



Highly Accomplished Teacher of Mathematics (HAToM) 2005 – Guidelines

Introduction

These Guidelines describe the components of the assessment process for the HAToM credential. It is a working document that will be updated to ensure it provides maximum assistance to you as a Candidate.

Please contact the AAMT Office (08 8363 0288; office@aamt.edu.au) if you need clarification or more details.

The Written Assessment

Note: Satisfactory completion of the Written Assessment is required in order to progress to the Portfolio and Interview stages of the credential.

A two (2) hour paper, although you can take up to three (3) hours if you wish, under normal examination conditions (i.e. without any form of written or verbal assistance except the *Standards* document). If a computer is used to type responses it must not be connected to the Internet.

The paper consists of four (4) items, and will be posted to your Principal, who will need to arrange a suitable time and venue for the paper to be undertaken. The Principal will then return the paper to the AAMT office by post. You should keep a copy of the paper and your responses.

Each item will probe your knowledge of mathematics and its teaching/learning. Other areas of the *Standards* will be probed through the context of some of the items that address:

- Community engagement
- Personal attributes/beliefs/commitment
- Working with colleagues
- Creating positive learning environments

The items will be matched to the area of expertise you nominate. There will be four choices — Early Childhood, Primary, Secondary (to year 10) and Secondary (post year 10).

The intention of the Written Assessment is to reveal the extent of your professional knowledge and skills base, possible decisions you might make and the reasons for making them, via simulated 'teaching situations'. Polished responses will not be expected.

You will be provided with feedback on your responses. You will then be invited to proceed further if the Coordinating Assessor is satisfied that you have a reasonable chance of successfully meeting the Standards in the Portfolio and Interview stages. If not, the Chair of the NPSCM (or his/her

nominee) will counsel you on the possibilities for your next step based on the advice provided by the Assessors.

Example items are available through the AAMT website.

The Portfolio

About the Portfolio

There are five compulsory components of the Portfolio that you need to submit for the credential. Each component must be annotated against the *Standards*. The components are:

- **Professional Journey** — a brief (≤ 2500 words) reflection on your professional life as a teacher of mathematics.
- **Current Teaching and Learning Practices** — a documented example of your current/recent classroom work.
- **Case Study** — a documented example of your efforts over time to address a particular issue(s) with one or a few students.
- **Validation** — some ‘objective’ material that attests to the real ‘you’ as a teacher (e.g., video or audio tape of you teaching; a report on a structured observation by a peer)
- **Documentation** — material you have collected which provides further evidence of your achievement of the *Standards*.

Your annotations should identify both the actual *Standards* to which you believe the material is relevant and how the evidence you provide demonstrates your achievement of the *Standards*.

You may submit additional items if you wish, but these must be accompanied by a rationale that justifies that inclusion. Extra items are worth the extra time and effort *only* if they relate to an unusual aspect of your teaching that you feel is important to highlight. As with the other components, it is important to clearly link the material presented to the *Standards*. Please seek the advice of others (e.g., a mentor, the Coordinating Assessor assigned by the NPSCM) before deciding to produce and include extra component(s).

Presenting the Portfolio

Three copies of the full Portfolio should be submitted to the Coordinating Assessor at the AAMT address. All Portfolio components that can be submitted in hard copy should be so submitted. Examples of material acceptable in other forms are analogue or digital video/audio tape, digital video/audio files on CD, PowerPoint presentations and software programs developed by the candidate. You should check with the AAMT office prior to submission that the Assessors can access non-hard copy material.

The Verification Form will contain the candidate’s guarantee that the work is authentic. The software requirements to view movies or play audio on CDs should be clearly identified on the Verification form.

Materials will only be used for assessment purposes. Two copies will be returned to you after the Assessment is complete; one will be kept by the AAMT.

You will be provided with feedback on your Portfolio. You will then be invited to proceed further if the Coordinating Assessor is satisfied that you have a reasonable chance of successfully meeting the *Standards* through undertaking the Interview stage. If this is not the case, the Chair of the NPSCM (or his/her nominee) will counsel you on the possibilities for your next step based on the advice provided by the Assessors.

