11th Annual NCVER Vocational Education and Training Conference/Workshop

TAFE Bracken Ridge Campus, Brisbane

July 9th to July 12th, 2002.

Conference Paper:

Case Study in “Assessment Benchmarking”
Implementing the Information Technology Training Package ICA99
TAFE NSW

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ABSTRACT:

This paper is a case study report on the “assessment benchmarking” activities conducted by the Information Technology, Arts and Media Division, in conjunction with teachers, Heads of Faculties, and DET support units (eg. VEAC), in TAFE NSW Colleges in respect to the implementation of the Information Technology Training Package (ICA99).

The delivery of IT VET in TAFE NSW, and of assessment in particular, is carried out against a background of a:

- diversity of “learning and assessment pathways” leading to a TP qualification
- geographical (metro/country) spread of IT provision
- wide diversity and large numbers of students and teachers involved in the process
- communication and support infrastructure (policy, systems, people etc..)

Against this background, this paper highlights the issues that are at the core of “assessment benchmarking”, documents the process, and illustrates practices with specific examples.

As a result, we have found that implementing AQTF “Assessment Benchmarking” in IT courses in TAFE NSW has led to the development of “TAFE NSW state wide” approaches, practices and solutions, which are presented in this paper, but has also raised other interesting questions and posed new challenges for the future.
This paper reports on a project that has been conducted with this philosophy in mind:

*Time spent strengthening relationships within the group before the work begins is time well spent. Relationships within the group need to develop in order to neutralise the competitive agendas that most of us carry. Groups need to reduce fear and build social capital by maximising trust and respect.* (personal maxim)

**Background**

In 1999-2000 the Information Technology, Arts and Media Division of TAFE NSW (ITAM) undertook to develop curriculum for 15 qualifications in the Information Technology Training Package ICA99. In addition, the Division won a tender to develop ‘non-endorsed’ components of the IT Training Package which included a Case Study Generator, course Delivery Guides and some assessment exemplars. Initial mapping exercises of existing courses against the Training Package qualifications showed that there was a significant mismatch. It was therefore decided to develop courses with modules that mapped as closely as possible to competency units in the Training Package.

**Context- Factors that lead to an assessment benchmarking process**

The curriculum developed around the IT Training Package allowed for a range of ‘learning pathways’. This meant that modules could be bundled differently across institutes to integrate a number of units into meaningful chunks, e.g. professional skills, advanced software functions etc. In most cases the assessment was highly reliant on projects that covered outcomes in more than one module. Another reason for bundling modules was to accommodate college teaching resources (teaching staff, equipment, room usage etc). Some colleges went beyond the course requirements for employability reasons, or to satisfy concerns about rigour and underpinning knowledge and skills as well as to maintain current credit transfer arrangements with Universities. Some variations were due to different interpretations of vague requirements in course documentation (due in part to vagueness in the Training Package).

The changing nature of the IT teaching workforce in TAFE NSW has resulted in a significant decrease in the proportion of full-time teachers and an increase in casual or part-time teachers who often see themselves as employed to carry out specific training, i.e. to teach specific modules (competency units) rather than be part of a team of teachers using an integrated approach to the delivery of learning and assessment (holistic assessment). Currently, in New South Wales there are approximately 300 full-time teachers of IT, over 1,150 part-time teachers and an additional 80 teachers from other non-IT faculties (usually ACCESS or Business and Public Administration teaching IT Training Package courses). *(Refer Appendix A- Distribution of IT teachers in TAFE NSW).* There are also some 24,808 students enrolled in 40 IT courses across the State’s 130+ campuses.

In June 2001 the first draft documents of the Australian Quality Training Framework (AQTF) were being made available and it was clear that consistency of assessment was going to be a high priority for RTO’s especially in terms of their scope retention of RTO status and extension of scope of registration.
The AQTF Assessment standards\(^1\) require training providers to:

**Standard 8:** “…ensure that each member of the RTO’s staff who are involved in training, assessment or client service is competent for the functions they perform”

**Standard 9:** “…ensure RTO’s assessments meet the requirements of the endorsed components of Training Packages and the outcomes specified in accredited courses within the scope of its registration”.

This means that RTO’s must demonstrate their capacity to undertake assessment. In addition, they must implement internal moderation procedures and external verifiers to ensure that the quality of assessment and verification meets national standards. The strategies used to ensure that assessment decisions are valid, fair and consistent across training providers are:

- visitation moderation
- sampling of candidate assessments
- monitoring and evaluation of assessment and verification practice

During the latter part of 2001 the NSW Vocational Education Assessment Centre (VEAC) was developing a range of resources \(^2\) to support the implementation of assessment validation strategies for NSW RTO’s as well as facilitating workshops on the implementation of ANTA’s Training Package Assessment Materials Project.

