LONDON MATHEMATICAL SOCIETY

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Grading GCE Mathematics

The London Mathematical Society believes that QCA's proposals to replace separate qualifications in Mathematics and Further Mathematics by a 3, 6, 9 or 12 unit awards grading system for GCE Mathematics would be highly damaging to mathematics education, is very badly conceived and should be withdrawn.

It fully supports the similar concerns of ACME, the IMA and other mathematical organisations on this matter. It is also very concerned that the proposals by QCA seem to have been made without proper consultation with the mathematics community.

The current system of grades works to encourage students to do Further Mathematics A level, which is universally regarded as important not only in mathematics degrees but also in degrees with a high mathematical content, such as engineering. A common approach to selecting a student to do such a degree is for a university to insist on a high grade in single Mathematics A level but if that student is doing Further Mathematics to take a lower grade in that than if they were taking a non-maths A level. Thus it is to their advantage to do Further Mathematics (whilst not significantly disadvantaging those that do not). This is a fair system which is understood, and liked, by schools and students.

In contrast the idea of (say) equating an A in Mathematics and a C in Further Mathematics to a BB would place such students at a major disadvantage as they would not have the A grade in Mathematics. They would of course be disadvantaged in other degree course admissions as well, which insist on higher grades.

Students would, not unreasonably, be deterred from taking Further Mathematics under this system as they would be then risking their high grade in single Mathematics.

The MEI Further Maths Network is to be complimented on the great work that it has done to further the cause of Further Mathematics in particular and mathematics in general. This has led to a significant rise in the number of students doing Further Mathematics, with advantages both in widening participation into subjects with a high mathematical content and, in the long term, contributing to the future of British science, technology and industry. Certainly the proposals QCA is proposing could wreck this excellent work.

There is continuing national concern in government, industry and higher education at the low uptake of mathematics post 16, and the knock-on effect of this on uptake at university both of mathematics itself and of subjects such as engineering which depend on mathematics. This widespread and deep concern has led to the Higher Education Funding Council for England (HEFCE) to fund the 'More maths grads' project – a £3.3 million programme designed to increase and widen participation within the mathematical sciences. It is a collaboration between five mathematical organisations including the London Mathematical Society. It is the belief of the London Mathematical Society that the QCA proposals for a 3-6-9-12 grading system for GCE mathematics would undermine this project in a serious way by reducing uptake of mathematics at GCE.

The Society strongly urges the QCA not to adopt the proposals.

Professor Chris Budd Education Secretary

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