

## DOCUMENT RESUME

ED 456 266

CE 082 246

AUTHOR Clayton, Berwyn; Booth, Robin; Roy, Sue  
 TITLE Maximising Confidence in Assessment Decision-Making: A Springboard to Quality in Assessment.  
 PUB DATE 2001-03-00  
 NOTE 11p.; In: Research to Reality: Putting VET Research To Work. Proceedings of the Australian Vocational Education and Training Research Association (AVETRA) Conference (4th, Adelaide, Australia, March 28-30, 2001); see CE 082 232.  
 AVAILABLE FROM For full text:  
<http://www.avetra.org.au/PAPERS%202001/CLAYTON%20BOOTH%20ROY.pdf>.  
 PUB TYPE Reports - Evaluative (142) -- Speeches/Meeting Papers (150)  
 EDRS PRICE MF01/PC01 Plus Postage.  
 DESCRIPTORS Adult Education; Competency Based Education; Developed Nations; \*Educational Assessment; Educational Certificates; Foreign Countries; \*Interrater Reliability; Minimum Competency Testing; Postsecondary Education; \*Quality Control; School Business Relationship; Secondary Education; Student Certification; \*Student Evaluation; Test Reliability; \*Test Validity; \*Vocational Education  
 IDENTIFIERS \*Australia; Australian Recognition Framework; National Training Packages (Australia)

## ABSTRACT

The introduction of training packages has focused attention on the quality of assessment in the Australian vocational education and training (VET) sector on the quality of assessment. For the process of mutual recognition under the Australian Recognition Framework (ARF) to work effectively, there needs to be confidence in assessment decisions made by Registered Training Organizations (RTOs). The issues of quality and consistency in assessment have become central to the development of the VET system. Quality assurance of all aspects of assessment is crucial for the protection of assessors and all other stakeholders in the process. Criteria for quality assurance are use of qualified assessors; established validation; feedback; appeals and verification processes; industry-endorsed assessment guidelines; and provision of industry audit of the assessment process. ARF requirements that all RTOs must meet to obtain and maintain registration are to be changed substantially in 2001, reflecting the national concern with consistency and quality. A comprehensive approach identifies strategies to assure quality for all key aspects of assessment, but particularly recognizes the vital role of assessors and the need for their participation in validation activities and continued professional development. (Contains 15 references.) (YLB)

# Maximising confidence in assessment decision-making: a springboard to quality in assessment

**Berwyn Clayton**

CURVE, Canberra Institute of Technology, Canberra

**Robin Booth and Sue Roy**

VEAC, TAFE New South Wales

PERMISSION TO REPRODUCE AND  
DISSEMINATE THIS MATERIAL HAS  
BEEN GRANTED BY

*K. Whittingham*

TO THE EDUCATIONAL RESOURCES  
INFORMATION CENTER (ERIC)

U.S. DEPARTMENT OF EDUCATION  
Office of Educational Research and Improvement  
EDUCATIONAL RESOURCES INFORMATION  
CENTER (ERIC)

This document has been reproduced as  
received from the person or organization  
originating it.  
 Minor changes have been made to  
improve reproduction quality.

• Points of view or opinions stated in this  
document do not necessarily represent  
official OERI position or policy.

1

The introduction of Training Packages has focused attention in the vocational education and training (VET) sector on the quality of assessment. For the process of mutual recognition under the Australian Recognition Framework (ARF) to work effectively, there needs to be confidence in assessment decisions made by Registered Training Organisations (RTOs). The issues of quality and consistency in assessment have become central to the development of the VET system in Australia. However there are a range of views and strategies regarding how this consistency, confidence and quality can be achieved.

## The issue of consistency in vocational education and training

In 1999, the Australian National Training Authority (ANTA) CEOs identified ten areas of inconsistency in the implementation of the national VET system by states and territories. These included differences with the 'declaration of vocations' and industrial relations arrangements for 'New Apprentices', differences in the monitoring and auditing of RTOs, different pricing models for user choice and differences with the legal underpinnings of both mutual recognition of RTOs and internal quality assurance arrangements for RTOs. ANTA is aiming to strengthen national legislation to reduce this inconsistency.

