

Next steps for STEM education and training in Scotland: widening participation, improving delivery and meeting the needs of business 26th June 2018

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, <u>apart from where it is indicated that the text was supplied by the speaker</u>, 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

About this Publication	3
Agenda	4
<u>Session Chair's opening remarks</u> Iain Gray MSP, Shadow Cabinet Secretary for Education, Skills and Science, Scottish Labour (transcript)	6
Key priorities for Scotland's STEM strategy	
Professor Iain Hunter , Research Professor, Molecular Microbiology, University of Strathclyde and Member, Scottish Science Advisory Council (<i>transcript</i>)	7
'Making Scotland a STEM nation': key perspectives on the STEM strategy	
Professor Lesley Yellowlees, Convener, Learned Societies' Group on Scottish STEM Education (transcript)	9
Polly Purvis, Chief Executive, ScotlandIS (transcript)	12
Questions and comments from the floor with Professor Iain Hunter , Research Professor, Molecular Microbiology, University of Strathclyde and Member, Scottish Science Advisory Council (<i>transcript</i>)	14
Widening participation in STEM education and careers: changing perceptions and improving diversity	
Zoe Thomson, Depute Headteacher, Woodmill High School, Fife (transcript)	22
Talat Yaqoob, Director, Equate Scotland (<i>transcript</i>) Peter Finegold, Head of Education Policy, Institution of Mechanical Engineers (<i>transcript</i>)	25 28
Questions and comments from the floor (transcript)	30
Session Chair's closing remarks	
Jession Chain's closing remarks Jain Gray MSP, Shadow Cabinet Secretary for Education, Skills and Science, Scottish Labour (transcript)	35
Sassian Chair's anoning romarks	
<u>Session Chair's opening remarks</u> Clare Adamson MSP, Convener, Cross-Party Group on Science and Technology (<i>transcript</i>)	36
Policy priorities for improving delivery of STEM education and training: new pathways into teaching and	
supporting the existing workforce	
Tom Renwick , Director, Maths on Track (transcript)	37
Martin McGuire, Principal, New College Lanarkshire (transcript)	40
Alastair MacGregor, Chief Executive Officer, Scottish Schools Education Research Centre (transcript)	42
Dr Alison Hennessy, Lecturer, STEM Education, University of Stirling (transcript)	45
Questions and comments from the floor (transcript)	47
Moving forward with the STEM strategy: priorities for business - best practice and innovative approaches	
Paul Allford, Standards and Qualification Policy Manager, CITB Scotland (transcript)	54
Ken Edwards, Education Programme Lead, Skills Development Scotland (transcript)	58
Questions and comments from the floor (transcript)	62
<u>Closing remarks</u>	
Professor Iain Hunter , Research Professor, Molecular Microbiology, University of Strathclyde and Member,	
Scottish Science Advisory Council (transcript)	63
Session Chair's and Scotland Policy Conferences closing remarks	
Clare Adamson MSP, Convener, Cross-Party Group on Science and Technology (transcript)	64
Roger Greer, Associate Producer, Scotland Policy Conferences (transcript)	65
<u>Comments</u>	
George McVerry, Head of Lifelong Learning, City of Glasgow College	66
Dr Dorothy Aidulis, Science & Education Professional	67
List of Delegates Registered for Seminar	69
Contributor Biographies	72
Please be advised that speakers' PowerPoint presentations are included within the transcript itself, just beneath the relevant speaker's text. Ple that not all speakers are able to grant permission for us to include their slides.	ase note

About this Publication

This publication reflects proceedings at the Scotland Policy Conferences Keynote Seminar: Next steps for STEM education and training in Scotland: widening participation, improving delivery and meeting the needs of business held on 26th June 2018. 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 Scotland Policy Conferences 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 Scotland Policy Conferences are acknowledged. We would also appreciate being informed.

Scotland Policy Conferences

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