experience with CBA provided them with the ability to distinguish between effective and ineffective practices.

For this user group improvements in 'paperwork,' including competency standards, and in the quality of assessor training, would result in beneficial change.

Resources

Resources were defined broadly as including people, assessment materials, time and money. Respondents stressed the need to review current use of resources in order to make them more efficient and effective.

Evaluating existing resources was seen by participants as a worthwhile exercise. Teachers, trainers and assessors indicated that they were aware of the large number of resources available to them, but felt that very few were appropriate and usable.

Similarly, employers and ITABs suggested that a consideration of how people are used in CBA systems would be a valuable task. Interestingly, most respondents did not request huge amounts of

additional funding or a large development of resources. Instead, they felt that a revamp of what was currently available, and a careful consideration of how people and paper resources were being used, would add value to existing CBA practice.

Developments in CBA

An overall impression derived from the evaluation was that respondents have acquired a higher level of understanding and more sophisticated uses of CBA, which has enabled them to articulate their concerns and suggest strategies for improvements.

While previous research on workplace assessment carried out by the Centre for Vocational Assessment Research (CVAR) identified a reasonably high level of satisfaction, those respondents were less able to identify either the issues or areas for improvement than were the present respondents.

It could thus be said that, in general, today's users of CBA are more aware of their needs in this respect, and how to go about meeting them.

***Section 1:
Background
to the evaluation***

The research question

Competency-based assessment—Is it meeting needs?

The research question

Although the research question was originally to ascertain what ways CBA contributed to VET in Australia, this proved too broad and required a more specific focus to ensure the findings remained useful and meaningful for users of CBA.

Therefore, the actual aim of this evaluation, conducted by the CVAR, was to examine the needs of users of CBA in order to discover whether or not these needs were being met through their involvement with it.

The 1990s have presented the Australian VET sector with rapid political, economic and industrial change. Previously, the language and practice of the market place, politics, education, training and industry had been far more clearly delineated. Heightened economic competition, and ever-changing political and industrial climates, have created a need for such divisions to be lifted—with the aim of creating a more diverse, flexible but complex VET sector.

At the centre of this transformation of VET in Australia has been the effective and structured use of CBA in the workplace and in training organisations. CBA has been one of the key anticipated outcomes of a quality national VET system.²

² Billet, S, McKavanagh, C, Beven, F, Angus, L, Seddon, T, Gough, J, Hayes, S & Robertson, I 1999, *The CBT decade: Teaching for flexibility and adaptability*, NCVER, Adelaide.
Mulcahy, D & James, P 1998, *Evaluating the contribution of CBT*, NCVER, Adelaide.
Dickson, M 1997, *Assessment works: A study of workplaces with experience in assessment*, CVAR, Sydney.
Docking, R 1997, *Assessor training programs*, NCVER, Adelaide.
Gillis, S 1997, 'Factors influencing decision making in performance based assessments', ARC.
Hager, P 1997, *Learning in the workplace*, NCVER, Adelaide.

Such emphasis on CBA is supported by a public and private 'assessment industry' that advises, informs and researches the development of assessment policy and practices in VET. McDonald (1996)³ estimated an investment of 'one billion dollars' in assessment activity in Australia each year.

Despite such a large projected financial outlay on assessment activities in Australia, recent studies (noted earlier) indicate that there has been relatively little systematic research conducted to evaluate the impact of CBA practices on quality VET outcomes, hence the need for the present evaluation.

³ McDonald, R 1996, *A billion dollar investment*, ACVE, Sydney.

Complexities of the evaluation

This evaluation is one of three, commissioned by the National Research and Evaluation Committee, to examine the impact of competency-based training, CBA and teachers' practice on the VET sector:

- Billet, McKavanagh, Beven and Hayes, and Angus, Seddon, Gough and Robertson 1999, *CBT decade: Teaching for flexibility and adaptability*, Centre for Learning and Work Research, Griffith University, Brisbane, and Studies of Work, Education and Training Academic Team, Monash University, Melbourne.
- Dickson and Bloch 1999, *Not just falling over the line? A snapshot of competency-based assessment*, Centre for Vocational Assessment Research, Sydney.
- Mulcahy and James 1999, *Evaluating the contribution of competency-based training*, Department of Vocational Education and Training, Melbourne University, Melbourne.

Isolating assessment from training and vice versa for the purposes of evaluation is a difficult exercise.

Assessment cannot properly be considered separately from training. Although, for the sake of the research, we have been concentrating [in our discussion] on assessment, it must be regarded as integral to training: good training implies continuous, integrated CBA.

—A union representative

Mulcahy and James (1998, p.5) reported commitment to CBT as being commonly associated with securing the following for enterprises who use it:

- improved productivity
- improved quality
- recognised skills
- standardised skills
- reduced safety and production costs
- enhanced personal development and organisational development

Compare this list with the kinds of benefits reported in this evaluation of CBA (regardless of industries selected):

- more accurate skill assessment
- meets industry needs
- better method of assessment for workers
- provides status/qualifications
- CBA values prior learning

These similarities endorse the complexity of attempting to isolate CBT from CBA, and vice versa. As well as the efficacy of evaluating CBT and CBA outcomes separately, there is an additional complexity in attributing factors *directly* to their impact, rather than their being one of a number of influences bearing on enterprises and VET organisations. This point has been noted most recently by the authors of the consolidation research project by Billet et al. (1998, p.85).

They state that 'many respondents had difficulty in separating the influence of CBT from other associated factors'. Such factors could include those bearing on VET training organisations (particularly TAFE systems), such as more competition between them and increased provision in the workplace, as well as the changing role of the TAFE/VET teacher/trainer.

Of course, making judgements about the impact of CBT/CBA on industry and individual enterprises is also prone to the 'associated factors' syndrome. These are well known and well documented.

