# **AAMT Comments on the National Curriculum in the Senior Secondary Years Position Paper**

Note: The AAMT appreciates the extension of time that enables the Association to present its comments on the paper. Further, the AAMT again acknowledges its appreciation that the Association has been involved and invited to make comments as the work of ACARA progresses. We look forward to continuing to be able to provide input at important phases on the work to develop the Australian Curriculum.

#### Overview

The development of national curriculum under the auspices of the Australian Curriculum and Assessment Authority (ACARA) puts education in this country in a new 'space'. It is a move that the Australian Association of Mathematics Teachers Inc. (AAMT) supports. Perhaps the most difficult matter that members of the AAMT are currently confronting is the divide between 'development' – ACARA's responsibility – and 'implementation' – the responsibility of jurisdictions and schools – that is characteristic of this new environment.

Historically, development and implementation have resided in the same place and essentially sat together. Take, for example, the matter of the use of technology in mathematics teaching, learning and assessment. Each state has its own version of a coherent approach across its syllabuses, teaching and learning advice, and assessment practices. This has been achieved because all the relevant documentation has been developed within the jurisdiction. Yet the *National Curriculum in the Senior Secondary Years Position Paper* – and other draft mathematics material – is completely silent on this matter.

ACARA has been consistent in distinguishing between its work to develop curriculum and the jurisdictions' responsibility to implement same. Among other things, the *Position Paper* is very careful in ruling the line between development and implementation. As a result, its silence on the matter of technology in mathematics is completely understandable if the matter is viewed as relating to implementation (a position that the AAMT disputes; see below).

However, given that all readers come from the heritage of expecting to see the whole picture, many of the comments on the paper have related to what it doesn't say about matters of implementation. This mismatch between what people expect to see in this or other documents and what ACARA documents can say is a continuing fact of life, given the division of responsibilities between it and the jurisdictions. This division needs to be seen as dynamic – the AAMT would argue that the benefits of national consistency require as much commonality as is possible in terms of implementation and assessment and look forward to effective 'governance partnership' (para. 58) as the way forward.

The AAMT's comments on the paper focus only on what the paper says, and what in our view it should say. The comments and suggestions reflect our specific interest in matters relating to mathematics.

#### Key comments on aspects included in the paper

- The descriptions of the four mathematics courses (para. 25) need much more elaboration of the 'pathways', and to commit to justifying content in relation to these.
- Whilst there is broad acceptance of the concept of four courses in a global sense, the incapacity of smaller schools to offer all these is a likely reality. This will ensure that existing issues of equity and access remain, and may be exacerbated. There is also a concern that providing well-prepared teachers for a large number of mathematics courses at the senior level will further reduce schools' capacity to appropriately staff classes in the junior secondary year.
- There seems to be some confusion in para. 30 in the use of the terms 'subject' and 'course'.
- The reference to a range of time allocation ('50-60 hours' for a semester unit' para 31) is potentially problematic in terms of national consistency. The time spent on mathematics by a student doing the two higher level courses could vary by as much as 40 hours over two years (four semester units). It is suggested that a single number of hours be specified as the minimum.

## Some suggestions for improving the paper's capacity to guide curriculum development

- The paper should take a more definitive stance on matters of equity and inclusion. The mathematics curriculum must play a part in achieving the expectations of the National Declaration on Educational Goals that the senior secondary years of schooling:
- '...should provide **all** students with the high quality education necessary to complete their secondary school education and make the transition to further education, training or employment' (p. 12; our emphasis) The mathematics curriculum anticipated from the Position Paper will to some extent reflect the status quo that has resulted in MCEETYA's need to specify this expectation for change. There is

an important and urgent need to further consider and elaborate how the senior years mathematics curriculum will be part of this expectation of the National Declaration.

- There is sufficient research evidence (see the MERGA submission) at this stage of the 21st century for the effective and beneficial use of technology in mathematics to be addressed as a curriculum issue, not confined to considerations on implementation (and so left at the discretion of the jurisdictions).
- There should be more explicit discussion of the interaction of the curriculum in the senior years with Vocational Education and Training.

### Submission presented by:

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