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Quality Teacher Programme

AAMT Teaching Standards Assessment Evaluation Project

Evaluation Summary Report October 2004

Contact Officer

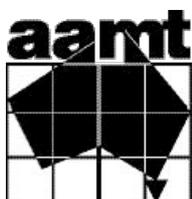
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Evaluation Summary

AAMT Teaching Standards Assessment Evaluation Project (TSAEP)¹

November 2004

Context

Teacher quality, standards and professionalism have, in recent years, become the focus of much interest in Australian education². The Australian Association of Mathematics Teachers Inc. has played a leading role on behalf of the nation's teachers of mathematics through its development of nationally agreed teaching standards and its contributions to wider debates and developments. The *Excellence in the Teaching of Mathematics: Professional Standards Project*, which was conducted by the AAMT and colleagues from Monash University in 1999-2002, provided much of the basis for the TSAEP.

The Project

Purposes

After adopting and publishing its *Standards for Excellence in Teaching Mathematics in Australian Schools* (2002) the AAMT has moved to implement these *Standards* as:

- the framework for teachers' career-long professional learning in mathematics.
- the measures against which a teacher can choose to be assessed for peer recognition as a *Highly Accomplished Teacher of Mathematics* (HAToM).

The AAMT's TSAEP sought to fully develop the processes for the second of these by:

- finalising the draft Assessment Model developed by the AAMT-Monash University project;
- training teachers as peer assessors; and
- piloting the assessment of six volunteers.

The Assessment Model

The Assessment Model was reviewed and finalised in the early stages of the project. The Model is based on clear principles that the assessment process will be:

- rigorous and valid;
- adaptable to and applicable in all teaching contexts;
- fair to all candidates no matter what their teaching situation;
- equally accessible to teachers across the country;
- controlled by the candidate insofar as this is possible; and
- oriented towards contributing to the professional growth of the candidate.

The AAMT *Standards Assessment Model*, September 2003, p.1

¹ The *AAMT Teaching Standards Assessment Evaluation Project* was conducted for the Australian Association of Mathematics Teachers by the AAMT's National Professional Standards Committee — Mathematics during the period July 2003 to May 2004. The project was supported by funding from the Australian Government's Quality Teaching Programme.

² The establishment of the National Institute for Quality Teaching and School Leadership in Canberra is a recent example of a very wide range of developments.

The model requires candidates to:

- respond to unseen questions that simulate teaching decisions through an *Assessment Centre*;
- submit a *Portfolio* of their work and achievements as a teacher consisting of a Professional Journey (reflective essay), a Case Study of one or two students' learning, an example of Current Teaching and Learning Practices, Validation (report of a classroom observation or video of their teaching) and Documentation (awards, references, testimonials etc.) ; and
- take part in an *Interview*.

The model involves a 'team consensus approach' to assessment. Individual assessors accumulate evidence from what the teacher has presented to make holistic judgements directly against each *Standard*. Assessors then meet to reach consensus about whether they have identified sufficient evidence to be confident that individual *Standards* have been met. To be recommended to receive the HAToM award the teacher must meet all ten *Standards*.

Conduct of the Project

In order to be able to assess the candidates at the end of the project using the agreed Assessment Model, a number of significant tasks needed to be undertaken within the project. Important among these were:

- Developing Guidelines to assist candidates to prepare their Portfolio items. This included commissioning 20 sample items from volunteer teachers to help refine the Guidelines.
- Recruiting the six candidates. They were all from different jurisdictions; four were female, two male; four primary, two secondary; four teach in government schools, two in non-government schools. This was about as good a mix as it was possible to achieve in the circumstances, although there was no-one from a non-metropolitan location.
- Providing support for the candidates during the process. This included providing general advice, sample Portfolio material and sample Assessment Centre items, and enabling candidates to work with a mentor.
- Selecting and training peer Assessors (five teachers from Tasmania, Victoria, WA and SA).
- Developing the items for the Assessment Centre. The work situations of the candidates required only two papers (primary and secondary)³

The constraints of this project required divergence from the model in several ways. These included only 3-4 months for Portfolio preparation compared with a minimum of 6 months; the Assessment Centre being held at the end of the process rather than the beginning; the Interview being held only hours after Candidates received feedback on their Portfolios as opposed to the anticipated 2-3 weeks; the questions to be asked in the Interview being made available on the same time frame, rather than, again, the anticipated 2-3 weeks; and support materials being developed during the process rather than being available from the start.

³ It is anticipated that separate papers for up to four levels of schooling may be required (early childhood, primary, junior secondary or middle school, senior secondary) in order to target items appropriately.

Results of assessing the Candidates

Four of the six Candidates were recommended to receive the HAToM award, with two teachers presenting insufficient evidence in relation to some *Standards*. These two teachers were subsequently advised of the areas in which there was insufficient evidence, and a process established to give them further opportunities to pursue the accreditation.

Findings

An independent external evaluator used a 'participant-observer' methodology to report on the project according to an agreed brief for that work. Observations, document analysis, interviews with participants and feedback from participants of all kinds provided the data for an extensive Evaluation Report. The report contains a wealth of information that can guide the thinking of the AAMT and others in relation to assessing teachers against professional teaching standards. Some key findings follow.

The Assessment Model

The TSAEP found that the Assessment Model works — candidates are validly and reliably identified as HAToMs.

Importantly, the assessment process is able to discriminate among teachers.

The Model itself and the Guidelines provided to candidates are both transparent and flexible in allowing teachers to exercise some control over the form of their submissions.