Kaye Schofield's reviews of the traineeship systems in Queensland, Tasmania and Victoria (where apprenticeships were also included in the study) identified a raft of issues leading to poor quality provision at the system and provider level and recommended strategies for the registration of providers, the strengthening of the audit function, quality assurance of teaching and learning and specific improvements to the individual states' traineeship systems. In each case, Schofield identified assessment as one of the areas requiring attention in assuring quality.

## Consistency in competency-based assessment

The introduction of Training Packages and increased attention to assessment have focused this concern with consistency. Prior to the introduction of competency-based training, education providers relied much more on centralised regulated systems of examinations to ensure consistency of assessment events. Assessment decisions were often made by centralised panels of 'markers'.

Assessment against competency standards within Training Packages involves collecting evidence and making judgements on whether or not the competency has

been achieved. Various factors including the experience and skills of assessors and the clarity of competency standards themselves can influence the quality of judgements made. The potential variability in factors affecting assessment and the need to maintain flexibility and focus on the learners means there will always be potential for variation in assessment decisions.

In 1999, DETIR Queensland investigated the success of current assessment practices in supporting the new training environment (Smith 1999). The study considered the major issues, practices and changes impacting on the quality of the assessment of training and recommended ways in which assessment practices and approaches may be improved.

Smith found that there is 'significant scope to improve the quality of assessment in terms of validity, consistency, usefulness and cost-effectiveness and that there are a significant number of trainers/assessors whose practices are not supportive of a quality assessment system'. He found an excessive amount of assessment being conducted with the concept that quantity equals quality, too much emphasis on summative assessment, and a lack of quality educational support for trainers/assessors.

Interestingly, Schofield's report of the Tasmanian system (1999) referred to Smith's study. She suggested that concerns about inconsistency may be less the result of inconsistent practice and more the result of a competency-based training system that allows only for a yes/no assessment rather than graded assessment. Many trainees may be assessed as competent yet they will each display varying degrees of capability leading to perceptions of inconsistency in assessment. She concluded that the 'issue of inconsistency in assessment may therefore be illusory', but recognised that other concerns about the extent to which valid, reliable and ethical assessment practices are being universally applied are substantial and require attention.

In early 2000 the National Training Framework Committee (NTFC) commissioned an evaluation project titled Consistency in Competency-based Assessment. The aims of this evaluation were to explore the concept of consistency in relation to a competency-based training system; identify and analyse factors that may impact positively or negatively on the consistency of assessment processes and outcomes, particularly in regard to Training Packages; and identify strategies for maximising consistency. The recommendations of this evaluation were concerned with the need to strengthen competency standards and include more specific advice in assessment guidelines as part of Training Packages. They also encompassed the strengthening of the audits of RTOs, assessor training and ongoing professional development and the introduction of an assessment review process for RTOs. This review process involves validation of assessment decisions by assessors to review the RTOs' assessment materials, processes and outcomes. Following this research ANTA is aiming to strengthen the aspects of assessment practice on which RTOs will be audited.

The term consistency in assessment is being used here to cover the assessment principles of validity, reliability and fairness. For assessment processes to produce consistent outcomes, they must assess what they are supposed to assess and produce similar outcomes when used by the same assessor or different assessors with candidates of equal competence at different times and/or places. Assessors must

have a shared understanding of the standard and the basis on which assessment decisions are made and what constitutes sufficient evidence.

### **The role of quality assurance in assessment**

Quality assurance is defined for the Training Package for Assessment and Workplace Training BSZ98 (ANTA 1998) as:

A planned and systematic process of ensuring that the requirements of the assessment systems, competency standards and any other criteria are applied in a consistent manner. Quality assurance mechanisms or procedures are an integral part of an assessment system.

Toop et al (1994) established a framework for an assessment system that included elements of a comprehensive quality assurance strategy. These included screening and training of assessors; verification of assessment decisions; appeals mechanisms and processes; and review of the assessment system.

