E-assessment and the AQTF

Bridging the divide between practitioners and auditors

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What is the Framework?

The Australian Flexible Learning Framework (Framework) is the vocational education and training (VET) sector's national e-learning strategy.

Background

- The Framework commissioned research to examine and promote a greater understanding of e-assessment and the AQTF (Australian Quality Training Framework) 2007 among VET auditors and practitioners.
- This research covered the wide range of activities in which digital technologies are used to design, deliver and mark assessment.

Growth in e-assessment

The Framework's 2009 E-learning Benchmarking Survey highlighted the continued growth in e-learning and e-assessment practices:

- 46% of registered training organisations (RTOs) were using e-learning for assessment.
- among teachers and trainers delivering units using e-learning, 62% are using online assessment activities
- this represents a considerable increase on previous years.

What is e-assessment?

E-assessment:

- covers a wide range of activities where digital technologies are used in assessment
- includes designing, delivering and marking assessments.

Where is e-assessment being used?

- *Low-stakes assessment* - usually formative, with the results being feedback that supports and motives the learner.
- *High-stakes assessment* - of high importance to the learner and the organisation, this form impacts upon learner progress or their gaining a qualification.
- In most countries, e-assessment is currently found more frequently in low- to medium-stakes rather than in high-stakes (high-profile) contexts.
- Major regulatory bodies in the United Kingdom and Europe are exploring the wider use of e-assessment across more stages and in higher stakes contexts.

Some challenges around e-assessment

- E-assessment promises potential benefits ranging from lowered costs, higher productivity and faster feedback, through to assessments which are more accurate, detailed and robust under critical scrutiny and audit.
- However, there is concern that these potential benefits are relatively slow to emerge.
- Progress is hampered by examples of poor quality assessment which fail to reliably provide acceptably valid measures of learner achievement and capability.

Some challenges around e-assessment

- A cornerstone of quality assessment principles and practice is the *AQTF2007 Essential Standards for Registration*.
- RTOs are required to ensure that assessment meets the requirements of the relevant training package or accredited course.
- Assessment must be conducted by qualified assessors in accordance with the principles of assessment and the rules of evidence.
- The need for continued quality judgements by practitioners, assessors and auditors underpins the operation of the AQTF 2007.

Some challenges around e-assessment

"There is a perception… that some of those currently conducting AQTF auditing are suspicious of – or unsympathetic to – e-learning evidence.

It is not clear whether the perception is justified. If it is, the problem must be addressed, and as a priority".

Figgis and Guthrie 2009, p. 21.

Table discussion

Q. What do you believe are the key challenges around the use and greater acceptance of e-assessment in the training sector today?

(e.g. acceptance by learners, practitioners, auditors; validity; authenticity; meeting AQTF standards; lack of guidelines; auditor training; practitioner training etc)

Aims of the research

1. To examine what practitioners and auditors judge to be the key issues in e-assessment.
2. To identify potential practical actions that will promote better understanding and improved practices.

Sample and method

- 48 individuals involved in interviews, teleconferences and small group discussions.

- Participants were expert practitioners, auditors and others who had in-depth experiences with e-learning and auditing in the VET sector.

- Participants were identified through network sampling, and by recommendations of a small reference committee.

The results…..

Formative and summative assessment

Practitioners and auditors:

- believed that e-assessment was mostly used as a form of diagnostic and formative assessment

- thought e-assessment use primarily for summative assessment was rare.

- had little support for using e-assessment as the primary form of evidence to support the signing-off of a formal qualification or certification of a skill

- envisaged considerable growth in incorporating various forms of e-examinations, e-quizzes and multiple choice questionnaires in low- to medium-stakes e-assessment.

Maintaining quality standards

- Auditors report that the majority of audits confirmed that quality assessment practices were occurring.

- Auditors provided examples where the standards were applied as, or even more, rigorously to e-learning and e-assessment, as for traditional training and assessment.

- Practitioners talked about some teacher's assumptions that everything to do with e-assessments is located online. As a result, teachers did not prepare a study guide, unit assessment plan or the assessment marking criteria.

"Good assessments do not come cheaply, and many organisations are not prepared to put the time and money into creating these assessments. They just want to get content and assessments up online as quickly and as cheaply as possible.

A well constructed online activity including content and assessment is time consuming. It is expensive and requires a great degree of skill from content experts, multimedia persons and assessment writers who know and understand the tools at their disposal and how to use them effectively.

Unfortunately, many students and their employers have yet to be really exposed to top class e-learning and e-assessment."

Practitioner

Maintaining confidence

- Respondents were positive about the operation of the AQTF 2007, and the outcomes-focused approach being adopted in the AQTF was well understood.

- Practitioners believed that the principles of continuous improvement were applied by internal and external auditors.

- Practitioners and auditors are still adjusting to the newer and more varied forms of assessment.

Maintaining confidence

- There is more complexity in the evidence being captured by new forms of assessment.
- Even highly skilled practitioners were having their professional judgements around e-assessment challenged in audits.
- Tensions exist between practitioners and auditors around maintaining the reliability and validity of assessment, while also achieving flexibility and cost efficiencies.

"There is a lack of confidence in anything to do with assessment, whether traditional or e-assessment. This lack of confidence is caused by many factors. But they include the large turnover in VET of staff, more casual and part time staff, poor practices learned from others, a lack of good TAA training around assessment, and a lack of experts in the field of assessment.

