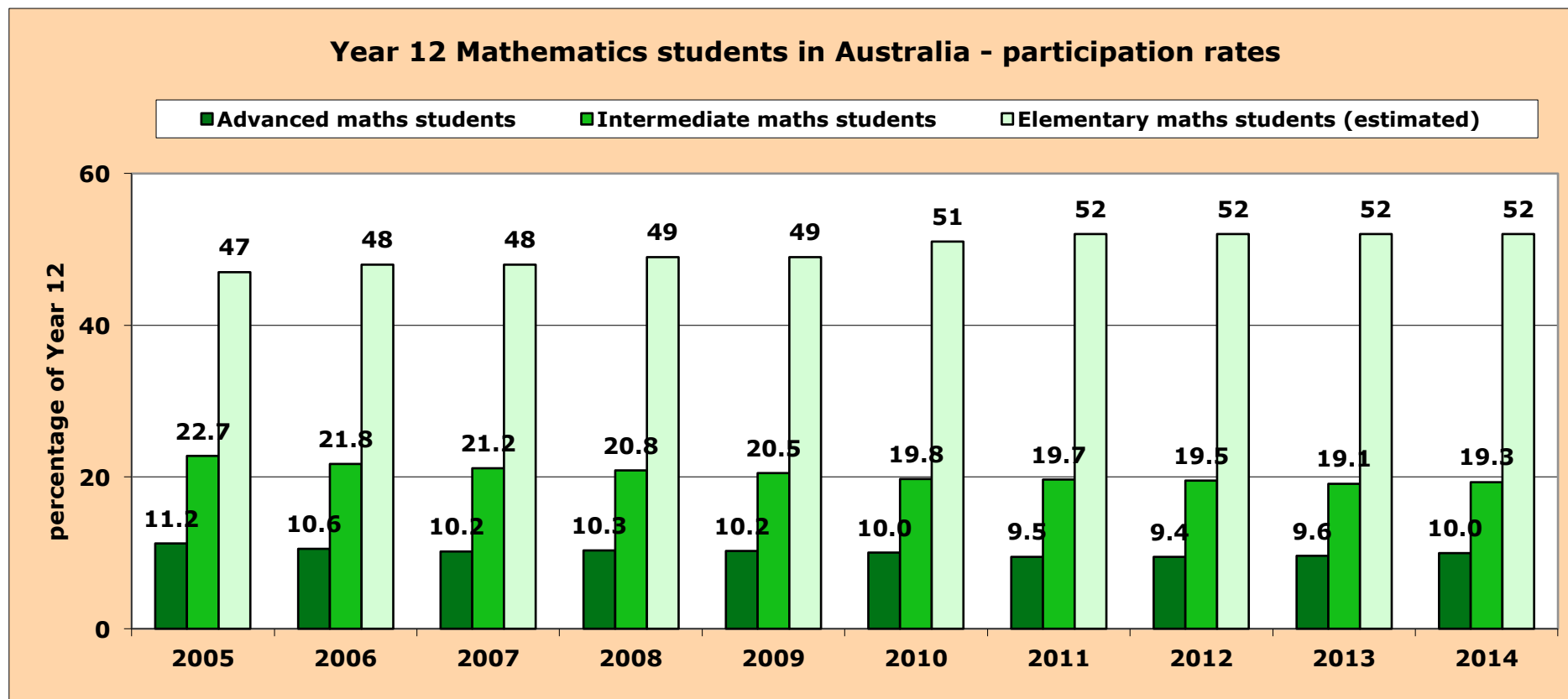


AUSTRALIAN MATHEMATICAL SCIENCES INSTITUTE

YEAR 12 MATHEMATICS PARTICIPATION RATES - THE LAST TEN YEARS

This summary for the ten years 2005 to 2014 inclusive is of all Year 12 mathematics students enrolled through the secondary boards of studies in the six states (NSW, VIC, QLD, WA, SA, and TAS) and in the two territories (ACT and NT) together with Australian IBO (International Baccalaureate) students.

