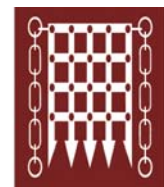


Westminster Higher Education Forum Keynote Seminar: Developing the next generation of scientists and engineers

Timing: Morning, Tuesday, 3rd June 2014

Venue: Royal Aeronautical Society, No.4 Hamilton Place, London W1J 7BQ



WESTMINSTER
HIGHER EDUCATION
FORUM

Agenda subject to change

- 8.30 - 9.00 Registration and coffee
- 9.00 - 9.05 **Chair's opening remarks**
Meg Munn MP, Vice-Chair, All-Party Parliamentary Engineering Group
- 9.05 - 9.35 **The Review of Engineering Skills - outcomes and next steps for policy**
Professor John Perkins, Chief Scientific Adviser, Department for Business, Innovation and Skills
Questions and comments from the floor
- 9.35 - 10.25 **STEM in schools - curriculum, practical lessons, careers information and teaching**
What can be done to encourage more young people, particularly girls, to study STEM subjects at GCSE, A-level and beyond? How well do the new National Curriculum programmes of study in Science, Maths, Computing and Design Technology link together for cross-curricular STEM teaching? What steps should be taken to address concerns around the lack of practical science lessons in schools? Has the removal of Key Stage 2 tests in science had an impact on the amount of teaching time allocated to the subject in primary schools? Will the new formal role for Russell Group universities in developing A-level course content result in students being better prepared for the transition to studying STEM subjects at undergraduate level? What can other STEM sectors learn from the Tomorrow's Engineers Employer Engagement Programme, singled out for praise in the Perkins Review, in engaging and inspiring young people about the possibilities of careers in various STEM fields? Will the new bursaries for Maths and Science teachers be enough to encourage top graduates in these fields to take up teaching? What more can be done to get specialist science teachers into primary schools?
Professor Louise Archer, Professor of Sociology of Education and Principal Investigator, ASPIRES research project, King's College London
Brian Cartwright HMI, National Lead for Science, Ofsted
Tim Bowker, Head of Physics, Bodmin College, Cornwall
Liz Ebbs-Brewer, Associate Director, Attraction, Graduate Recruitment, Teach First
Questions and comments from the floor
- 10.25 - 10.30 **Chair's closing remarks**
Meg Munn MP, Vice-Chair, All-Party Parliamentary Engineering Group
- 10.30 - 10.55 Coffee
- 10.55 - 11.00 **Chair's opening remarks**
Lord May of Oxford, Emeritus Professor, Zoology Department, University of Oxford, former Chief Scientific Adviser to HM Government and former Head of the UK Office of Science and Technology
- 11.00 - 11.15 **Policy and funding to support STEM studies in Higher Education**
Lis Edwards, Senior Higher Education Policy Adviser, North, HEFCE
- 11.15 - 12.05 **STEM in HE - widening participation, funding and meeting industry needs**
How can colleges and universities increase applications to STEM degree courses, particularly amongst female students and those from disadvantaged backgrounds; what role should learned societies, Sector Skills Council and industry play in this? What is the potential for University Technical Colleges (UTCs) with STEM specialisms to provide a vocational route to HE STEM courses in on a nationwide scale? Is the current system of £9,000 annual tuition fees plus HEFCE support for the expense of running STEM courses sufficient in order for universities to fund world-leading facilities, staff and other teaching resources; how else might institutions seek to secure funding for courses, for example through industry-links? To what extent are undergraduate STEM courses providing students with the practical knowledge and skills required by employers? What can be done to encourage more employers to provide STEM students with more opportunities to take up work placements, internships and 'years in industry' in order to better prepare them for the workplace?
Melanie Radford, Principal, University Technical College Cambridge
Dr Gordon Mizner, Chief Executive, Engineering Development Trust
Dr Coorous Mohtadi, Senior Academic Technical Specialist, MathWorks
Dr Lisa Jardine-Wright, Co-Director, Rutherford Schools Physics Project and Educational Outreach Officer, Cavendish Laboratory, University of Cambridge
Questions and comments from the floor with **Lis Edwards**, Senior Higher Education Policy Adviser, North, HEFCE
- 12.05 - 12.55 **Supporting STEM graduates into industry and postgraduate study**
What impact has the current postgraduate funding system had on demand for postgraduate STEM courses, particularly taught courses? How can Government and institutions ensure that students wishing to progress to postgraduate study are adequately supported, both financially and academically? To what extent will the new Government-backed CDTs (Centres for Doctoral Training) meet the needs of PhD students and early career researchers? What support, financial, mentoring or otherwise, can Government, research councils and academic trusts provide for professionals looking to return to STEM careers? What can be done to encourage more science-intensive employers to provide fellowships and funding to STEM graduates wanting to progress into academia and STEM careers? What role should Government and the HE sector play in encouraging more female STEM graduates to progress onto postgraduate study and academic careers? What potential do Higher Apprenticeships have to become an attractive alternative route into STEM careers; what needs to be done to encourage more science-intensive employers to design and deliver Higher Apprenticeships?
Dr Katie Perry, Chief Executive, The Daphne Jackson Trust
Professor Sa'ad Medhat, Chief Executive, New Engineering Foundation: The Innovation Institute
Rachel Lambert-Forsyth, Director of Education and Training, Society of Biology
Professor Philip Nelson, Chief Executive, Engineering and Physical Sciences Research Council
Questions and comments from the floor
- 12.55 - 13.00 **Chair's and Westminster Higher Education Forum closing remarks**
Lord May of Oxford, Emeritus Professor, Zoology Department, University of Oxford, former Chief Scientific Adviser to HM Government and former Head of the UK Office of Science and Technology
Jonny Roberts, Associate Editor, Westminster Higher Education Forum