



WESTMINSTER
HIGHER EDUCATION
FORUM

Developing the next generation of scientists and engineers 3rd June 2014

CONDITIONS FOR USE OF TRANSCRIPTS:

This document is intended to provide a timely reference for interested parties who are unable to attend the event to which it refers. Some portions are based on transcripts of proceedings and others consist of text submitted by speakers or authors, and are clearly marked as such. As such, apart from where it is indicated that the text was supplied by the speaker, it has not been possible for the transcript to be checked by speakers and so this portion of the document does not represent a formal record of proceedings. Despite best endeavours by Westminster Forum Projects and its suppliers to ensure accuracy, text based on transcription may contain errors which could alter the intended meaning of any portion of the reported content. Anyone who intends to publicly use or refer to any text based on the transcript should make clear that speakers have not had the opportunity for any corrections, or check first with the speaker in question. If in doubt please contact the forum first.

Contents

<u>About this Publication</u>	3
<u>Agenda</u>	4
<u>Session Chair's opening remarks</u>	
Meg Munn MP , Vice-Chair, All-Party Parliamentary Engineering Group (<i>transcript</i>)	6
<u>The Review of Engineering Skills - outcomes and next steps for policy</u>	
Professor John Perkins , Chief Scientific Adviser, Department for Business, Innovation and Skills (<i>transcript</i>)	7
Questions and comments from the floor (<i>transcript</i>)	10
<u>STEM in schools - curriculum, practical lessons, careers information and teaching</u>	
Professor Louise Archer , Professor of Sociology of Education and Principal Investigator, ASPIRES research project, King's College London (<i>transcript</i>)	16
Brian Cartwright HMI , National Lead for Science, Ofsted (<i>transcript</i>)	18
Tim Bowker , Head of Physics, Bodmin College, Cornwall (<i>transcript</i>)	20
Liz Ebbs-Brewer , Associate Director, Attraction, Graduate Recruitment, Teach First (<i>transcript</i>)	22
Questions and comments from the floor (<i>transcript</i>)	24
<u>Session Chair's closing remarks</u>	
Meg Munn MP , Vice-Chair, All-Party Parliamentary Engineering Group (<i>transcript</i>)	34
<u>Session Chair's opening remarks</u>	
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 (<i>transcript</i>)	35
<u>Policy and funding to support STEM studies in Higher Education</u>	
Lis Edwards , Senior Higher Education Policy Adviser, North, HEFCE (<i>transcript</i>)	36
<u>STEM in HE - widening participation, funding and meeting industry needs</u>	
Melanie Radford , Principal, University Technical College Cambridge (<i>transcript</i>)	40
Dr Gordon Mizner , Chief Executive, Engineering Development Trust (<i>transcript</i>)	41
Dr Coorous Mohtadi , Senior Academic Technical Specialist, MathWorks (<i>transcript</i>)	43
Dr Lisa Jardine-Wright , Co-Director, Rutherford Schools Physics Project and Educational Outreach Officer, Cavendish Laboratory, University of Cambridge (<i>transcript</i>)	45
Questions and comments from the floor with Lis Edwards , Senior Higher Education Policy Adviser, North, HEFCE (<i>transcript</i>)	47
<u>Supporting STEM graduates into industry and postgraduate study</u>	
Dr Katie Perry , Chief Executive, The Daphne Jackson Trust (<i>transcript</i>)	54
Professor Sa'ad Medhat , Chief Executive, New Engineering Foundation: The Innovation Institute (<i>transcript</i>)	56
Rachel Lambert-Forsyth , Director of Education and Training, Society of Biology (<i>transcript</i>)	57
Professor Philip Nelson , Chief Executive, Engineering and Physical Sciences Research Council (<i>transcript</i>)	59
Questions and comments from the floor (<i>transcript</i>)	61
<u>Session Chair's and Westminster Higher Education Forum closing remarks</u>	
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 (<i>transcript</i>)	68
Jonny Roberts , Associate Editor, Westminster Higher Education Forum (<i>transcript</i>)	69
<u>Comment</u>	
Dr Leigh Baxandall , STEM Coordinator and Teacher of Maths and Physics, St Marylebone CE School	
<u>List of Delegates Registered for Seminar</u>	70
<u>Contributor Biographies</u>	

About this Publication

This publication reflects proceedings at the Westminster Higher Education Forum Keynote Seminar: Developing the next generation of scientists and engineers held on 3rd June 2014. The views expressed in the articles are those of the named authors, not those of the Forum or the sponsors, apart from their own articles.

Although Westminster Higher Education Forum is grateful to all sponsors for the funding on which we depend, participation in events and publications is never conditional on being a sponsor. As well as funding ongoing operations, sponsorship enables the Forum to distribute complimentary copies of publications, and offer complimentary tickets for events, to Government Ministers, parliamentarians and officials most involved in policy.

This publication is copyright. Its copying, in whole or in part, is not permitted without the prior written consent of the publishers. However, extracts of the text may be reproduced for academic or review purposes, subject to the conditions of use outlined in the previous page, providing they are accurate, are not used in a misleading context and the author, their organisation and the Westminster Higher Education Forum are acknowledged. We would also appreciate being informed.

Westminster Higher Education Forum

UK Headquarters
4 Bracknell Beeches
Old Bracknell Lane West
Bracknell
Berkshire RG12 7BW

T: 01344 864796
F: 01344 420121
publications@westminsterforumprojects.co.uk

Directors

Peter van Gelder
Chris Whitehouse