Through this research, many factors have emerged as significant in influencing VET provision. These include:

- national accreditation of community service organisations (child care centres and nursing homes)
- occupational health and safety
- the quality certification movement
- the changing industrial relations landscape

These are probably as significant for those workplaces as the desire to recognise and increase the skills of the Australian workforce through training and assessment.

These findings, while not a revelation in research terms, indicate the importance for industry-focused VET evaluative research to be consciously making links with other areas—such as human resources and industrial relations—in order to interpret outcomes more effectively.

The users of CBA

Who are the users?

The scope of this evaluation included the following users of CBA:

- VET RTOs (private and public)
- employers
- trainers
- teachers
- assessors
- ITABs (national and State)
- employer groups and associations
- unions
- learners/workers

What about the non-users?

An exploration of the non-user groups could provide even more scope for refining CBA to meet different sets of needs.

While this evaluation investigated those already using CBA, in an effort to continue improving current practice an equally interesting investigation could concern what CBA may offer the current 'non-users' of VET—for example, enterprises doing in-house, non-accredited training but not participating in the National Training Agenda through, in particular, the Australian Qualification Framework (AQF).

For many of the people interviewed for this evaluation, CBA was very useful. For others, it was too early to tell. Many were still coming to terms with competency-based approaches, or were still in early implementation stages and felt they were too busy to stop and reflect.

Others insisted it was time to reflect.

Evaluation of non-user needs could provide an opportunity to explore expectations before applying CBA: we could explore 'how deep' before diving in.

Section 2:
Key findings

The evaluation model

'The most important purpose of evaluation is not to prove but to improve.'⁴

Information gathered through this model should help identify areas for improvement of CBA processes and practice

The evaluation model

At the centre of this National Research and Evaluation Committee (NREC) funded evaluation is a model. This model was adopted because it views evaluation as a tool which can 'help make programs work better for the people they are intended to serve' (Stufflebeam and Shinkfield 1985, p.165).

The users of CBA were asked to reflect upon their participation by being asked questions based on the model, which then provided a framework for evaluating and analysing their responses and outcomes. In short, the model provided the scope for looking at input and output.

Context	To what extent is CBA meeting the needs, preferences, and expectations of the various stakeholders?
Input	What resources are people using for CBA?
Reaction	What are the reactions of different users to the purpose and method of CBA, compared with other assessment approaches?
Outcomes	The outcomes and benefits of CBA: Is it worth it in terms of the costs involved?

The evaluation model provided a framework within which the questions for the surveys and interview schedules were located. The questions explored the following areas:

Context—The environment of CBA

- Who is involved in CBA?
- Where is CBA operating?

⁴ Stufflebeam, DL, Shinkfield, AJ, 1985, *Systematic evaluation*, Kluwer-Nijhoff Publishing, Boston.

- How long has CBA been operating?
- Why is CBA being used?
- Has CBA brought about changes to the work that users do?
- Effectiveness of a range of CBA practices and procedures

Input

- What new skills/knowledge do users need for CBA?
- Resources used for CBA:
 - financial costs
 - time costs
 - people costs
- Structures and systems supporting CBA

Reactions

- What issues have users faced in relation to CBA?
- Good features of CBA
- Improvements for CBA

Outcomes (immediate, intermediate, ultimate)

- Advantages of CBA for individuals/organisations/industry
- Disadvantages of CBA for individuals/organisations/industry

Analysing the data

There was a wealth of primary data collected from:

- initial interviews with key informants
- focus groups
- written survey responses
- face-to-face and telephone interviews

Surveys were designed, coded, entered, and data was analysed, using the survey design and analysis package, *Pinpoint*.

The initial interviews and focus groups informed the questions that were asked and gave the researcher a key to what the most significant issues were likely to be. All interviews were transcribed and written up according to the categories in the evaluation model, which provided the basis for analysing this data.

Coding of the surveys (the open-ended questions) and the structured interviews was done laboriously (and with many revisions) to seek out commonalities, differences, what was working well, or not, among CBA users and industry sectors. The coding was also related to the research questions, utilising the categories described in the evaluation model and the issues or themes that were identified (and subsequently modified) at the beginning of the evaluation.

An iterative process of successive interviews with a range of users within each 'industry case study' refined the researchers' understanding of the data received. Thus, over the two months of interviews (and using three researchers who had regular discussions and reflections on the interview sites), subsequent interviews tested and built upon earlier ones. The researchers, by a process of inductive qualitative inquiry, used this bank of knowledge and observation to link the data and build on the evaluation model.

How was the information gathered?

A mixture of quantitative and qualitative data collection methods (surveys, focus groups and structured interviews), using a theory-building model, were employed in conducting the evaluation. This triangulated approach has the ability to provide rich description and detailed insight into CBA.

Step 1—What are the current issues surrounding CBA?

How did we find this out?

- A search of recent literature of CBA was conducted to confirm areas for further research exploration.
- A national reference group comprising representatives from industry, RTO, VET policy makers and unions met to provide parameters and advice for the evaluation.
- Two focus groups were held to clarify CBA issues for investigation within the evaluation. One group contained members from Sydney, NSW; the second group contained members from rural NSW and Victoria.
- Consultations were held with ITABs to locate the study within the issues industry faced in relation to CBA.

What was decided at Step 1?

- 1 Fieldwork would be conducted in NSW, ACT, SA and Vic. Additional consultations would be conducted in WA, Qld, Tas. and NT.
- 2 The evaluation would focus on three industry sections.
- 3 It was decided that each industry section would comprise a case study, using a number of methods to triangulate the data. To ensure the study was of national significance, the following criteria were used to guide the selection of industry sectors and sites:
 - public and private sectors
 - gender balance
 - industry and institutional RTOs
 - rural and metropolitan representation
 - consideration of AQF levels 1–5
 - unionised and non-unionised workplaces
 - small, medium and large enterprises using CBA

- high tech areas and low tech areas
- users both new and experienced in CBA

On the basis of these criteria, three industry areas were selected:

- Primary industry (Agriculture, Horticulture)
- Community Services and Health (Aged care, Child care)
- Construction (Commercial construction, Residential construction)

Step 2—Exploring issues around CBA

Participants were selected by a process of snowball sampling⁵ from the three industry sectors covered in the evaluation.

