Westminster Education Forum Keynote Seminar: Reforms to science at GCSE and A-level: implementation, practical science and support for teachers and learners

Timing: Morning, Tuesday, 5th July 2016 Venue: 1 Wimpole Street, London W1G 0AE

Agenda subject to change

8.30 - 9.00	Registration and coffee
9.00 - 9.05	Chair's opening remarks Carol Monaghan MP, Member, Science and Technology Committee

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9.05 - 9.30 Reforms to science qualifications at GCSE

Bethany Caines, Assistant Director, Curriculum and Standards, Department for Education

Questions and comments from the floor

9.30 - 10.10 Reformed science GCSEs - content and implementation

<u>Supporting the teaching of the new science curriculum with a greater focus on mathematical skills</u> **Dr Marianne Cutler**, Director, Curriculum Innovation, The Association for Science Education

Enabling cross-curricular teaching in the sciences and further increasing the uptake of science subjects at A-level Caroline Jordan, Headmistress, Headington School, Oxfordshire and President, Girls' Schools Association

Encouraging and helping more schools to offer Triple Science qualifications at GCSE

Pauline Hoyle, Associate Director, National STEM Learning Centre and Network

Questions and comments from the floor

10.10 - 10.40 Science teaching - attracting new graduates and professional development throughout the teaching career

Attracting talented science graduates into teaching

Dr David Cameron, Education Programmes Manager, The Institute of Physics

Addressing teacher shortages - the value of collaborative school partnerships

Kim Knappett, President, ATL and Science Teacher, Forest Hill School, London

Questions and comments from the floor

10.40 - 10.45 Chair's closing remarks

Carol Monaghan MP, Member, Science and Technology Committee

10.45 - 11.10 Coffee

11.10 - 11.15 Chair's opening remarks

Dr David Cameron, Education Programmes Manager, The Institute of Physics

11.15 - 11.25 Reforms to assessing practical sciences at GCSE and A-level

Lucy Rimmington, Senior Manager, Strategic Relationships, Ofqual

11.25 - 12.05 Practical science at GCSE and A-level - assessment, delivery and practical science skills

In what ways can it be ensured that there is consistency in the assessment of practical skills across all sciences? How can concerns be addressed that the new method of assessing practical skills - where the marks for practical experiments will not count towards the final mark - will lead to schools not taking practical sciences seriously? How can concerns about students not gaining the scientific skills required by industry be tackled? What more could be done to encourage creative teaching practices and embed outdoor learning and field trips in science education?

Dr Sarah Jones, Head of Education and Academic Liaison, The Association of the British Pharmaceutical Industry (ABPI) **Sharmila Metcalf**, Programme Head, Nuffield Research Placements, Nuffield Foundation

Stephen Diston, Head of Sciences and ICT, OCR

Questions and comments from the floor with Lucy Rimmington, Senior Manager, Strategic Relationships, Ofqual

12.05 - 12.55 Increasing participation in science education and promoting innovative teaching

What more could be done to grow the uptake of STEM subjects at A-level and university and improve support and encouragement for students - including those from under-represented groups, such as females? How can the teaching of science in schools be refreshed to improve enthusiasm in sciences; what are current best practice examples of innovation in this area? In what ways can schools be supported to incorporate high quality practical science experiments and outdoor learning when delivering sciences at GCSE and A-level? With ongoing concerns about the level of the engagement of STEM-reliant businesses with education and schools, how can potential employers be encouraged to engage more in curriculum development and to increase awareness of STEM-related careers?

David Lakin, Director of Programme Development, STEMNET

Professor Yang Gao, Professor of Space Autonomous Systems, Surrey Space Centre, University of Surrey

Jim Langley, Member, Institute for Outdoor Learning and Director, Nature's Work **Peter Finegold**, Head of Education and Skills, Institution of Mechanical Engineers

Questions and comments from the floor

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

Dr David Cameron, Education Programmes Manager, The Institute of Physics **Dieuni Welihinda**, Forum Lead, Westminster Education Forum