As part of ITAM Division’s regular consultations with Institute Managers the issue of consistency of assessment and problems about grading became a common theme. It was becoming clear that many colleges were struggling with assessment issues and some action had to be taken. It was decided to implement a project to determine the scope of the problem and with some assistance from VEAC develop a Statewide approach to assessment benchmarking.

**An approach to assessment benchmarking**

For the purpose of this case study, there are two aspects to assessment benchmarking:

- **the process**: procedures involved in gathering assessment exemplars and validating them. Once there is acceptance by teachers and administrators that the process is working, it is documented as a formal quality management procedure for all Institutes.

- **assessment exemplars**: this refers to the collection of good examples of assessment tasks, instruments and learner responses that have been validated and can be shared by colleagues.

**Formative workshops – tackling the job**

The purpose of these early workshops was to determine the most appropriate way to facilitate the benchmarking process. As this project was running in parallel with research being conducted by VEAC into assessment validation it was decided to use a similar approach.

\(^1\) Australian Qualifications Framework, Standards for Registered Training Organisations, ANTA 2001

\(^2\) Assessment Validation Strategies – VEAC TAFE NSW, 2001 (Website: [http://www.veac.org.au](http://www.veac.org.au))
At this time it was not clear the extent to which teachers had already participated in some form of assessment benchmarking process nor was it clear how much information teachers had about the AQTF requirements, especially requirements 8 and 9. In order to determine the scope of the project a series of one-day workshops were held at various locations around the State. Head teachers and Faculty Managers were informed about the workshops using an established email network.

The format of the workshops varied slightly depending on the number of teachers who attended and the IT courses they taught. Where possible, part-time teachers were also encouraged to participate. Some colleges also employed teachers from other faculties such as Business and Public Administration and teachers from ACCESS (access and equity programs Division of TAFE NSW) to teach IT modules in courses delivering the International Computer Drivers Licence (ICDL), Certificate I in IT and the Certificate II in IT.

The workshops covered the following issues:

- AQTF assessment standards – making sense of and understanding the importance of documenting assessment validation procedures in colleges
- interpreting assessment requirements for courses – the issue of how assessment evidence is gathered using projects, tests, assignments etc
- unpacking the criteria used to grade assessment
- storing and distributing assessment, project and case study exemplars
- best way of setting up College, Institute and State wide assessment benchmarking teams.

Attendance at the first three workshops was quite poor. This may have been because teachers could not obtain release from teaching duties or college management did not consider the workshops to be a high priority at that time. Teachers also had limited access to staff development and the Division had limited funds to pay for teacher release. Another problem was that many teachers, particularly part-time teachers did not have access to TAFE NSW corporate systems such as the TAFE Learning Gateway (Intranet web site) where information about the AQTF, assessment workshops and Division planning documents were regularly posted.

There was also a sense that some teachers were reluctant to allow any scrutiny of their assessment practices and considered the whole issue of assessment validation to be threatening rather than a mechanism for confirming professional judgement.

It became evident during these formative meetings that assessment validation was being carried out in an ad hoc manner in some Institutes. Some colleges were undertaking assessment validation meetings, however the outcomes of the meetings were poorly documented and there was not much sharing of assessment resources.

There was a general lack of understanding about the AQTF requirements and the impact these requirements will have on the way teachers work.

There was a general view that “this does not really affect me”, and thus a resistance to change. It is a mindset and requires a “cultural shift” that is hard to achieve, as many are not prepared to do it. These requirements are also seen as “additional work”, and with the increasing casualisation of the teaching workforce, as with part-timers, the shifting of the teaching/assessment “effort” is difficult to absorb readily, or with any enthusiasm.
**Determining the best approach** - *Empowering teachers to use their professional knowledge, expertise and judgements.*

For this innovation to work it must be seen as being feasible, desirable and be understood in practical terms by teachers. Teachers must have a developed sense of ownership of the process, a sense that what is to occur takes account of what they think will work best and the context of their unique work situation. If they sense imposition or a failure to listen, the best that one can hope for is minimal compliance.

In order to encourage this sense of ownership and practical understanding it was decided to invite as many teachers as possible to a number of assessment benchmarking workshops to test the model developed by VEAC. The purpose of these workshops was to encourage a shared understanding of how to conduct assessment validation at the college, Institute and State levels. As the procedure evolved and teachers became more confident, the workshops produced some tangible examples of good quality assessments that were in turn validated and entered on to the TAFE Learning Gateway as ’Assessment Benchmarks’.

Since October 2001 the ITAM Division facilitated 12 assessment-benchmarking workshops at Sydney Institute, North Sydney Institute, Riverina Institute and North Coast Institute. Attendances varied from 6 to 41 people per workshop session. All the metropolitan workshops included teachers, both full-time and part-time from a number of Institutes.