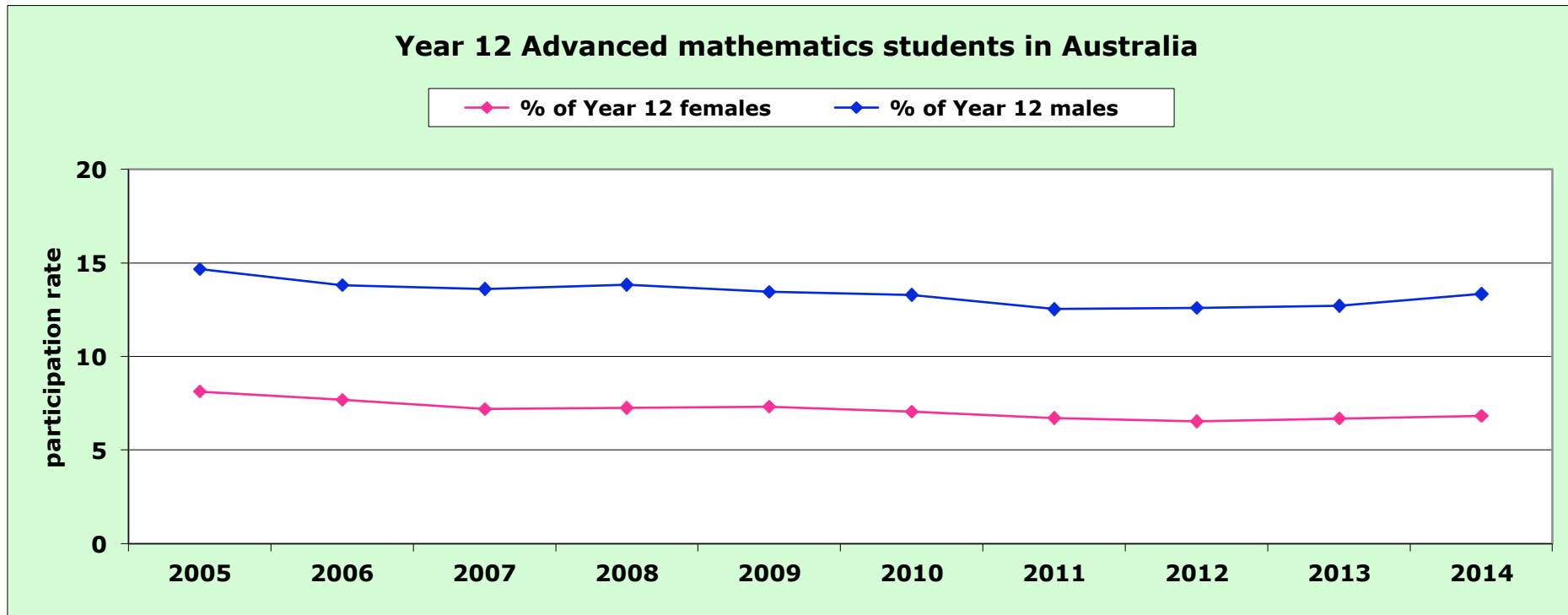


Some gender differences are noted below.

ADVANCED MATHEMATICS STUDENTS

We are pleased to report that the actual NUMBER of Australian Advanced mathematics students in 2014 was 21,507, the highest Advanced number recorded since 2005. Furthermore, the 2014 Advanced mathematics percentage participation rate of 10.0% is up from 9.6% in 2013. This is the second successive rise in the Advanced rate. (The 2012 rate of 9.4% was the lowest recorded since 1995.)

Both the girls' and boys' Advanced mathematics participation rates were higher in 2014 than in 2013. The overall Advanced rate of 10.0% for 2014 is slightly less than the arithmetic mean of the female (6.8%) and male (13.4%) rates, the reason being that females outnumber males in Year 12, in the ratio 52:48 approximately.