Bloch et al (1995), in supporting Wolf's contention that much assessment is made on the basis of assessor experience in their technical domain, suggested that there is a need to set up a system of checks and balances to justify assessment decisions. Quality assurance of all aspects of assessment is crucial for the protection of assessors and all other stakeholders in the process.

Alexander (1997), quoted in Docking (1997, p 11), lists four criteria for quality assurance: the use of qualified assessors; established validation; feedback; appeals and verification processes; industry-endorsed assessment guidelines; and provision of industry audit of the assessment process.

### **The international experience**

In Australia, the focus of assuring quality in assessment has concentrated on the 'front end' of the process in developing and clarifying competency standards and qualifications and in the registration and audit of providers. In Australia, self-regulation has been the clear focus of VET policy overall. In other comparable VET systems such as those in the United Kingdom and New Zealand, there is a more centrally directed regulatory system with prescribed forms of moderation to ensure quality outcomes.

The Qualifications and Curriculum Authority (QCA) in the United Kingdom contends that 'the credibility of any assessment system depends on fair, accurate assessment and effective quality assurance' (QCA 1997, p v). Effective quality assurance is also seen as the critical element in building the confidence of all stakeholders involved in National Vocational Qualifications (NVQs).

This emphasis on quality assurance has generated a highly regulated approach to assessment in NVQs. Within this system, there is a dual layer of monitoring which makes up the quality assurance strategy - internal verification and external verification. The *Awarding Bodies' Common Accord 1997* provides the guidelines for quality arrangements in the system, while *Implementing the National Standards for Verification* sets out how the national standards for assessment and verification units are to be assessed and verified.

Studies by Black (1993), Eraut (1994), Lester (1996; 1997; 1999) and Konrad (1999) highlight some of the critical issues and concerns that they have with the highly regulated approach adopted for assessment of NVQs. In particular, they focus upon the quality *control* nature of the UK system which includes increasing external monitoring and standardisation. Lester (1996) suggests that the solution is not one of quality control, but rather quality assurance. He contends that the solution primarily rests with ongoing professional development. For him, increasing the quality control measures is bound to have detrimental outcomes.

The result is likely to be that while public confidence is increased, validity suffers as assessment increasingly concentrates on factors which are amenable to checks and controls ... (Lester 1996, p 3)

More specifically, Konrad (1999, p 9) suggests that the complex role of internal verifier is often under-resourced and those carrying out this role have barely adequate initial education and training to undertake the tasks effectively. Eraut (1994, p 207):

Evidence suggests that once established by training and regular communication, a community of assessors is able to ensure sufficiently standard use of criteria; but that it is easy for standardization to slip if training and communication are not regularly maintained.

The training of assessors and verifiers is another essential component of quality assurance, because assessment and verification are themselves professional processes requiring special expertise.

The New Zealand Qualifications Authority (NZQA) adopts a somewhat less rigorous approach in implementing the New Zealand Qualifications Framework.

Unit Standards are established by Standards Setting Bodies, registration of providers, provision of assessment materials in some industry sectors by the relevant Industry Training Organisation; establishment of unit standards for assessment; provision of assessor training and the use of qualified assessors.

Assessments conducted against unit standards that are drawn from specific industry sectors are moderated through processes established by the relevant Industry Training Organisation. The NZQA requires providers of training to develop their own quality assurance systems. However, all unit standards set requirements for moderation, and training providers and standard-setting bodies are responsible for ensuring that assessors participate in the designated process for ensuring validity and consistency in assessment.

## **Quality assurance and compliance**

In Australia, all RTOs must meet the requirements of the Australian Recognition Framework to obtain and maintain registration. These requirements have been reviewed and will be changed substantially in 2001 reflecting the national concern with consistency and quality. The revised ARF will stipulate requirements for:

- systems for quality training and assessment

- compliance with Commonwealth and state/territory legislation and regulations
- effective financial management
- effective administrative and records management procedures
- recognition of qualifications issued by other RTOs
- access and equity
- competence of RTO staff
- RTO assessments
- learning and assessment strategies
- issuing qualifications
- use of national and state logos
- ethical marketing and advertising.