Prior to each workshop participants were provided with some background reading:

- An abridged version of AQTF standards 7, 8 and 9 explaining the implications for teaching and assessment. This was sent out to all IT Faculty Managers, Head teachers and teachers on the email distribution group.
- A paper explaining the importance of establishing an assessment validation process. This was adapted from a paper written by VEAC titled “Assessment Validation Strategies”.
- Validation checklist – this document included eight questions (later increased to twelve questions as the process evolved) that were to be ‘user tested’ in the workshop. *(Refer Appendix B)*.

Each workshop was designed to cover assessment validation for the core modules in a particular course (In TAFE NSW most IT courses include at least five core modules whose combined marks contribute to the grading of the qualification). Usually, only teachers who delivered these modules attended the workshops. Participants informed the project team by email whether or not they would participate. Participants were also encouraged to bring along assessment examples.

A member of the project team who did not necessarily have any IT content knowledge, but did have a good understanding of assessment issues facilitated the workshops. The project team also included a curriculum expert or a content expert and a scribe who kept an accurate record of all recommendations. Each workshop included the following agenda items:

- Overview of the assessment validation process – implications for TAFE NSW in the context of the AQTF Evidence Guide and Standards for RTO’s, VETAB, RTO and ISO certification requirements
- Discuss assessment instruments being used – look at specific assessments for a module or module cluster
Consider the following questions:
* does the assessment actually assess the assessment criteria being assessed (validity) ?
* Are the instructions unambiguous and clear for assessors and learners (reliability and fairness) ?

- Compare assessments between colleges and Institutes
- Make recommendations for improvements
- Review the benchmarking process – suggest improvements.

**Recommendations – an agreed benchmarking process (refer appendix C)**

At least one week after each workshop a report was written and distributed to all teachers on the email distribution list (approximately 250 teachers at that time). The reports provided feedback to workshop participants as well as teachers who were unable to attend. This continuous feedback seemed to encourage more teachers to participate and by the seventh or eighth workshop numbers of participants increased to almost unmanageable sizes.

The intensive workshops, meetings with Faculty Managers and Head Teachers and more general feedback from our visits to colleges were used to specifically identify how the benchmarking process might best work, and once it had been refined in the light of our evaluation of its initial implementation, could best be sustained.

As an outcome of these initial workshops an “Assessment benchmarking model” has been implemented. (Adapted from VEAC “ Assessment Validation Strategies”)

**At the college level:**

Teachers will meet at least two times a year either before, during or after assessment has taken place for a given course or courses. At the module or module cluster level assessment should concentrate on the:
- Design of the assessment activities
- Evidence guides and assessment tools
- Benchmarks against which learner performance is to be assessed. This should include benchmarks for grading.

Validation *during* assessment should concentrate on:
- The actual performance being undertaken by a learner and can obviously only be conducted where there are teams of assessors working together.

Validation *after* assessment should concentrate on:
- The assessment task and the assessment process
- Learner performance
- The assessment decision that has been made
- Reporting and record keeping. Head teachers are encouraged to keep an official file that records all staff meetings that cover issues about assessment
- All minutes should be sent to Institute coordinators (usually an Institute Manager or Senior Head Teacher) and the Division Program Manager or Curriculum Coordinator of IT. This will ensure that the implementation of the assessment benchmarking process is continually monitored and where major issues are identified, solutions can be put in place.
at the State level.

At the Institute level:

At least twice a year, usually after the college workshops, Institute Managers should run assessment validation workshops for all colleges delivering a particular course. There will only need to be one representative from each college. The format of the workshops should be similar to the college workshops but should concentrate on ensuring consistency of assessment across the Institute. Issues raised at college workshops should be dealt with at these workshops and improvements agreed upon. Examples of good assessment practice should be validated and benchmarked. A representative from the ITAM Division may be invited to facilitate the workshop if required. Benchmarked assessments are emailed to the ITAM Division for further validation at the State wide workshops.

At the State level:

These workshops should be conducted at least twice a year after the Institute workshops have been held. This is a venue for identifying inconsistency of delivery and assessment across the State and working out quality improvement strategies. The outcome of these workshops may result in changes to the curriculum and other supporting documentation which is centrally located and distributed electronically to all teachers as the need arises. Issues about the Training Package itself are then fed back to the National ITAB for consideration. This is also a State wide venue for the sharing benchmarked assessments.

It is at this point in the process that we can consider a benchmark has been achieved. That is, the process has been adhered to and examples of good quality assessment documents have been validated at all levels and placed on the TAFE Learning Gateway for distribution.

The technical aspect of storing and retrieving benchmarked products has yet to be finalised and there is currently a project underway to use a well-established knowledge management system for TAFE NSW.

