UNIVERSITY OF BIRMINGHAM School of Mathematics

**STEM** Education Centre



# Where next for mathematics education in higher education?

#### A one-day meeting in honour of Professor John Blake 13 July 2017, University of Birmingham

For further details and (free) registration please visit: http://web.mat.bham.ac.uk/D.Smith/JohnBlake\_2017.htm

#### Introduction

On the 10<sup>th</sup> of June 2016 Professor John Blake passed away peacefully following a short illness. He was 69.

For over twenty years, and until his retirement in 2013, John was Professor of Applied Mathematics at the University of Birmingham, where he held the Headship of the School of Mathematics on two occasions; he was also Dean of the Faculty of Science. In addition to his world-leading profile in mathematical research, John was amongst the first true champions of teaching and learning within higher education. He established the U.K. Mathematics Courseware Consortium (MATHWISE), a ground-breaking forerunner of later innovative uses of software in teaching and learning, and went on to lead the Computers in Teaching Initiative (CTI) Centre for Mathematics. In 2000, John became inaugural Director of the highly-regarded Mathematics, Statistics & Operational Research Network under the auspices of the national Learning and Teaching Support Network. As Director, he shaped a number of important initiatives through the Network and many regard this as his greatest legacy, one that thrives to this day.

John was a passionate and committed teacher delivering a range of undergraduate courses at the University of Birmingham. In his joint foreword to the Higher Education Academy supported

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text 'Transitions in Mathematics Education<sup>1</sup>', John commented: "As lecturers, tutors and teachers, we are in a privileged position to work with young minds to support their mathematical growth. The transmission of our excitement, knowledge and understanding to our students is a complex challenge that demands considerable expertise, especially given the different mathematical backgrounds of our students, their diverse mathematical needs and career goals. Students will inevitably face barriers to their learning of mathematics. ..." John was committed to the enhancement of the learning and teaching of mathematics within higher education, and in his honour, the School of Mathematics and STEM Education Centre at the University of Birmingham, with support from the Institute of Mathematics and Applications, have organised this one-day meeting.

In the 17 years since the Maths, Stats & OR Network was established, there has been much activity to support learning and teaching enhancement, and innovation, within the mathematical sciences. In addition, higher education has undergone a period of significant change. With the recent introduction of the Teaching Excellence Framework (TEF), and changes to the national infrastructure to support discipline-based learning and teaching and the sharing of effective practices, there is a need for the mathematical community to consider the next steps and priorities for mathematics education in higher education and how these might be realised.

This one-day meeting will explore the current needs and priorities of the mathematical sciences community, and will be relevant to anyone teaching mathematics in other disciplines. It will explore how we can can continue to work together in a landscape that is much changed since John established the Maths, Stats & OR Network in 2000, to ensure we build upon his considerable legacy and in doing help students overcome their barriers to learning mathematics through a collaborative and community-wide approach.

Whileattendanceisfree,registrationinadvanceisessential:http://web.mat.bham.ac.uk/D.Smith/JohnBlake\_2017.htm

<sup>&</sup>lt;sup>1</sup> <u>http://www.birmingham.ac.uk/university/colleges/eps/STEM/Publications/Transitions-in-UG-Maths-Education.aspx</u>

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## **Outline Programme**

0915	Registration and Tea/Coffee
0945	Welcome
	Professor Andy Schofield, Pro-Vice Chancellor and Head of College of
	Engineering and Physical Science
1015	The expanding reach of the mathematical sciences and its implications for
	undergraduate curricula
	Professor Chris Linton, Deputy-Vice Chancellor (Loughborough University)
	and President of Institute of Mathematics and its Applications
1100	Where next for mathematics support?
	Professor Tony Croft, Loughborough University
1130	Graduate employability – where is its place in the mathematical sciences
	curriculum?
	Dr Stephen Hibberd, University of Nottingham
1200	Discussion
1230	Lunch & Networking
1330	Scholarship – what's the point?
	Michael Grove, University of Birmingham
1400	Assessing the value of Assessment
	Professor Jeremy Levesley, University of Leicester
1430	Even bigger challenges than Big Data
	Dr Gary Brown, Office for National Statistics
1500	Tea/Coffee
1530	Blue skies thinking in a cloudy climate
	Dr Joe Kyle, University of Birmingham
	(including discussion)
1615	Close