Regardless of any regulatory requirements, an organisation needs to be committed to providing the best possible training delivery and assessment services. Quality assurance focuses on a systematic approach to improvement that recognises and responds to the needs and expectations of all stakeholders in the enterprise.

Smith (2000, p 29) concludes that:

The consistent message from the research, worldwide, into successful assessment practice is that the achievement of assessment quality requires an integrated package of initiatives: relevant and practice-oriented pre-service and professional development training; a combination of both progressive ('formative') and summative assessment; a genuine 'team' effort between professional trainers and appropriate industry/employer representatives; on-going research into, and dissemination of, best practice; clearly defined standards for both initial and on-going 'registration' as a trainer (as distinct from a training organisation); and an effective system of moderation and audit. Unless all of these components are addressed in an integrated fashion, quality of assessment is unlikely to be achieved.

### **Identifying and developing quality assurance strategies**

In 2000, the Canberra Institute of Technology (CIT) and the Vocational Education and Assessment Centre, TAFE NSW (VEAC) investigated strategies for improving confidence in assessment decision making for providers (NCVER, to be published). Issues initially identified by providers as having an impact on the quality of assessment and the level of confidence of assessors and others in the VET sector were:

- the lack of consistency in assessment decisions and assessment practice
- the new demands placed on assessors and assessment with the implementation of training packages
- the lack of rigorous quality assurance processes
- concerns about the quality of assessor training programs and ongoing support for assessors.

This research drew together assessors from private and public providers specifically from the Children's Services, Information Technology and Horticulture industries. The project found that although providers used a range of quality assurance strategies, very few organisations currently have a comprehensive strategy to assure quality in assessment. From this consultation, specific strategies were identified for further development in the areas of validation of assessment tools and judgement, gathering of evidence and the use of assessment partnerships.

Findings from this research are currently being used to develop an assessment guide for RTOs and assessors to develop comprehensive quality assurance arrangements for their organisations (DETYA, in press). The key aspects of assessment we consider necessary to be quality assured are:

- the assessment system
- the assessment process
- the assessors
- the evidence
- the judgement.

This comprehensive approach identifies strategies to assure quality for each of these aspects but particularly recognises the vital role of assessors and the need for them to participate in validation activities and continued professional development.

### **Validation as a key quality assurance strategy**

Recent Australian national and state-based research points towards the need to support assessors in their decision making through activities to validate or moderate the evidence collected and the judgement made.

The revised ARF standards (ANTA 2001, draft February) in fact stipulate that RTOs implement a validation process and define it as:

reviewing, comparing and evaluating assessment processes, tools and evidence contributing to judgements made by a range of assessors against the same standards. Validation strategies may be internal processes with stakeholder involvement or external validations with other providers and/or stakeholders.

While there are some providers and specific industry sectors currently implementing adhoc validation activities with assessors, there is little evidence to date of RTOs

encouraging their assessors to systematically review, compare and evaluate their assessment processes, tools and evidence (NCVER, to be published).

(Note that the use of the term 'moderation' is being debated. Moderation has traditionally implied some statistical application to achieve norm-referenced scores such as the moderation activities for the NSW Higher School Certificate. In the case of competency-based assessment, the term validation is now used to describe the process of reviewing, comparing and evaluating assessment.)

## **Implementing these QA strategies – where to from here?**

### *Tension between national compliance requirements and implementing quality assurance strategies by RTOs*

The revisions and strengthening of the ARF Standards for RTOs are being made in an attempt to improve consistency and quality of VET provision. These changes could become a whitewash to ultimate improvement of quality if RTOs treat them as maximum requirements rather than minimum standards. The RTO has to sponsor or own this process and have the will to devote resources to improving the quality of its training and assessment.