Plan for sustaining the Assessment Benchmarking Process

There is much evidence and personal experience in past innovations that inadequate effort is given to sustaining an innovation. In order to sustain this particular innovation the ITAM Division will be undertaking the following:

- Continuously monitor the implementation of assessment validation workshops and gradually improve their operation
- Identify and promote ways in which Assessment validation workshops are having a positive impact not just on individuals but on TAFE NSW generally
- Identify and disseminate ‘best practice’ using the TAFE Learning Gateway as a medium for electronically distributing documentation

3 Adapted from Scott, G (1992) Managing Change in Adult & Vocational Education, Sydney, UTS).
• Identify any TAFE NSW policies or Institute procedures or activities which are impeding the full implementation of assessment validation and communicate these to TAFE NSW Directors
• Provide support for Institute and college assessment validation coordinators on their role in supporting the scheme locally
• Identify if there are any recurring areas of professional learning which need to be undertaken to ensure all teachers are familiar with assessment validation
• Attend college and Institute staff meetings to promote and clarify the assessment benchmarking process
• Provide support for people interested in introducing this scheme in other sectors of TAFE NSW.

Continuation

Once the assessment benchmarking process is fully underway we will have to be prepared to recycle through the whole process as changes in external, system or local conditions or feedback on how well the process is working in practice dictates it. The recommendations of sustaining the innovation will, if adopted, provide the mechanism for doing this.
References:


Assessment Validation Strategies – Vocational Education and Assessment Centre, (VEAC), TAFE NSW. Website: http://www.veac.org.au

A Guide to TAF NSW Divisions’ Support for Institutes in Implementing the AQTF Standards for Registered Training Organisations (RTOs), TAFE NSW Divisions, V1.0, April 2002.

Appendix A

Distribution of IT Teachers in TAFE NSW

- North Coast: 10% Other, 20% P/T, 70% F/T
- New England: 5% Other, 20% P/T, 75% F/T
- Hunter: 6% Other, 10% P/T, 84% F/T
- Western: 3% Other, 2% P/T, 95% F/T
- Riverina: 16% Other, 42% P/T, 42% F/T
- Illawarra: 10% Other, 30% P/T, 60% F/T
- OTEN: 20% Other, 300% P/T, 0% F/T
- Sydney: 15% Other, 70% P/T, 15% F/T
- South Sydney: 5% Other, 28% P/T, 67% F/T
- SW Sydney: 5% Other, 45% P/T, 50% F/T
- West Sydney: 5% Other, 45% P/T, 50% F/T
- North Sydney: 5% Other, 55% P/T, 40% F/T
Appendix B

Use this checklist to evaluate the assessment process, tools or strategies provided

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<thead>
<tr>
<th>Question</th>
<th>Yes/No</th>
<th>Comment</th>
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<tbody>
<tr>
<td>1. Does the assessment clearly and directly relate to the learning outcomes and assessment criteria?</td>
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<td>2. Are the assessment tasks based on realistic, current/typical workplace activities and contexts?</td>
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<td>3. If the assessment addresses more than one module, can the different components be clearly differentiated?</td>
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<td>4. If the assessment task is a group task, how does it identify individual assessments?</td>
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<td>5. Is the level of difficulty appropriate to the Learning Outcomes being assessed?</td>
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<td>6. Is the weighting allocated for different components of the assessment appropriate? Eg Theory and practice, weighting of different learning outcomes.</td>
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<tr>
<td>Question</td>
<td>Yes/No</td>
<td>Comment</td>
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<td>7  Are different sources of evidence of knowledge and skill considered in</td>
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<td>the assessment, eg for underpinning knowledge?</td>
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<td>8  Are the student assessment criteria, task instructions and assessment</td>
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<td>conditions clearly identified?</td>
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<td>9. Are there clearly defined guidelines about how to interpret the</td>
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<td>answers? Eg marking guides, sample answers, observation checklist.</td>
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<td>10 Does the assessment allow for integrated and holistic assessment of</td>
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<td>competence?</td>
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<td>11 Is the assessment activity suitable for use in other assessment</td>
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<td>contexts, eg recognition, trainees, workplace?</td>
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<tr>
<td>12 Do trainees need to keep a log book as part of this assessment? How</td>
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<td>is this verified?</td>
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Other Comments:........................................................................................................
Appendix C

An agreed benchmarking process

**College validation**
Before, during & After assessment
F/T & P/T teachers

**Institute validation**
Consistency issues,
Benchmarks gathered - 1 or more reps from each college

**State wide validation**
Consistency across State, Benchmarks validated – 1 or more reps from each Institute

**ITAM Division**
Benchmarked documents centrally stored (TAFE NSW Intranet)
Changes made to curriculum

**AQTF requirements**

**ITAB**