Written surveys

One survey gathered information and reactions from public and private RTOs, teachers, trainers and assessors from the three selected industry sectors. A second survey gathered information and reactions from ITABs (national and State), unions, employer groups and associations, and other industry representatives.

The major purpose of the surveys was to obtain information about the context in which CBA is operating, and users' reactions to CBA as an assessment approach.

Fieldwork

Fieldwork (in person and by telephone) was conducted across all States and Territories. In-depth work was done in Vic., ACT, SA and NSW. Structured interviews were held with a range of users of CBA from all three industry sectors. The user groups included:

- trainees/employees
- managers/enterprise
- trainers
- teachers
- assessors
- unions
- employer groups/associations
- private RTOs
- public RTOs
- employers

⁵ Snowball sampling involves using a group of informants with whom the researcher has made initial contact, and asking them to put the researcher in touch with people in their networks. It then involves asking those people to be informants, and so on as long as they fit the criteria for the research project.

General survey data

A survey of 258 teachers, trainers and assessors was conducted. This survey has a 43% response rate. Throughout this report this survey will be called the Teacher/Trainer/Assessor survey.

Another survey was sent to 68 ITABs, unions, employer associations/groups. This second survey had a response rate of 89%. All but one response to this survey was from ITABs. This survey will be called the ITAB survey.

The two surveys provided data that has been incorporated into the individual issues that follow.

The following data has provided the evaluation with some useful, more general findings.

How long has CBA been used by our respondents?

The ITAB survey

- 67% of respondents had been using CBA in their area of work for over three years.
- 25% of respondents had been using CBA for 1–3 years.
- 8% of respondents had used CBA for less than one year.

The Teacher/Trainer/Assessor survey

- 45% of respondents had used CBA for more than three years.
- 38% of respondents had used CBA for 1–3 years.
- 17% had been working with CBA for less than one year.

Has CBA changed the work you do?

The ITAB survey

- 52% of respondents stated CBA had brought about changes to their work.

The Teacher/Trainer/Assessor survey

- 83% of respondents said CBA has brought changes to the work they do. Changes included:
 - changes to the assessment methods
 - changes to teaching or training methods
 - increases in administrative workload

Is CBA better or worse than other forms of assessment?

The ITAB survey

- 80% of respondents stated that CBA was better than the form of assessment it replaced.

This was not asked of the Teachers/Trainers/ Assessor survey. Piloting the survey revealed that Teachers/ Trainers/ Assessors found this too big an issue to give a simple survey response. This issue was explored through fieldwork interviews.

What issues have you faced related to CBA?

The ITAB survey

The particular issues that industries had to deal with in relation to CBA were:

- 75%—conducting assessment on the job
- 50%—paperwork associated with CBA
- 47%—the need to provide levels of competency (i.e. grading)
- 43%—linking CBA to pay

The Teacher/Trainer/Assessor survey

Respondents consistently stated that the following practices, once established, worked well for them:

- ensuring validity of assessment
- ensuring transparency of assessment
- developing new / relevant resources
- assessing on/ off the job
- methods used to gather evidence
- ensuring reliability of assessment
- record keeping

Advantages of CBA

The ITAB survey

The following table represents the perceived benefits of CBA for industry:

What are the benefits for your industry?

More accurate skill assessment	28%
Meets industry needs	23%
Better method for workers	18%
Provides status/qualifications	16%
Values prior learning	12%

Disadvantages of CBA

The Teacher/Trainer/Assessor survey

Respondents identified the benefits of CBA as:

- providing better feedback for students
- subjecting learners to a less stressful assessment process
- being more flexible in meeting learner and industry needs
- relating more closely to the workplace
- being clear in assessment requirements

Four per cent of respondents felt it had no advantages.

The ITAB survey

The following table identifies the perceived disadvantages of CBA for industry:

What are the disadvantages of CBA?

Poor communication about CBA	30%
Costs too much	20%
Time consuming	17%
Inconsistent assessor standards	12%
More resources needed	7%

This question was not asked in the Teacher/Trainer/Assessor survey because the pilot respondents felt that the disadvantages of CBA would vary too greatly between individuals. The pilot respondents felt that asking this question in a survey format would only result in a very broad range of unrelated responses, and thus be statistically insignificant. A pilot of this question in a survey format revealed this to be true. This issue was further explored through the case study visits.

How could you improve current CBA practice?

The ITAB survey

Of the respondents, 73% suggested that CBA practice may be improved by:

- better assessor training
- more money
- greater industry involvement

The Teacher/Trainer/Assessor survey

The following table represents suggestions made for improving current CBA practice:

How could CBA be improved?

Develop more resources	31%
Needs to use grading	29%
Clearer guidelines needed	27%
Poor communication about CBA	22%
CBA should combine new system with old	19%

Grading

Grading of CBA was an issue that emerged primarily from the ITAB and the Teacher/Trainer/Assessor survey. The major challenge facing respondents was finding strategies to bridge the gap between competence and excellence.

Benefits

Different users... different opinions

The perceived benefits of grading CBA varied according to the user groups. The majority of those who valued the grading of CBA did so as a means of recognising excellence.

ITABs

There is, by human nature, a desire to see how good a competent person is, compared to the group.