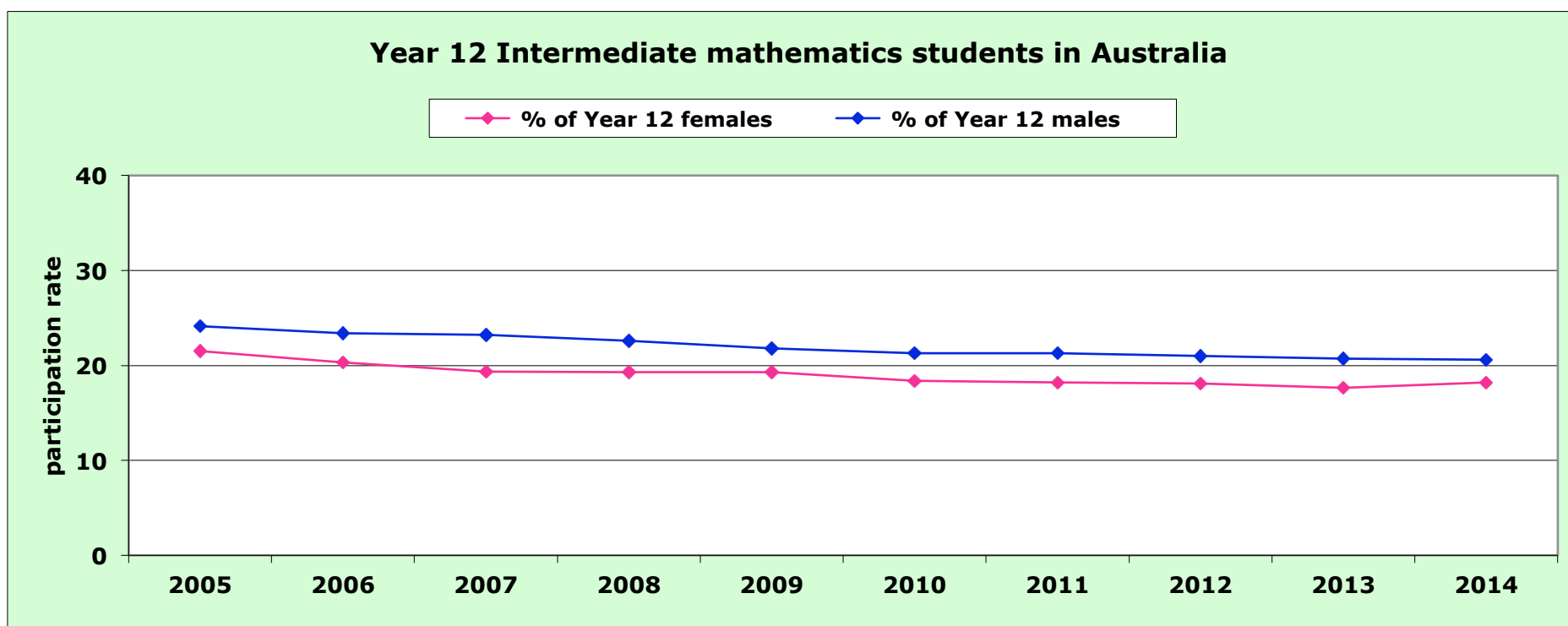


INTERMEDIATE MATHEMATICS STUDENTS

Intermediate mathematics students are those enrolled in an Intermediate mathematics subject but NOT enrolled in an Advanced mathematics subject.

Most Australian Advanced mathematics students are also enrolled in an Intermediate mathematics subject. In 2014, there were approximately 41,750 Australian Intermediate mathematics STUDENTS, while the total Intermediate mathematics ENROLMENT was almost 60,000.

The 2014 Intermediate mathematics participation rate of 19.3% is up from 19.1% in 2013, and the gap between the boys' rate (20.6% in 2014) and the girls' rate (18.2% in 2014) has narrowed.



ELEMENTARY MATHEMATICS STUDENTS

Elementary mathematics students are those enrolled in one or more Elementary mathematics subjects but NOT enrolled in an Intermediate mathematics subject NOR in an Advanced mathematics subject.

Both the male and female Elementary mathematics participation rates for 2014 were 52%.

However, as has been the case for each of the last ten years, in 2014 the NUMBER of female Elementary mathematics students clearly exceeded the NUMBER of male Elementary mathematics students, by virtue of the general female/male imbalance in Year 12 as a whole.

A graph of the female and male Elementary participation rates is uninteresting, because the male and female rates have been almost exactly the same every year for some years.

GENERAL

Overall, just over 81% of Year 12 students took SOME mathematics in 2014. Of course, many of these students took more than one mathematics subject.

Of the girls, between 76% and 77% took SOME mathematics in Year 12 during 2014.

Similarly, between 85% and 86% of Year 12 boys took SOME mathematics during 2014.

Frank Barrington
f.barrington@ms.unimelb.edu.au

Michael Evans
michael@amsi.org.au

23 September 2015