### *Difficulties in implementation of quality assurance strategies*

The implementation of validation processes will certainly require RTOs to allocate additional resources for assessors to meet to compare and evaluate their assessment effectively. Our experience to date in working with RTOs suggests that while this process offers excellent opportunities for professional development and improving quality of assessment, providers will find it difficult to allocate the resources needed for effective operation.

### *Tension in emphasis in implementation of the range of quality assurance strategies*

This paper has referred to the range of different strategies for assuring quality in assessment and stressed the need to implement all of them comprehensively.

It will be interesting to observe developments in attention to these strategies for assessment of VET courses in secondary schools. The issue of consistency of outcomes has become particularly significant with the inclusion of VET subjects linked to the ARF being used for university selection and is of great concern to ANTA CEOs. In a paper commissioned by ANTA, the Assessment Research Centre (Griffin et al 2001) recommends a range of strategies to deal with this complex issue, where VET subjects can contribute to what has been a single university entrance score for Australian universities.

The paper recommends the introduction of a standards referenced system for interpreting and reporting of VET subjects, with content-specific criteria developed for each vocational subject. Greater specificity in industry standards would be welcomed nationally.

The paper also recommends the development of calibration of assessment data through item response modelling procedures, which can be calibrated onto a single underlying differentiating scale for each VET subject or unit. Griffin et al (2001) specifically recommend that 'all VET assessment data that combines workplace and



classroom assessments to integrate competency and differentiating purposes should be centrally calibrated to enable quality assurance mechanisms to apply' (2001, Recommendation 11). A system is suggested where schools could design and administer performance tasks within approved assessment strategy and design parameters. The data from these assessments could then be provided to a central administrative agency for calibration. However, such measures would be costly, difficult to administer and potentially lack the flexibility needed to enable assessment that demonstrates competence in authentic workplace environments.

While the paper does identify a need for professional development for teachers in assessment task design, it focuses on the development of a national task bank. There is consideration of the potential role of moderation to support assessors. In this context, it is seen as the process of bringing scores and standards into alignment and the emphasis on the calibration of assessment tasks to ensure comparability across schools.

The task of balancing the needs of assessment for industry competency recognition and university selection is extremely complex. However, it will be interesting to watch the development of these recommendations and their potential viability in the broader VET context.

## **Conclusion**

We have defined confidence in assessment decision making as a sense of trust in the:

- quality of the information provided to learners
- validity of the assessment tools
- reliability and fairness of the assessment procedures
- sufficiency of evidence
- correctness of the interpretation
- accurateness of the recording and reporting of assessment results.

These factors must be included in the design of an RTO system to assure the quality of assessment. Minimum standards related to these factors are embodied in the ARF standards for RTOs. However there is a danger that they remain minimum standards, as some of the most valuable features such as activities for validating assessment will be costly to implement. In the effort to emphasise consistency rather than confidence, there may also be undue emphasis placed on strategies to standardise processes rather than provide resources to support assessors to perform their work with more confidence.

It is interesting to consider whether confidence in assessment decision making requires consistency of approach. The concept of consistency may ultimately be illusory as Schofield has suggested, but the confidence of providers, assessors and learners in assessment decision making certainly needs to be enhanced.

## **References**

ANTA (2001) Australian recognition framework standards for registered training organisations (draft February), Brisbane.