Portfolio Components: Professional Journey

Through presenting your professional journey you have the opportunity to provide an account of your own professional development throughout your teaching career and to highlight your strengths as a teacher of mathematics.

This component will be a good means for demonstrating your achievement in relation to Standards 2.1, 2.2 and 2.3 in particular.

Format/Contents

Your Professional Journey will be a written paper of no more than 2500 words. It will contain a description of the major influences and milestones in your teaching of mathematics in your career thus far. The description should be reflective in nature, with clear links to the *Standards*.

What you include will be your decision, but you should consider including the following elements:

- A chronology to reflect your professional development up to this time in your career;
- Brief discussions of the major influences that have shaped you professionally;
- Identification of particular milestones in your career;
- Connections to other evidence that you have included in your portfolio;
- Reflections on your responses to the professional development situations you have experienced.

Portfolio Components: Current Teaching and Learning Practices

This component of your Portfolio will provide evidence of your work with a whole class. It probably will not consist of a single lesson, but is more likely to encompass class work that has taken place over a week or two.

The aim of this entry is to enable you to demonstrate how you plan for students' learning and the sorts of learning experiences that students actually undertake. It is important that you show how student learning improved as a result of your teaching strategies — hence the suggested timeframe of a week or two.

This component will be a good means for demonstrating your achievement in relation to Standards 1.1, 1.2 and 1.3; 3.1, 3.2, 3.3 and 3.4, in particular.

Format/Contents

This section might include:

- Planning documents;
- Worksheets and descriptions of 'hands on' activities;

- Some illustrative examples of students' work;
- Assessment examples (schedules, tests and marking schemes, self-assessment schemes, peer-assessment schemes, assignments, projects etc.);
- Other items that you consider suitable.

A short section on background / context should include a description of such things as the class setting (mixed ability, single sex, composite class etc.) as well as specific information on the students themselves (age, grade, information on 'where they are at' in the context of the intended learning).

You should also include a Reflective Statement on the whole activity (no more than 2 pages). This should include:

- A discussion of student engagement, student performance against what was expected and against previous teaching and learning activities, level of guidance provided during the unit.
- Annotation against the *Standards*.

Portfolio Components: Case Study

The Case Study component will be a written report of an in-depth study, over a period of two months or more, of two or more students in the classroom. It is an excerpt from a teaching situation that focuses on and describes one or more specific teaching and learning strategies or areas of study.

The aim of the Case Study is to allow you to demonstrate your skills in identifying and working on learning issues for individual students over a sustained period of time.

This component will be a good means for demonstrating your achievement in relation to Standards 1.1 and 1.3, 3.2, 3.3 and 3.4, in particular.

Contents/Format

Your Case Study must provide clear evidence of purpose in the manner of delivery, choice of learning opportunities provided and assessment of the progress student(s) make in a specific topic, process or area of study.

The Case Study consists of two elements — a description of an intensively studied event or events and an explanation of how these events came about. You could use your Case Study to provide evidence addressing:

- General teaching and learning issues;
- Social/cultural factors that influence these students' learning of mathematics;
- Students' confidence levels;
- Innovative teaching strategies;
- The ability to meet individual student needs;
- Assessment strategies; and
- Any other factor(s) relevant to your accomplishment as a teacher.

The report may be presented in a variety of ways but suggested sections are:

Title: the specifics of the Case Study itself

Background or Context: This should include a description of such things as:

- The class setting: mixed ability, single sex, composite class etc.
- Specific information on the students themselves i.e. age, grade, information on 'where they are at' in the context of the Case Study.

Rationale: a brief analysis of why this specific study was chosen.

Implementation: a description of the methodology including timelines, methods of data collection, etc.

Commentary: A reflective comment on the process including annotations pointing to the relevant *Standards*. This may include diary notes, points of interest, points of elaboration, relevant data on the student's learning (or lack thereof), relevant data on the student's situation on particular days i.e. last period Friday, first attendance after illness, absent locker key, 'dog ate my homework' type excuses.

