

The Health of A level Further Mathematics Provision and Participation

Entries for A level Further Mathematics have increased each year for the past 13 years. Despite a smaller cohort of students taking A levels in 2016, and a decrease of 1.7% in the total number of A levels entered, entries for Further Mathematics still increased by 1.8% compared with 2015.

Since 2003 Further Mathematics entries have grown faster than those of any other A level subject.

	2003	2016	% change
<i>ALL</i>	5315	15257	187%
<i>Male</i>	3837	11054	188%
<i>Female</i>	1478	4203	184%

The growth in participation in Further Mathematics is due both to increases in the numbers taking the subject in each school and college, and to an increase in the number of schools and colleges offering Further Mathematics.

Many HE STEM departments have concerns that emphasising the benefit of students studying AS and A level Further Mathematics will deter students and that not many schools/colleges can offer the subject, therefore there is an access or widening participation issue. This is not the case in reality. In 2016 of the 2246 state-funded schools/colleges that offered A levels (i.e. that had at least one student taking an A level examination), 66% had at least 1 student taking A level Further Mathematics. Further Mathematics was the 10th most widely taken subject at A level in 2016. Chart 1 shows the top 20 A level subjects ranked by the number of state-funded schools and colleges in England that had students taking that subject at A level. Five years ago Further Mathematics was 15th in the list.

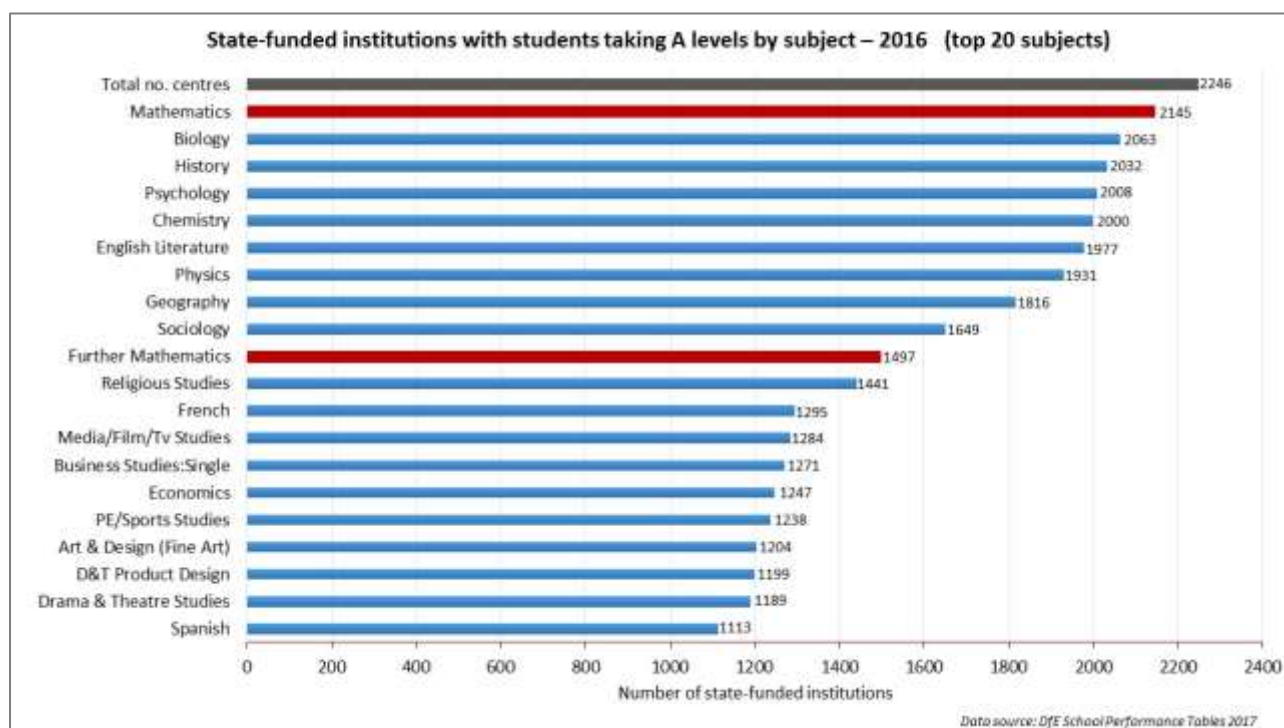


Chart 1



The opportunities for students to study Further Mathematics in state-funded institutions have never been better and are comparable with any other mainstream A level subject. In addition if a school or college struggles to offer Further Mathematics due to low numbers or teacher shortages, the Further Mathematics Support Programme is able to provide high quality resources and expert tuition support for students.

The changes to post-16 funding are causing schools and colleges to reconsider the number of subjects they offer at A level in order to satisfy the full programme requirement. The requirements of higher education are often cited as the reason for this change as school and college leaders argue that a programme of 3 subjects is sufficient for university entry. However, clear demand from universities, especially STEM departments would ensure that current levels of participation are sustained and increased further.

Kevin Lord

FMSP programme leader

Kevinlord@furthermaths.org.uk