Reform of the National Curriculum in England Response to consultation by the London Mathematical Society LMS Education Committee De Morgan House 57-58 Russell Square London. WC1B 4HS

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The London Mathematical Society (LMS), founded in 1865, is the UK's learned society for mathematics. The Society's main activities include publishing journals and books, providing grants to support mathematics and organising scientific meetings and lectures. The Society is also involved in policy and strategic work to support mathematics and the mathematics research community. This work includes engaging with government and policymakers on mathematics education and research, participating in international mathematical initiatives and promoting the discipline.

The London Mathematical Society welcomes the op

Stage by stage:

On primary, we feel that under the circumstances the team has achieved a reasonable outcome, but we are concerned that the content is over-ambitious so that some of the more advanced topics will often be taught mechanistically and the key basics may not be taught with the right depth and understanding.

The KS1/2 curriculum is admirable in seeking to raise aspirations. But it must moderate its expectations, and set the bar at an achievable height (by moving significant topics to KS3 - and leaving schools to judge whether to begin to explore them in Year 6). If we fail to do this, schools will seek to deliver skills without understanding, and this will undermine the objective of raising achievement.

The best way to achieve the overall aims of the curriculum, in the context of the system and teachers we have, is to consider what curriculum, delivered by non-specialists in primary schools, can best facilitate achievement in later secondary education. This is more effective than looking for achieved content at 11, and is more likely to give better results in international test-based comparisons at particular ages than a direct aim at these tests.

On secondary the Key Stage 3 and 4 curriculum both have their merits, but each has been produced on a very rushed timescale.

We are concerned that at Key Stage 3 there is too little detail, while at Key Stage 4 too much is left to be determined by exam boards as they develop GCSE assessment.

Overall, we are happy with the broad balance, provided that the main points of the ACME position paper http://www.acme-uk.org/news/news-items-repository/2012/12/acme-launches-raising-the-bar-developing-able-young-mathematicians on developing able mathematicians are heeded. A key principle of this report is that potential heavy users of mathematics should experience a deep, rich, rigorous and challenging mathematics education, rather than being accelerated through the school curriculum.

Recommendations of this report which directly relate to the national curriculum include Recommenda

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