- Black H (1993) Sufficiency of evidence: what might be fair and defensible? *Competence and Assessment*, vol 20, pp 3-10.
- Bloch B, Clayton B and Favero J (1995) Who assesses? In W C Hall (ed) *Key aspects of competency-based assessment*. Adelaide: National Centre for Vocational Education Research.
- Clayton B, House R, Booth R and Roy S (2001, in press) *Maximising confidence in assessment decision-making*. Adelaide: National Centre for Vocational Education Research.
- Docking R (1997) *Assessor training programs: review of research*. Adelaide: National Centre for Vocational Education Research.
- DETYA (2001, in press) *Quality assurance arrangements - assessment guide*, Canberra.
- Eraut M (1994) *Developing professional knowledge and competence*. London: The Farmer Press.
- Griffin P, Gillis S, Keating J and Fennessy D (2001) *Assessment and reporting of VET courses within Senior Secondary Certificates*. Melbourne: Assessment Research Centre, Melbourne University.
- Konrad J (1999) *Assessment and verification of NVQs: policy and practice*. Education-line: [www.leeds.ac.uk/educol/documents/00000889.htm](http://www.leeds.ac.uk/educol/documents/00000889.htm).
- Lester S (1999) *Vocational qualifications in practice and principle: lessons from agriculture*, *Research in Post-Compulsory Education*, vol 4, no 1, pp 1-10.
- Lester S (1996) Which way NVQs? *Education, Training, Employment*, December, pp 21-24.
- NTFC (2000, unpublished) *Consistency in competency based assessment*. Brisbane: Australian National Training Authority.
- QCA, XXX NVQ Monitoring report 1998/99. <http://www.qca.org.uk/nvq-monitoring/98-audits.htm>.
- Schofield K (1999) *A risky business - review of the quality of Tasmania's traineeship system*. Hobart: OVET.
- Smith L (2000) *Impacting on the quality of assessment in VET in Queensland*. Brisbane: DETIR.
- Toop L, Gibb J and Worsnop P (1994) *Assessment system design*. Melbourne: Australian Government Publishing Service.

## **Contact details**

*Berwyn Clayton*

Director

Centre Undertaking Research in Vocational Education (CURVE)

Canberra Institute of Technology

Ph: +61 2 62074844

Fax: + 61 2 62073322

Email: [berwyn.clayton@cit.act.edu.au](mailto:berwyn.clayton@cit.act.edu.au)



U.S. Department of Education  
Office of Educational Research and Improvement (OERI)  
National Library of Education (NLE)  
Educational Resources Information Center (ERIC)



# REPRODUCTION RELEASE

(Specific Document)

## I. DOCUMENT IDENTIFICATION:

Title: <i>Proceedings of the 4th Annual Conference 2001</i> (AVEIRA)	
Author(s):	
Corporate Source: <i>AVEIRA.</i>	Publication Date:

## II. REPRODUCTION RELEASE:

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, *Resources in Education* (RIE), are usually made available to users in microfiche, reproduced paper copy, and electronic media, and sold through the ERIC Document Reproduction Service (EDRS). Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce and disseminate the identified document, please CHECK ONE of the following three options and sign at the bottom of the page.

The sample sticker shown below will be affixed to all Level 1 documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

*Sample*

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

**1**

Level 1

Check here for Level 1 release, permitting reproduction and dissemination in microfiche or other ERIC archival media (e.g., electronic) and paper copy.

The sample sticker shown below will be affixed to all Level 2A documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE, AND IN ELECTRONIC MEDIA FOR ERIC COLLECTION SUBSCRIBERS ONLY, HAS BEEN GRANTED BY

*Sample*

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

**2A**

Level 2A

Check here for Level 2A release, permitting reproduction and dissemination in microfiche and in electronic media for ERIC archival collection subscribers only

The sample sticker shown below will be affixed to all Level 2B documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY

*Sample*

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

**2B**

Level 2B

Check here for Level 2B release, permitting reproduction and dissemination in microfiche only

Documents will be processed as indicated provided reproduction quality permits.  
If permission to reproduce is granted, but no box is checked, documents will be processed at Level 1.

I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce and disseminate this document as indicated above. Reproduction from the ERIC microfiche or electronic media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries.

Sign here, → please

Signature:	Printed Name/Position/Title: <i>KAREN WHITTINGHAM SECRETARY/TREASURER</i>
Organization/Address: <i>Locked Bag 70 Alexandria NSW 1435.</i>	Telephone: <i>02 412 342 098</i> FAX: <i>02 9209 4054</i>
E-Mail Address: <i>karen.whittingham@erics.ed.gov</i>	Date: <i>13/8/01</i>



erics.ed.gov

(over)