–ITAB survey

Comments from the ITAB survey endorsed grading as a positive means of making judgements. Almost half (46%) of the ITAB survey respondents stated that the grading of competencies was a major issue. They indicated that there was a strong need in industry to provide some way of showing 'levels of competency.' While definitions of CBT are grounded on the premise that one is either 'competent' or not, practitioners in this research indicated that they wanted to know 'how good' a person is at a particular skill.

Employers—Grading defines strengths and weaknesses

For many employers an award of 'competent' or 'not competent' provided no statement of strengths and weaknesses. The survey of ITABs also indicated that many employers still wanted to select employees based on 'traditional percentage grades,' which were still considered a better indication of ability.

Does this reflect a need for greater understanding of CBA, or does this data reflect the continued need to incorporate ways of measuring excellence into the current competent/not yet competent industry framework?

For example, the call for graded assessments was made in an enterprise visit in the construction industry, where an employer said that people in the construction industry were looking for the best achievers, not people who could 'just' achieve.

Students/learners—Graded assessment recognises higher achievers

Lack of student motivation has been reported in situations where all learners received the same 'result'. Although CBA removed the fear of failure for lower achievers it has no way of recognising higher levels. Many students saw this as narrowed competitiveness. Industry also saw that it supported the struggling learners, but often at the cost of ignoring the high achievers.

Graded assessment motivates employees/learners

For some employees/learners grading can make achievement more satisfying. The Teacher/Trainer/Assessor survey respondents indicated that grades could often act as incentive or motivation to learners. This is a reality faced by many RTOs who are asked by their learners: 'Is this as high as we have to achieve?'

CBA has given us a new category of achievers: high achievers who are only just achieving.

Concerns

Grading of competency—A contradiction?

This is adult learning. It's not the mark that is important, it is the work you are doing.

—Management, RTO, Community Services and Health

One ITAB survey respondent suggested that grading of competencies would undermine the agreed workplace/industry standards. It was argued that the industry standards were the accepted minimum standards of performance required in the workplace, and that putting a grade against a competency would not support the value of the agreed level.

Why should we use grading when we're all supposed to agree on a minimum performance anyway?

—State ITAB survey

Another ITAB respondent felt that grading CBA meant more for RTOs than for industry:

How do you put a curriculum-based 50% pass mentality in a CBA 100%?

—National ITAB survey

Improvements

RTOs—Using grading to meet specific needs

Almost half (48%) of respondents to the survey of Teachers/Trainers/Assessors stated that their current practice of CBA would be improved by using some form of grading. Of these respondents, 32% wanted their current CBA practice to adopt elements from previous assessment approaches—namely, grading of skills.

Many RTOs were adopting their own policy on graded assessments in an attempt to meet their needs and the needs of the industries they serve. One such policy document suggested that:

Assessment design and practice enable judgements to be made about different levels of achievement, where a need for this has been identified. Grading is used where it is considered educationally appropriate and where it meets students and industry needs.⁶

Employers—Finding the true value of a performance

Employers reported not being given the information they required to select trainees/employees under a competency-based system of assessment. Many had no clear picture of 'not yet competent/competent.' Some industry sectors suggested that perhaps there was a need to expand the competent/not yet competent awards to show the true value of a performance.

Many employers looked to their RTO for guidance on the issue of 'who is best'—but the responses to the ITAB survey made a clear division between the approach taken by many RTOs and the needs established by employers and industry. Such an approach to grading might not have to rely on 'marks,' but on other forms of giving recognition for achievement that would be understood and accepted in industry.

Recognition of high achievement

Assessment instruments and methods aren't assessing people's productivity; everyone just falls over the line. We're just not distinguishing between people's performances.

—Assessor, Commercial construction (large enterprise)

⁶ 'Principles underpinning assessment in TAFE NSW under the NTF.'

For a number of users, grading of CBA provided the means for recognising high achievement. For these users a Pass/Fail result did not meet their needs. Employers in particular still looked to marks as a means of differentiating the quality of a learner. This was an important issue for enterprises, particularly when selection processes were connected with workplace quality systems.

Adding value to competency standards

A large number of participants in this evaluation considered that national competency standards provided good minimum standards, but did not reflect the 'best standard.' A common view was that competency standards offered a good starting point from which one could only get better. Many advocated developing clearer, more relevant assessment instruments that worked with the standards to provide room for recognising a learner's 'additional' qualities.

Developing strategies to bridge the gap between 'competence' and 'excellence'

For learners, being told you are 'competent' was often not enough. A 'high achiever' said:

I quickly came to realise that I was stupid for putting in extra time to get it all perfect, or up to a certain standard. Nobody was giving me any extra reward or recognition for trying to stand out from the crowd. I soon stopped putting in the extra work and effort and became satisfied with being 'competent.'

—Learner, Horticulture

Regardless of its nature, grading was considered to hold a number of purposes for users in this evaluation. It:

- assisted employers to select employees
- motivated learners to achieve higher skills/levels
- improved quality standards
- reflected levels of achievement
- rewarded excellence

Bridging the gap between recognising competence and 'excellence' might be achieved by considering grading not in terms of marks or percentages but in terms of other criteria. Consultation with industry about how they differentiate between employees could facilitate this process.

Skills versus knowledge

The key concern of respondents was ensuring that assessment was inclusive of skills, underpinning knowledge, and attitudes and ethics.

Benefits

Some respondents considered that CBA of skills was inextricably linked to assessment of knowledge, that when you assess one you also assess the other.

These users explained that learning and assessment incorporated skills and knowledge. Assessment of skills did not have to mean dismissal of knowledge in the process.

For example, an employer in the Agriculture industry said:

Just because it's happening on the job doesn't mean we're losing the knowledge. Our industry rarely sees the difference between theory and practical. For years teaching has been done in sheds, on acreage, on machinery. We're now just using a system.

These words were echoed by an RTO in Primary industry:

Just because we're more focused on standards doesn't mean we should lose the learning of knowledge. In so many parts of our industry we need that knowledge in order to get the job done.