Significant time and effort is required by teachers to compile a case for accreditation, and this has an impact on their personal and professional lives.

The actual process of assessment is professionally demanding and time-intensive for the Assessors.

Conducting assessments according to the Model has a significant monetary cost.

In the current climate, being assessed using this Model is likely to appeal to a relatively small number of teachers.

The assessment strategies

All components of the assessment appear important to provide a sufficient picture of the Candidate's knowledge, skills and attributes. Although requiring all components may lead to some redundancy of information about how a candidate meets the *Standards*, there are other benefits such as increased internal reliability of data.

The Assessment Centre is feasible to manage. The tasks developed were searching but fair, and candidates responses were predictive of their ability to meet the *Standards*. The Centre should be able to be located in any appropriate setting.

The Portfolio can provide valid and sufficient evidence about a candidate's knowledge, capability and commitment as a teacher of mathematics. It is relatively straightforward, if time-consuming to assess, but a reliable assessment is possible. While the Portfolio is time-consuming in itself to compile, it tends to reflect the broad range of *Standards* required of HAToM, and reducing its scope would probably lessen its effectiveness as a source of evidence. Importantly, the experience of assembling a Teaching Portfolio is considered by candidates as a worthwhile professional development experience in its own right. It provides an opportunity to compile a broad picture of one's teaching and to reflect on this towards one's further development as a teacher.

The Interview is an important part of the assessment process, with benefits both for those who achieve accreditation and those who do not meet all *Standards*. Conducting it by teleconference is feasible and effective.

The Candidates' overall responses

In preparing for the assessment, candidates acknowledged the important role of the material sent to them for guidance in compiling their Portfolios and of the role of mentors. For this Project, candidates were generally satisfied with the quality of support provided to them through mentoring and the provision of written guidance and advice, although it was not always there when first needed.

Overall, candidates felt positively about the assessment process, despite at times feeling frustrated or anxious, with reservations about the time available and the hard work required. Several stated that they felt the process helped to affirm their status as a good teacher and that it was valuable and confidence boosting. Indeed, in collecting documentation in the form of references, some candidates were genuinely and pleasantly surprised at how highly thought of they were in some quarters. They universally felt that the assessment process had helped to provide them with informed feedback about their teaching and an opportunity to document an accurate picture of their teaching. In other words the experience of undertaking the assessment was valuable in its own right.

The Assessors' overall responses

Assessors appreciated that the Assessment Training Workshop:

- built on and respected their existing skills;
- maintained a good balance between theory and practice;
- gave them an opportunity to contribute, question, clarify and fine-tune the assessment process;
- encouraged open discussion and was not narrowly agenda-driven;
- acknowledged the history of the Project; and
- was collaborative in style.

Their main concern was not having enough example Portfolio items to work through. They felt quite confident to fulfil the role of Assessor as a result of the Workshop (since through simulated assessment exercises their assessments had proven to be effective and reliable).

The experience of assessing candidates was highly positive for the Assessors. When asked about the assessment process, they used words such as 'revelatory', 'delighted', 'overwhelmed', 'amazed', 'impressed', 'inspiring', 'uplifting', 'humbling' and 'valuable' to describe their main reaction. They were impressed with the ability of the process to reveal the very high quality of the candidates' work as teachers, and were grateful for the opportunity to learn about talented colleagues in an 'interesting' way. They felt that assessing the candidates was a good learning process, as it forced them to reflect on their own professional status in relation to the *Standards*. In other words the assessment process proved to be an excellent professional development experience for the Assessors.

Is this approach sustainable?

The approach can only be sustainable if there is a sufficient pool of candidates for whom the benefits of undertaking the assessment outweigh the costs. The Project provides some insight into likely costs for candidates:

Time: Likely to be a minimum of 70-80 hours (50-60 hours for the Portfolio; 20 hours to prepare for and take part in the Assessment Centre and Interview, and for general preparation and administration).

Money: Likely to be a minimum of \$1 200 (allows for payment to Assessors for their work, a contribution to the ongoing training of Assessors, AAMT administration and other personal costs such as stationery, postage etc.).

The benefits identified by these Candidates are their professional learning, affirmation of their work by their peers and recognition in their school community.

In the current climate, a monetary cost of over \$1 000 to the individual would outweigh these benefits for the vast majority of teachers. A financial incentive such as promotion, reclassification, a salary increment or some other emolument would make the process more appealing, as would arrangements to subsidise the monetary costs of assessment through scholarship schemes funded by employers, education authorities, unions, institutes of teaching or the private sector.

Questions still remaining / ideas

Because of the constraints and conditions imposed on the conduct of this Project there are some other questions that remain unanswered:

- Is there a problem of access and equity for teachers in non-urban areas or as a result of costs of assessment?
- Are some teachers advantaged because they teach in a setting where performance reviews are required, where teaching portfolios are expected to be kept and documentation encouraged?
- What processes need to be established for those who are assessed as not meeting all of the *Standards* at the time of assessment?
- What structures and processes are needed to maximise the support that mentors can provide?

Addressing these and other questions will be important for the AAMT in any future programs that use its Assessment Model.

Conclusion

The TSAEP has significantly advanced the AAMT's capacity to undertake valid and reliable assessment of teachers against its *Standards for Excellence in Teaching Mathematics in Australian Schools*. The Assessment Model has worked well in this pilot, and a range of materials and processes has been developed to assist its use in the future to identify and reward *Highly Accomplished Teachers of Mathematics*. The Project and its findings are recommended for consideration by those with an interest in teacher quality, standards and professionalism.