Conclusion including impact should include:

- Reflection and evaluation of whether teaching and learning activities were appropriate/successful measured by the progress or otherwise of the student with respect to the specified goal;
- Any other demonstrable affective changes;
- An outline of the next step in this student(s) mathematics learning;
- An indication of whether this approach could be used in the future with similar students, or if not, what modifications would be made.

Portfolio Components: Validation

The Validation component will provide some 'objective' evidence of your daily professional practice in teaching mathematics, gained from a single 'snapshot' of a lesson.

This component will be a good means for demonstrating your achievement in relation to Standards 1.3, 3.1 and 3.3, in particular.

Contents/Format

You have several options and will need to choose one of the following:

- A video (digital or analogue) of an entire lesson segment of at least 30 minutes duration, accompanied by a written annotation of not more than two A4 pages, linked to the *Standards*.
- An audiotape of an entire lesson segment of at least 30 minutes duration, accompanied by a written annotation of not more than two A4 pages, linked to the *Standards*.
- A written report from a colleague of a lesson(s) they observed you teach, accompanied by your written annotation of not more than two A4 pages, linked to the *Standards*.

A short section on background/context should include a description of such things as the class setting (mixed ability, single sex, composite class etc.) as well as specific information on the students themselves (age, grade, information on 'where they are at' in the context of the intended learning)

The evidence you provide should address:

- Verbal interaction with the class (using appropriate language, questioning techniques, discussion techniques);

- Types and appropriate level of activities;
- Pace and delivery;
- Concept development (that students are further 'down the line' than they were at the start of the lesson);
- Classroom management (discipline, positive reinforcement, rapport with students); and
- Positive promotion of, and enthusiasm for, mathematics.

The annotation should provide:

- A rationale for the lesson (why particular activities were chosen, where the lesson was located in a unit/topic/sequence, etc)
- Evaluation/reflection on lesson aims and outcomes
- How this lesson influenced what came next in the students' learning?
- Clear links to the *Standards*.

Portfolio Components: Documentation

The Documentation component will consist of a collection of materials that give a picture of your achievements as a teacher. Others may have provided them to you throughout your career. The purposes of this item are to provide you with more flexibility in the type of evidence you can present, and to provide evidence from a variety of sources supporting your claims.

This component will be a good means for demonstrating your achievement in relation to Standards 2.1, 2.2 and 2.3, in particular.

Contents/Format

As you will provide documents from different sources and a variety of media, it is impossible to set a format for these documents in terms of their individual length or font size, etc. The types of evidence that are expected are references, testimonials, certificates, evaluations of workshops or professional development sessions presented, etc.

This component allows you to address any Standard that you believe has not come across sufficiently strongly in other components, and also provides you the opportunity to emphasise a particular area of strength.

There should be not more than ten (10) pieces of material in this section.

Annotations must clearly link each piece of documentation to the *Standards*.

The Interview

The Interview will take place after your Portfolio has been assessed. At least two weeks prior to the Interview date, you will be given an outline of the issues the Assessors wish to explore with you. They will advise you of the particular areas in which further evidence of achievement of the *Standards* is sought. You may also provide more physical material on these areas directly to the Assessors if you wish.

The Interview will normally be held by teleconference and will likely take approximately 30-45 minutes at a time negotiated as convenient to you and the Assessors. You should be alone in a quiet room and free of interruptions.

You should have your original Portfolio with you. There are no restrictions on the other material that you can have to hand during the Interview.

After the Interview

The Assessors will make a recommendation to the NPSCM on whether you have successfully met all the *Standards* or not. The NPSCM will consider the Assessors' recommendation, and communicate their decision to you. You will also receive detailed feedback on your overall candidacy.

For those who have not met all of the *Standards*, the Chair of the NPSCM (or his/her nominee) will counsel you on the possibilities for your next step based on the advice provided by the Assessors.