Other industries had a similar philosophy, seeing the assessment of skills as a process inclusive of accompanying underpinning knowledge:

We've always looked at what people can do right next to why they do it. That's looking at skills and knowledge. Of course we need to assess knowledge—how do you do the job if you don't know why you're doing it?

—Supervisor, Commercial construction

Concerns

Are we losing the teaching and learning of knowledge through competency-based training and assessment?

While some users were confident that CBA adequately assessed skill and knowledge, others were not so convinced. Comments from the ITAB survey indicated that assessors from some industry areas were concerned over the apparent lack of ability of CBA to assess knowledge, attitudes and ethics. Over one-quarter (26%) of respondents to the survey of Teachers/Trainers/Assessors indicated that they would like CBA to capture more adequately assessment of knowledge, attitudes and ethics. The fear of losing underpinning knowledge within the competencies was real for many users, and was raised many times throughout this evaluation:

Although I really value the opportunity CBA gives for a focus on the hands on, the practical side, I don't want it all to be totally practical. I really don't want to lose the theory side. I think some of the competency standards [at lower AQF levels] don't allow for the knowledge, the theory, to play a big part at all. I think this is a shame. The reality is that as soon as people hit the workplace, they'll need to have certain knowledge to support their skills.

–RTO Trainer, Horticulture

Assessing attitudes and ethics

CBA was introduced as part of the national training reforms about five years ago—it had not really been a choice by the industry. In the early days resistance to the introduction of CBA was common because of the difficulty in assessing values and attitudes (which are vital in this industry), as competencies.

–Centre Manager, Child care

A number of respondents from the Community Services and Health industry indicated that the uptake of CBA had been slower than anticipated due to the problems associated with assessing attitudes, values and ethics throughout the industry. Respondents felt that the industry competency standards do not adequately address the area of assessing attitudes and ethics. RTOs, employers, assessors and learners all expressed varying degrees of discomfort. At the same time, respondents recognised that a large part of assessing the skills people used at work had to include the holistic assessment of attitudes and ethics.

Once-off assessment is definitely not okay. You can't pretend to be wonderful 100% of the time if you don't believe in what you are doing. If you don't have a value system that underpins all the work you do, you will come unstuck.

–Education co-ordinator, Aged care

Improvements

Some users of CBA in the Construction industry considered CBA to be the most effective method of assessing their learners and workers. However, they also indicated that assessors needed to make sure they were assessing the knowledge which underpinned skills. Assessing underpinning knowledge to a skill could mean getting the job done well, and safely, or getting the job done and not meeting licensing or safety requirements. Assessors and trainers in this industry also felt that paying attention to skills and the underlying knowledge helped to avoid the 'tick the box' mentality often linked to CBA.

One RTO stated that changes to current CBA practice to ensure assessment of skill and underpinning knowledge are important for the ongoing quality of training, assessment and work practice:

There are no advantages to the alternative of CBA, as these alternatives are no longer acceptable. There are some challenges associated with effectively assessing knowledge, but doing so takes the industry beyond reinforcement of the status quo in terms of level of knowledge and skill, and moves them towards improved work practice.

–RTO Trainer, Community Services and Health

Implications for users

Make the process and documentation inclusive of skills and knowledge

CBA is more valid than other forms of assessment if it is done properly. This means paying attention to the skills but looking for the underlying knowledge and attitudes that help you complete the skills.

– RTO Trainer, Community Services and Health

Effective competency standards cover skills and knowledge

A common positive reaction to CBA was that it was outcomes-based. A number of users in different industries stated that if the competency standards were appropriate and the assessment was well done, there would be real confidence that the individual was competent. This was particularly true when it would be impossible to be assessed as 'competent' without having the necessary underlying knowledge and correct attitudes to perform the skill. However, the competency standards must cover skills and knowledge for this to be true.

On the other hand, other participants in this evaluation saw competency standards as reinforcing inappropriate methods of assessing. These users strongly noted that assessment based on poor competency standards (that is, standards which do not stipulate underpinning knowledge adequately) presented the danger of CBA being seen as a quick and easy way to assess, using a checklist 'sausage machine' approach.

Quality

The term 'quality' is used here to discuss processes and outcomes of CBA that were perceived to be beneficial either for an individual, an organisation or an industry as a whole. These included:

- ensuring CBA systems meet user needs
- using the right assessors
- getting the paperwork right
- ensuring the quality of competency standards

Benefits

Respondents to the surveys and the interviews identified CBA as a factor contributing to:

- improving work processes/service/product
- expanding the skills of learners/employees
- maintaining quality work procedures
- maintaining industry and workplace standards
- national accreditation of Community Services organisations
- improved OH&S

CBA and changes in OH&S standards

There is an attitudinal change to safety, which has been the main driving force for the introduction of training and assessment. Although formal assessment has only been recently introduced, OH&S has been a focus for some time, and the lost time/injury rate has declined from 70 to five [accidents] in the last five years. This has a real impact on productivity.

–Management, Group Training Company,
Domestic construction

I think for us, CBA is driving the process of organisational change and ... accreditation of the organisation.

–Education co-ordinator, Aged care

Registered Training Organisations

All RTOs participating in this evaluation stated that the National Training Framework has encouraged them to increase their commitment to establishing and maintaining training and assessment relationships with employers and learners. For some RTOs this meant approaching CBA in a new, flexible manner.

We're small and flexible. That's how we are surviving. But maybe it's not about size. Perhaps it's the way we've structured ourselves?

–RTO, Primary industry

While some RTOs have already been providing on- and off-the-job training and assessment, others are completely reworking their philosophy and structure to remain competitive:

It's really quite a paradigm shift. Some of us are moving from a textbook 'bums on seats' approach to CBA in the workplace. The bottom line is that by staying flexible, we're maintaining our competitive edge.