Often professional development workshops are conducted by people who don't have their own best practice guidelines in place. We need good worked examples of e-assessment representative of its various forms that help to close this gap that is emerging between practitioners and auditors around what are valid, reliable and authentic forms of e-assessment."

Auditor

Auditor experiences

- The forms of e-assessment used were not diverse.
- Online tests to assess knowledge and blogs and wikis to promote reflection and self-assessment were the dominant e-assessment methods used.
- Use of e-portfolios for e-assessment was on the increase.
- When auditing, auditors want to see:
  - ➤ evidence that training and assessment is meeting clients' needs
  - ➤ the principles of assessment and rules of evidence
  - ➤ that the assessment is aligned to the AQF level.

Auditor experiences

- Some auditors highlighted that high demands on their time may encourage cautious decisions around e-assessment validity.
- Poor use of e-assessment around authenticity further supported some in their inclination to be suspicious.
- Despite their professional development, many auditors were "*still wedded to tradition and paper evidence more than we should be*".

Validity

- Validity was a major concern for auditors.
- E-assessments were not validly assessing the skills being tested and the assessment did not always address the intended learning outcome.
- Some e-assessment had been introduced without establishing learner needs and completing training needs analysis.
- Auditors wanted to see better practices around evidence gathering through multiple sources to support the validity of e-assessments.

Authentication

- Issues highlighted included unreliable infrastructure that impacted upon the user in completing online assessment, accessibility, ease of use and poor security.
- Practitioners would like more trials to investigate technological solutions that meet authenticity challenges.

Practitioners and auditors agreed that:
- the right technology can enhance the security of e-assessments
- high quality and supportive relationships between teachers, learners, and employers were critical to managing issues around authenticity.

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"I have a number of concerns that need to be addressed. How are they managing the security of electronic data? I want confirmation around the authenticity of students' work, and the access that students have to ICT hardware/software so that they are able to complete their training and any online assessment.

In particular, as with any form of assessment, I will be asking about how they are managing the concerns I typically raise around how a sufficient range of evidence is being gathered, issues around employability skills and transferability, and overall, how the progress of students is being monitored."

Auditor

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Online quiz - predominant type of e-assessment

- Advantages - included quickly preparing, marking and assessing learner knowledge and providing more regular feedback.
- Disadvantages - included poorly constructed online tests with limited validity and reliability.

Practitioners and auditors:

- reported that some teachers have little understanding of how to design valid and fair online quizzes
- described that online tests and short quizzes were, at worst, cheap options and ill-thought out efforts by the provider to make money quickly, or to save money.

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Assessment support materials

- There are gaps in assessor support materials for competency-based assessment in online environments.
- A large number of poor-quality e-assessments tools are being used online, on intranets and in blended learning.
- Inexperienced practitioners are failing to identify poor quality e-assessment tools.
- More practitioners are becoming aware of the potential use of Flexible Learning Toolboxes for e-assessment.

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Auditor consistency and training

- Practitioners appreciated cross-jurisdictional experience that some auditors now bring to audits.
- Concern among practitioners around different audit outcomes in different jurisdictions.
- Auditors had ideas on how to promote better levels of consistency among auditors e.g. a third party with no direct interest in the outcome; engage training organisations at an earlier stage than at present.
- Auditors were up front about the need to continue to broaden their understanding of e-learning and e-assessment.

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"In the end we are coming in from the back end as auditors, establishing and demonstrating how the training and assessment are meeting the requirements of the training package, rules of evidence, and the units of competence.

You can tell when a lot of thought has gone into the development of effective assessment systems. We see enough bad examples to warrant the value in capturing and sharing good worked examples that will help all of the parties involved".

Auditor

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More informed practitioners

The current VET practitioner needs to be more able to:

- possess the technical skills to devise or create valid, reliable and authentic assessment and e-assessment
- demonstrate knowledge and understanding of assessment best practice
- understand and address issues relating to e-assessment use
- access cost effective and easy to use e-tools and resources
- access high quality continuing professional development courses that allows them to become familiar with the principles and best practice of e-assessment.
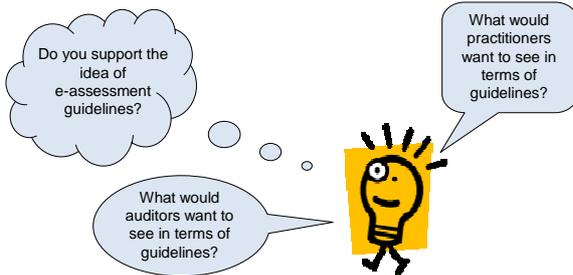
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Next steps

1. Develop guidelines for e-assessment in the VET sector: *E-assessment: Guide to effective practice in the VET sector.*

2. Collate examples of good practice around the use of a variety of e-assessments.

3. Deliver workshops that promote a broader discussion between practitioners, auditors and others of the key issues raised in this report.

4. Develop support materials for the design and delivery of online quizzes.

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Next steps

5. Develop e-assessment units of competency that become part of revisions to current training and assessment.

6. Identify an independent organisation that provides support for professionals in the field, collecting best practice guidelines and communicating the positive aspects of e-assessment.

7. To assist in the development of the e-assessment guidelines and best practice examples, complete a state-of-the-art review of e-assessment techniques for application in the VET sector.

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Group discussion

Do you support the idea of e-assessment guidelines?

What would practitioners want to see in terms of guidelines?

What would auditors want to see in terms of guidelines?

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