Westminster Education Forum Keynote Seminar

Reforms to Mathematics qualifications: new A-levels and the future of Mathematics provision post-16

Timing: Morning, Tuesday, 25th April 2017 Venue: Sixty One Whitehall, London SW1A 2ET

Agenda subject to change

- 8.30 9.00 Registration and coffee
- 9.00 9.05 Chair's opening remarks Lord Lucas

WESTMINSTER EDUCATION FORUM

9.05 - 9.40 The Mathematics post-16 review: progress so far

Professor Sir Adrian Smith, Vice-Chancellor, University of London and Lead, 16-18 Mathematics Review Questions and comments from the floor

9.40 - 10.40 The future of post-16 Mathematics: improving quality and increasing uptake

What are the chief barriers that need to be overcome in order to increase the uptake of Mathematics post-16, and how can this be achieved? How effectively do current funding mechanisms for schools and colleges incentivise uptake of post-16 Maths? What will be the likely impact of government plans to use the free school model to establish specialist Maths schools? What has been the effect so far of forced resits of GCSE Mathematics for students who do not achieve a C grade; has it raised standards? How have colleges coped with the additional demand for Maths teaching caused by the resit policy? In light of only around a third of students resitting Maths GCSE at the age of 17 achieving A*-C, what plans should be made for those who continue to fail? How successful has the implementation of Core Maths been in increasing uptake of Maths post-16 and developing students' mathematical skills, and what should be its future role in post-16 provision? Should there be an alternative post-16 Mathematics qualification that focuses on the maths skills needed for everyday life for students who fail to achieve a good grade at GCSE, as suggested by Mathematics in Education and Industry? What should be the role of universities in encouraging more pupils to pursue Maths post-16?

Susan Trigger, Executive Headteacher, Bitterne Park School, Hampshire

David Corke, Director of Education and Skills Policy, Association of Colleges

Professor Paul Glaister, University of Reading; Chair, The Joint Mathematical Council of the UK; Consultant, CMSP; External Expert, Ofqual; Member: ALCAB/ALMAB; IMA Council; The Royal Society's Advisory Committee on Mathematics Education **Mike Ellicock**, Chief Executive, National Numeracy

Dr Mary McAlinden, Member, Advisory Committee on Mathematics Education, The Royal Society and Head of the Department of Mathematical Sciences, University of Greenwich Questions and comments from the floor

10.40 - 10.45 Chair's closing remarks Lord Lucas

10.45 - 11.15 Coffee

11.15 - 11.20 Chair's opening remarks

Professor Paul Glaister, University of Reading; Chair, The Joint Mathematical Council of the UK; Consultant, CMSP; External Expert, Ofqual; Member: ALCAB/ALMAB; IMA Council; The Royal Society's Advisory Committee on Mathematics Education

11.20 - 12.10 The new Mathematics A-levels: implementation and the contribution of other subjects

What are the main challenges facing schools and colleges in the run up to the introduction of the new Maths and Further Maths A-levels in September 2017; how can they ensure a smooth transition from the new GCSEs to the new A-levels, and what lessons can be learnt from the implementation of the new Mathematics GCSEs in September 2015? What will be the impact on teaching, student performance and university admissions of decoupling Maths A-levels? How effectively do the new A-levels prepare students for higher education and careers in subjects that require mathematical skills, and what contribution can other subjects make to developing the mathematical skills of A-level students?

Mark Heslop, Head of Mathematics, Altrincham Grammar School for Boys, Greater Manchester and Member, Mathematics A-Level Content Advisory Board

Steve Brace, Head of Education and Outdoor Learning, Royal Geographical Society (with IBG) **Will Hornby**, Mathematics Subject Specialist, OCR Questions and comments from the floor

12.10 - 12.55 The Mathematics teaching workforce - recruitment, retention and continuing professional development

In light of evidence that half of schools did not have enough Mathematics teachers in September 2016, what more can be done to tackle recruitment and retention issues in Maths teaching; in particular, what incentives are needed to encourage more Maths graduates to enter teaching? How successful have attempts to date to increase recruitment been, and what examples of best practice exist? What further action would be needed in order to build the teacher capacity required for any extension of post-16 Mathematics provision, particularly in FE colleges? What will be the likely impact of the trend of schools and colleges increasingly turning to non-specialist Maths teachers, or those without teaching qualifications, to teach Maths? What more can be done to improve the professional development and support provided to Maths teachers in order to help with retention and confidence in teaching?

Jane Imrie, Deputy Director, National Centre for Excellence in the Teaching of Mathematics

Sue Southwood, Head of English and Maths, Professional Standards and Workforce Development,

Education and Training Foundation

Jocelyn D'Arcy, Trustee, Association of Teachers of Mathematics and Head of Mathematics, Warwick School, Warwickshire Questions and comments from the floor

12.55 - 13.00 Chair's and Westminster Education Forum closing remarks

Professor Paul Glaister, University of Reading; Chair, The Joint Mathematical Council of the UK; Consultant, CMSP; External Expert, Ofqual; Member: ALCAB/ALMAB; IMA Council; The Royal Society's Advisory Committee on Mathematics Education **Michael Ryan**, Deputy Editor, Westminster Education Forum