–Private RTO, Primary industry

CBA is a better approach to assessment

I like CBA because it's very clear what you're looking for, this is what we see as being the appropriate minimum standards, this is our benchmark. It's harder to add personal bias into the assessment; harder to let it take control when you have very explicit behaviours you're looking for. That's why I like the competencies for appraisal systems as well.

–Education co-ordinator, Aged care

CBA allows learners to judge their own level of performance as a critical part of the assessment. This is empowering and involves learners more intensively in their own development.

I end up with a fabulous portfolio of evidence of my skills. This is not just developed for my assessments; it becomes an important part of my daily work. I use it to show parents during interviews; I refer to it all the time and keep it constantly updated with new material. I am even working on my own web page.

–Learner, Child care

Multiskilling

Some enterprises identified CBA as a way to improve their use of multiskilling:

CBA has helped pave the way for multiskilling in this industry. Multiskilling is the best thing out. It gets things done faster and with more workplace relevance. To survive we need to have multiskilling, and CBA is helping us to make sure our workforce have their skills noted.

–Learner / Assessor, Commercial construction
(medium sized enterprise)

CBA peddles competencies not trades. It becomes an ongoing part of everyday work because people are noted for their flexibility—that's human nature. We're all here to do loads of things through our lives, CBA just recognises this reality.

–Private RTO Trainer

Concerns

While industry comments indicated a general approval of the quality of CBA as being more industry based and industry related, they still expressed ongoing concerns about quality.

For many, current CBA systems were considered to be impractical, time consuming and often unworkable. Often accompanying this were inadequate competency standards and the need for a quality assurance process.

Most participants expressed a need to audit current CBA processes and practice, in an effort to ensure quality and continued improvement of CBA for the future:

We're all so busy racing around trying to get CBA done we don't take time out to think about how we do things, why we do things, and are they right?

–State ITAB survey

As other research has indicated, the smaller the enterprise, the less likely it is to participate in VET. Similarly, in this evaluation, fewer medium and small sized enterprises were reported to use CBA:

In this industry, though, the very large numbers of small operators have not yet adopted the quality process aligned to assessing and counting skills as part of their domain.

–Manager, Commercial construction (large enterprise)

Improvements

Getting the paperwork right

Many users felt that the overall quality of CBA was suffering because people were focusing on the paperwork and record keeping, rather than on monitoring training and assessment and auditing the processes they are using.

It was thought that current examples of paperwork being used in CBA systems reflected assessment of individual elements, rather than more integrated assessment of clusters of competencies.

Assessment tools, paperwork and assessment models are needed to make the CBA process more simple, more holistic and more flexible:

The way CBA is set up means we all have to work with far too much paperwork and pedantic interpretations. The language linked to CBA even means that we're increasing the literacy demands of some people in industry, quite unfairly. All of these things mean that it is very easy to place CBA in the 'too hard' basket.

–Employer Association, Commercial construction

Using the right assessors

A common concern for quality assurance is quality of assessors. The 'best' assessors were those with assessor qualifications and specific industry experience and/or training. Lack of funding to support ongoing training of industry-specific assessors is creating problems for industry, who are losing faith when assessors cannot demonstrate industry-specific skills and knowledge:

The key is training of workplace assessors—this is a challenge.

–ITAB survey

Using internal or external assessors in industry largely depends upon the nature of the workplace. Some enterprises advocated the use of independent assessors, to make sure the 'mates factor doesn't slip in.' Others attempt to ensure that internal assessors were used consistently:

We ensure quality by using assessors who know the work and work with the people being assessed

–RTO, Community Services and Health

Quality of competency standards

Even standards need standardising!

–Trainer, Community Services and Health

While some industries considered their standards to be 'ahead of the rest,' others felt their standards fell short of acknowledging appropriate levels of skills and knowledge. As the standards are at the centre of CBA, they need to accurately reflect the requirements of industry in order to effectively operate in a CBA system. Adequate industry consultation was thought to overcome this issue:

The industry itself has not had a say in the validity of outcomes of CBA, and faith is being lost because the standards are way off base.

–Industry Association,
Community Services and Health

Implications for users

One respondent stressed the need for RTOs to be more flexible in order to meet industry needs:

The most important thing to keep in mind is that our role is to keep communicating with industry to meet their needs in terms of training and assessment in a competency-based system. We're not corporate and our approach to CBA shouldn't appear to be corporate. It needs to stay flexible, approachable and usable. We need to keep going out of our way to relate to our people and meet their needs. Using a competency-based approach to training and assessment allows us to do this.

–RTO Manager, Community Services and Health

Additionally, a number of industries were experiencing constant change to their standards. RTOs and enterprises expressed a need for an increase in continuity, and looked forward to standards being finalised:

Things just keep moving and changing. Change in standards, competencies and assessment guidelines. All of this means we're ending up with a variation in skills, approaches to CBA and quality of assessment. It really has to stop.

–Trainer, Community Services and Health

Being flexible is really important, but being consistent should go hand in hand.

–Industry Association, Commercial construction

Keep ensuring that the system meets the needs of the users

Some RTOs are utilising their systems to make training and assessment more cost effective for their learners and for themselves, especially with respect to recognition:

For trade qualification assessment, it is much cheaper for an individual to 'enroll' in a Cert. 3 course, and not attend due to Recognition of Current Competence (RCC) rather than receive an up-front assessment.

–ITAB survey

Better funded options for RCC/RPL are required. Through New Apprenticeships and User Choice, for example, it is more cost effective to train than to recognise.

–ITAB survey

Resources

Resources were defined broadly as including people, assessment materials, time and money. Respondents stressed the need to review current use of resources in order to make them more efficient and effective.

Benefits

Employers, ITABs, industry associations and other users of CBA involved in this evaluation indicated that CBA was worthwhile, despite the initial difficulties in getting a system established.

