

Mr Nick Gibb MP
Minister of State
Department for Education
Sanctuary Buildings
Great Smith Street
London SW1P 3BT

14 July 2010

Dear Minister,

FE Funding – Implications for Mathematics

We are writing to you regarding the mechanisms currently in place for funding further education and the implications of this mechanism for mathematics. I'm sure you agree that the nation's future well-being will be determined by the raising of our science, mathematics and technical skill base to meet the new economic challenges ahead. Critical to this are the numbers of students choosing A-Level Mathematics and Further Mathematics.

The new funding regime brought in from September 2008 established a new cap on the size of programmes that could be funded for students. This cap equates to broadly 4 AS or A2 subjects, tutorials and enrichment, plus some smaller qualifications such as a freestanding mathematics qualification or a wider key skill.

However, students studying on a programme of 5 AS or A2 subjects are not fully funded for their fifth choice despite there often being a good reason for such a programme for the most able students. Such combinations may include STEM subjects including Mathematics, Further Mathematics, Physics, Chemistry and Biology, or indeed any combination that involves breadth and depth in mathematics in particular. A good option for many students planning to go on to STEM degrees at university is to take up AS Further Mathematics in year 13, alongside 4 A2 subjects.

Some colleges have so far continued to allow students to choose these programmes despite incurring considerable financial penalty, because they believe it is in the best interests of the students, as well as fitting with government priorities on STEM subjects. However, the funding situation is now becoming more challenging and the cap mentioned above is to be lowered so that it is unlikely anything more than a 4 AS programme (plus tutorial) will be provided.

This will have a serious effect on Further Mathematics, as this qualification is taken by the most able students and it is they who are most likely to be affected by the cap. Thus, funding decisions put at risk the excellent increases in student numbers achieved in Further Mathematics over recent years, which are greatly valued by STEM departments in higher education and by employers.

At the moment, A Level subjects are weighted as either 'A' or 'B' – all science and practical subjects are weighted higher than the rest (Band B) but mathematics subjects are weighted

lower (Band A). As the funding mechanism is partly based on this weighting, mathematics receives a lower weighting than other STEM subjects. While we appreciate that this is partly due to the higher costs associated with practical work and laboratory needs, we would point out that mathematics has similar resource needs to psychology which as a science subject has been placed in Band B, although at A-Level it is also predominantly a classroom-based subject.

As you are aware, one of the real recent successes in promoting mathematics has been the work of the Further Mathematics Support Programme (formerly the Further Mathematics Network). During their existence, the number of entries for Further Mathematics has doubled to over 10,000 students. Moreover, the evidence suggests that there is a 'pulling up' of the numbers studying A-Level Mathematics as a result of the rise in those choosing Further Mathematics.

Therefore, while there have been recent welcome rises in the numbers of students on A-Level mathematics courses, we believe that this upward trend could continue further *if Further Mathematics was reclassified as a Band B subject*. This would be particularly helpful for colleges, as this is an important subject generally delivered in small class sizes, with the resultant cost implications for centres. The latest data show that 1/3 of all A-Level Further Mathematics entries came from centres with five (or fewer) Further Mathematics students.

We believe this reclassification, alongside continued support for the Further Mathematics Support Programme, would help sustain a continuing rise in numbers taking Further Mathematics which would also lead to further growth in the numbers taking A-Level Mathematics, with resultant benefits for learners, employers and the nation as a whole.

We would value your thoughts on this increased emphasis on mathematics at A-Level.

Yours sincerely



Professor Dame Julia Higgins FRS
Chair, Advisory Committee on Mathematics Education

Cc: Mr David Willetts MP