# Westminster Education Forum Keynote Seminar: Next steps for science education and STEM skills provision - participation, teaching and progression to higher level study

Timing: Morning, Monday, 9th October 2017

Venue: Hallam Conference Centre, 44 Hallam Street, London W1W 6JJ

Agenda subject to change

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

Layla Moran MP, Liberal Democrat Spokesperson on Education

#### 9.05 - 9.25 Science in secondary schools - assessment and regulation

Sarah Old, Senior Manager, Standards, Ofqual Ouestions and comments from the floor

## 9.25 - 10.00 Reformed science GCSEs - assessing the first year of teaching

What lessons can be learnt following the completion of the first full year of teaching the reformed science GCSE? What future position should practical science take in GCSEs? Have students been effectively prepared for the greater emphasis on mathematical skills in the reformed

Marianne Cutler, Director, Curriculum Innovation, The Association for Science Education

Heidi Faure, Principal, Rosedale College, Middlesex

**Neil Wade**, Lead Subject Advisor, OCR Questions and comments from the floor

#### 10.00 - 10.10 Science education at secondary level - current initiatives, teacher development and future priorities

Yvonne Baker, Chief Executive, National STEM Learning Centre

## 10.10 - 10.45 Priorities for the science teaching profession - recruitment, retention and Continuing Professional Development (CPD)

In light of the £12.1m investment announced in December 2016 to improve science teaching over the next three years, how can schools effectively utilise the additional funding? Beyond the provision of bursaries, what further options could be considered in motivating science graduates to enter teaching? Amidst concerns that teacher workloads are driving down retention rates, what more could be done to tackle challenges relating to the recruitment and retention of science teaching staff? With investment being put into improving the teaching of science in schools and ongoing concerns surrounding workload, what further support can teachers receive in order to be able to take time to engage in Continuing Professional Development? What potential problems can local delivery groups avoid, when rolling out a larger CPD programme under the umbrella of the Science Learning Partnerships in the years up to 2019?

Charles Tracy, Head of Education, Institute of Physics

David Shakespeare, CPD and Education Consultant, Square 2 Learning

Dr Julie Bélanger, Research Leader, RAND Europe

Questions and comments from the floor with Yvonne Baker, Chief Executive, National STEM Learning Centre

## 10.45 - 10.50 Chair's closing remarks

Layla Moran MP, Liberal Democrat Spokesperson on Education

10.50 - 11.15 Coffee

### 11.15 - 11.20 Chair's opening remarks

**Baroness Sharp of Guildford** 

#### 11.20 - 11.25 Innovative science teaching and embedding outdoor learning into science education

Elaine Skates, Chief Executive, Council for Learning Outside the Classroom

# 11.25 - 12.15 Improving STEM skills provision and increasing participation in science: diversity, progression to A-levels,

### higher level study and science as a career

With renewed emphasis placed on boosting STEM skills in the Modern Industrial Strategy, what provisions can be made for schools to directly promote greater uptake of science at both A-level and at university and consequently to encourage greater numbers of students into careers in science? What factors should be considered in promoting the participation of under-represented groups such as girls in science - including girls' decisions around choosing science, the influence of parents and extrinsic factors such as the direct benefit and impact of a science career on a community? What lessons can be learnt by secondary schools from high-profile media campaigns and initiatives to generate enthusiasm for studying science from a young age? How can employers play a larger role in curriculum development and the provision of science in schools? In light of plans to overhaul technical further education and to devise 15 new routes of vocational training, what further role can be played by schools and careers advisors pre-16 in increasing uptake and interest in science-related fields and improving STEM skills provision?

Charlotte Avery, Headmistress, St Mary's School, Cambridge and President, Girls' Schools Association

Peter Finegold, Head of Education and Skills, Institution of Mechanical Engineers

Joanne Gogerly, Operations Manager, Siemens Professional Education, Siemens

Cerys Griffiths, Executive Editor, BBC Learning

Professor Nazira Karodia, Dean, Faculty of Science and Engineering, University of Wolverhampton

Questions and comments from the floor with Elaine Skates, Chief Executive, Council for Learning Outside the Classroom

## 12.15 - 12.55 Secondary school science in context - careers, diversity and industrial strategy

Dr Rosalind Mist, Head of Policy, Education, The Royal Society

Dominic McDonald, Head of Education, The Royal Institution

**Lord Winston**, Professor of Science and Society and Chair, Science Communication, Imperial College London

Questions and comments from the floor

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

**Baroness Sharp of Guildford** 

Sean Cudmore, Deputy Editor, Westminster Education Forum