The majority believed that much of the success of their use of CBA depended upon the quality of the resources they use. Of the respondents to the Teacher/Trainer/Assessor survey, 80% stated that the new CBA resources they were using were working well for them.

Effective resources were defined by users as:

- being easy to use
- meeting specific industry/workplace requirements
- having continuity
- encouraging access and equity

CBA was seen as providing more opportunities for fairness in the assessment process. One example was given of an RTO providing a Greek-speaking trainer/assessor to train and assess in Greek the skills of a group of Greek-speaking construction workers.

Concerns

Time

Over three-quarters (78%) of respondents to the ITAB survey stated that the time spent on CBA was considered reasonable or acceptable, considering the benefits gained from participation. At the same time, very few workplaces could afford to take people out of their 'real jobs' to assess them; it had to be integrated into normal work practices as much as possible and thus be minimally intrusive.

The jury is still out on the time debate—it depends on what industry does with Training Packages. I believe competency-based training and assessment requires a lot of time ... but [CBA] should be able to be incorporated into normal workplace procedures.

—ITAB survey

RTOs indicated that CBA took longer than other forms of assessment because they had to develop resources, set up any off-the-job assessment requirements, prepare the learner, conduct the assessment, and provide feedback after the process. The increase in CBA in the workplace has also placed new planning, resource development, time allocation and management demands on RTOs.

This was increasingly difficult when many industries, and their RTOs were developing resources, implementing a CBA system and evaluating their participation concurrently.

Money

Funding CBA was a concern for most users. New approaches to assessing, development of resources and training assessors were not often supported by increased funding.

Costs are a major issue. Assessments often have to be done in the workplace, which means travel costs to remote areas for the assessors, the cost of labour forgone while the employee is being assessed, the time taken for the preparation of the assessment and the trainees wages for the day of assessment. Some employers see this as an investment, but many still see it as a cost.

–Private RTO, Primary industry

Of unions, employer associations and ITABs participating in this evaluation, 60% indicated that various cost issues were either holding back their industry from full participation, or making it extremely difficult to participate at any level.

Of respondents to the ITAB survey, 30% stated that the costs associated with CBA were too high and 64% said CBA was more expensive than other forms of assessment, while simultaneously acknowledging that the higher costs were acceptable considering the benefits involved. The initial expense of setting up a competency-based approach to assessment was overwhelming, particularly to small and medium sized businesses.

Small to medium sized businesses are really keen to become involved in competency-based training and assessment but the cost of getting set up means that they are often cut out of the market. Really, what this means is that the larger companies and registered training organisations will have a stranglehold. That's a bit frustrating.

–ITAB officer

Improvements

Continued development of effective CBA resources

CBA is a really effective way to assess, but the strength of it all is looking at what people actually do in the workplace; to get it all right we need to have more resources. In the long run we'd save money if we spent some funding up front on getting the resourcing right

–Assessor/Manager, Commercial construction

- 51% of respondents to the Teacher/Trainer/ Assessor survey suggested that CBA could be improved through development of resources.
- 11% of ITAB survey respondents indicated that resource development would improve CBA. Participants in this evaluation suggested that effective development of resources included:
 - RTOs providing sufficient human resources to meet individual industry/workplace assessment requirements
 - appropriate assessment resources to support learners' needs
 - establishing increased networking opportunities

I have encountered a large amount of literacy problems and have modified the way I do things. For example, I use heaps of drawings and diagrams and use loads of questioning to make sure everyone is meeting the pace. So many people don't write down a thing, ever, so I use visual shows to get my message across. In some cases I only give oral assessments, it all helps.

–RTO Trainer, Horticulture

In some areas within the Community Services and Health industry, the 'people networks' operated in a flexible manner. One RTO conducted initial training and preparation for assessment in community training rooms, followed by a series of ongoing visits into the workplace to conduct the assessment. This process was regarded as a mentoring opportunity rather than as 'pure assessment.' It was seen as providing an opportunity to share information, resources and ideas, while completing the assessments required.

Implications for users

Partnerships must continue

Establishing effective training/assessment relationships requires flexibility and willingness:

We've really got to use CBA to develop a partnership approach, where institutions and farmers co-operatively assess for the industry—because farmers have the technical skills, colleges have the assessment skills.

–Employer Association, Primary industry

The most important thing to keep in mind is that our role is to keep communicating with industry, to meet their needs in terms of training and assessment in a competency-based system. We're not corporate and our approach to CBA shouldn't appear to be corporate. It needs to stay flexible, approachable and usable. We need to keep going out of our way to relate to our people and meet their needs. Using our competency-based approach to training and assessment allows us to do this.

–Private RTO, Community Services and Health

I am worried about total on the job. There is just not enough time to get all of the theory, for example: they need the theory knowledge. This is where you have got to set up really well with the training RTO.

–Supervisor, Domestic construction (small enterprise)

For RTOs, establishing training/assessment relationships often meant meeting very specific needs.

We've identified what units of competency are best suited to on-site training and assessment and we're verifying the whole process to make sure employers don't just see it as a way to get cheap traineeship labour on site. We're assessing for skills and underpinning knowledge. This is the first time this is happening in this sector.

–RTO Trainer, Horticulture

[We] are the sole RTO for the ... traineeship, TAFE delivers some of the off-the-job for us. We must address a mixture of on/off-job competencies. It may be TAFE or another RTO who delivers off the job, but they have nothing to do with the on-job. We monitor all of the on-job competencies through stages 1–3. We could deliver off job, but don't. We contract it out, license it, through our network of trainers and assessors at the workplace; we co-ordinate on job activities.

–Employer Association, Civil construction

Some private RTOs are seen by industry as 'surging ahead' in training and assessment because their structure and practice allow them to meet the changing needs of industry.

TAFE has trouble stopping and doing a right-angle turn [whereas group training companies and private RTOs] can cover niche markets more easily.

–Trainer/ Assessor, Group Training Company,
Domestic construction

We really need to have more flexible use of public RTOs to work with us in industry. RTOs do have their own established systems to work with, but they are too often different to what is practical for industry.

–ITAB survey

Some participants in this evaluation thought CBA needs marketing at policy and planning levels.

We need a high profile marketing campaign assisted by increased funding in support of CBT and CBA. People are starting to forget that CBA can offer opportunities to people who might not have had them before. CBA is a great way to keep access and equity issues under the National Training Framework.

–National ITAB survey

At present there is a lot of lip service paid to CBA. It really needs to get beyond talk and get things done. This requires education to industry about what CBA really is and how it can work. But it can't stop there. RTOs must learn about industry needs and pay attention to them. We can't keep expecting RTOs and industry to do it all without updates and current advice.

–State ITAB survey

**Section 3:
The research
participants**

Research participants

Primary Industry

Rural Skills Centre, TAFE NSW Wagga Wagga NSW

Murrumbidgee College of Agriculture Yanco NSW

DeBortoli Wines Griffith NSW

The Wine & Food Technology Centre,
Riverina Institute of TAFE Griffith NSW

Heytesbury Beef WA

Australian Agricultural Company Qld

Rural Industry Training Charters Towers Nth Qld
& Extension

United Dairy Farmers of Victoria Vic.

Active Industry Training West Wallsend NSW

Primary Industry ITAB National/State/Territory

Construction

Manteena Pty Ltd Canberra ACT

Barclay Mowlem Pty Ltd Kingston ACT

Industry Services Training Pty Ltd Winnellie NT

CITEA Dickson ACT

Construction ITABs National/State/Territory

CFMEU South Carlton Vic.

Boulderstone Hornibrook Southbank Vic.

Henry Walker Group Adelaide SA

Westfield Design & Construction Cheltenham Vic.

Civil Contractors Federation Girraween NSW

Hunter Plant Operator Training Cessnock NSW

Hunter Group Training Broadmeadow NSW

Community Services and Health	
Gowrie Training Centre	Thebarton SA
Children's Services—DETE	Adelaide SA
Masonic Homes SA	Somerton Park SA
Centre of Personal Education (COPE)	Adelaide SA
Beverley Depot, Parks & Gardens City of Charles Sturt	Beverley SA
Magill Training Centre	Magill SA
Community Services & Health ITABs	National/State/Territory
Kangan Batman Institute of TAFE	Vic.
Community Child Care	Northcote Vic.
Villa Maria Society	Vic.
Perpetua in the Pines	Vic.
Australian Nursing Federation (Federal Office)	Vic.
TRACHS	ACT
Health and Community Services	Tuggeranong ACT
Tuggeranong Community Service —Family Day Care	Tuggeranong ACT
Helena Lloyd	Tuggeranong ACT
St Andrews Village	ACT
Montefiore Home	Hunters Hill NSW
Illawarra Retirement Trust	Woonona NSW
Frog Hollow Pre-School & Long Day Care Centre	Kiama NSW
Balls Paddock Children's Centre	Woonona NSW
Wattle Grove Children's Centre	Wattle Grove NSW
Early Childhood Training & Resource Centre (ECTARC)	Wollongong NSW

Reference group

The members of the Reference Group provided ongoing support, advice and assistance. Their input was most appreciated.

Jeanette Allen National Wholesale, Retail &
Executive Officer Personal Services Industry

Training Advisory Board NSW (WRAPS NSW)

Sue Boyd Metropolitan Business College
Principal NSW

Jane Carnegie VET ASSESS
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Jeremy Gilling Manufacturing Learning Australia
Executive Officer NSW

Rex Hewett Australian Education Union (AEU)
Federal TAFE Secretary Vic.

Rilda Mossop Analytical Solutions
Consultant NSW

Bob Shaw Bob Shaw & Associates
Consultant Vic.

Peter Thomson National Centre for Vocational
Deputy Director Education Research (NCVER)
SA

Focus groups

The two Focus Groups provided valuable information about current issues facing users of CBA. These issues further validated the questions for the surveys and other field work.

Focus Group 1— Sydney NSW

A special thanks to the following Focus Group members for their time, enthusiasm and thoughts.

John Smith	Australian Industry Group
Colin Anderson	BTR Automotive
Peter Fluder	BTR Automotive
Cathy Barry	TAFE NSW
Anne Peterson	Access, Education Services Division, TAFE NSW
Cassandra Parkinson	CREATE ITAB
Bob Paton	MERS ITAB
Melissa Wortman	Utilities ITAB
Adrian Denyer	Transport ITAB
Alison Eccles	Hospitality, Travel & Tourism— Metropolitan Business College
Glenda Hogarth	Office Administration— Metropolitan Business College
Grant Fletcher	Manufacturing and Engineering ESD, TAFE NSW

**Focus Group 2—
Rural NSW/Vic.**

Mark Byatt	National Industrial Skills Training Centre Wodonga
Anthony Ross	Vic.
Ian Elston	ALTC Training Development Group, Bandiana Vic.
Kathie Hinton	ALTC Training Development Group, Bandiana Vic.
Ray Hoppo	Foundation Studies, Albury TAFE NSW
Bill Hubbuck	Tourism and Hospitality, Albury TAFE NSW
Phil Browne	MF&W, Albury TAFE NSW
Joy Stocker	Wodonga Vic.
Vicki Rose	Riverina Institute NSW
Steve Meads	Traineeships, Wodonga Vic.
Marion Curtis	Apprentices Trainees Employment LTD, Wodonga
Murray Watson	Vic.
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	Albury City Council Albury NSW
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The National Centre for Vocational Education Research is Australia's primary research and development organisation in the field of vocational education and training.

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NCVER provides a range of information aimed at improving the quality of training at all levels.