

Joint Mathematical Council of the United Kingdom

Annual Report for 2015

This report is for the calendar year 2015 (as required by article 10.2(a) of the JMC Constitution) with supplementary information for the period from 1 January to 30 September 2016.

Membership

Those asterisked were members of the Executive Committee.

	2015		2016
	1 Jan – 10 Nov	10 Nov – 31 Dec	1 Jan – 30 Sep
Officers			
Chair	Tim Rowland*	Paul Glaister*	
Honorary Secretary	Peter Thomas*		
Honorary Treasurer	Paul Harris*		
Participating Societies			
Representative			
Adults Learning Mathematics (from 10 Mar 2015)	Jeff Evans (from 10 Mar)		
Association of Mathematics Education Teachers	Ros Hyde*		
Association of Teachers of Mathematics	Sue Pope*		
British Society for Research into Learning Mathematics	Hilary Povey*		
British Society for the History of Mathematics	June Barrow-Green		
Conference of Heads of Departments of Mathematical Sciences	Catherine Hobbs		
Edinburgh Mathematical Society	David Pritchard		
Institute of Mathematics and its Applications	Chris Chipperton		
London Mathematical Society	Alice Rogers		
The Mathematical Association	Peter Ransom		
Mathematics in Education and Industry	Charlie Stripp		
National Association for Numeracy and Mathematics in Colleges	Sally Barton*		
National Association of Mathematics Advisers	Alice Onion (to 13 Oct) / Matt Lewis (from 13 Oct)	Matt Lewis	
National Numeracy	Lynn Churchman	Mike Ellicock	
National STEM Centre <i>subsequently</i> STEM Learning	Stephen Lyon		
NRICH representing the Millennium Mathematics Project	Charlie Gilderdale (to 17 Sep) / Ems Lord (from 17 Sep)	Ems Lord	
Operational Research Society	Charlene Timewell		
Royal Academy of Engineering	Rhys Morgan		
Royal Statistical Society	Olivia Varley-Winter (to 6 Feb) / Neil Sheldon (from 6 Feb)	Neil Sheldon	
United Kingdom Mathematics Trust	Bill Richardson		
Wales Institute of Mathematical and Computational Sciences	Stephen Williamson (to 1 Sep) / Sofya Lyakhova (from 1 Sep)	Sofya Lyakhova	
Co-opted Members			
UK Representative to the International Commission on Mathematics Instruction	Chris Budd		
BCME Committee Chair	David Martin		
Immediate Past Chair	–	Tim Rowland	

	2015		2016
	1 Jan – 10 Nov	10 Nov – 31 Dec	1 Jan – 30 Sep
Observing Societies	Representative		
Advisory Committee on Mathematics Education	Robert Barbour		Robert Barbour (to 12 Jun) / Jeremy Hodgen (from 12 Jun)
Adults Learning Mathematics (until 10 Mar 2015)	Jeff Evans (until 10 Mar)	–	
Department for Education [England]	Stephen Rogers (to 5 Oct) / Clare Fowler (from 5 Oct)	Clare Fowler	
Department of Education [Northern Ireland]	Nick Todd		Julie Harris
Education Scotland	Fiona Robertson (to 9 Oct) / Lorna Harvey (from 9 Oct)	Lorna Harvey	
The Higher Education Academy	John Craig (to 30 Jun) / Roger Brooks (from 1 Jul)	Roger Brooks	Roger Brooks (to 22 Feb) / Sean Ryan (from 23 Feb to 13 Jun) / Catherine Hack (from 14 Jun)
National Centre for Excellence in the Teaching of Mathematics	Jane Imrie		
National College for Teaching and Leadership	James O'Donoghue (to 9 Oct) / Matt Bulmer (from 9 Oct)	Matt Bulmer	
Office for Standards in Education	Jane Jones		
The Office of Qualifications and Examinations Regulation	Janet Holloway		
The Royal Society.	David Montagu		
Sector Skills Council for science, engineering and manufacturing technologies in the UK (until 5 Mar 2015)	Elinor Wallace (to 5 Mar)	–	

Dylan Jones of the Department for Education and Skills [Wales] is invited to meetings and receives papers.

Meetings

2015 The Council met on 10 March 2015, 16 June 2015 and 10 November 2015; meetings of the Executive Committee preceded the Council Meeting. All meetings were held at the Royal Statistical Society in London.

10 March 2015 A Special General Meeting was held immediately before the Council meeting to approve the accounts for 2013/14 which it had not been possible to present to the Annual General Meeting.

At the Council meeting Adults Learning Mathematics, previously an Observing Society, was admitted as a Participating Society. The Council considered developments relating to the new GCSEs in Mathematics in England, and progress with arrangements for bursaries for ICME13 and with the preparations for BCME9.

In the afternoon session Carol Copstick (Senior Education Officer) from Education Scotland gave a presentation on the Scottish Survey of Literacy and Numeracy, a joint survey by the Scottish Qualifications Authority and Education Scotland. Surveys of children in Primary 4, Primary 7 and Secondary 2 were conducted in 2011 and 2013, they were asked mathematical questions and questions about their experience of learning mathematics; questions were also asked of teachers of mathematics and other subjects. Carol Copstick also spoke about the professional development resources that Education Scotland had developed to support teachers.

16 June 2015 The Council endorsed the A Level Mathematics Advisory Board as an independent body in good standing with the JMC and enjoying its support. The Council gave further consideration to developments relating to the new GCSEs in Mathematics in England, and progress with arrangements for bursaries for ICME13 and with the preparations for BCME9. The Council also discussed the emerging findings from ACME's Initial Teacher Education project.

In the afternoon there was a presentation and discussion on the work of the National STEM Centre by Gill Collinson, Head of the National STEM Centre, and Stephen Lyon, its mathematics specialist. The presentation covered the centre's key priorities, how it supported teaching and learning. The discussion focussed on the relationship between STEM as a whole and mathematics.

10 November 2015 At the Annual General Meeting, initial consideration was given to a draft of a constitution for the JMC as a Charitable Incorporated Organisation. At the end of the meeting, Tim Rowland concluded his term of office as Chair with a reflection on his time as Chair before welcoming the incoming Chair, Paul Glaister.

At the Council meeting which followed concern was expressed about the changes to GCSE Mathematics in England and the need to monitor the implementation of those changes; it was decided to establish a GCSE Working Group to undertake that work. In the afternoon there was a discussion on A Mathematics Teacher's Professional Learning Journey led by Robert Barbour on behalf of ACME, the discussion provided input into a project ACME is undertaking on the topic.

2016 The Council met on 23 February 2016 and 14 June 2016; meetings of the Executive Committee preceded the Council Meeting. All meetings were held at the Royal Statistical Society in London.

23 February 2016 At the Council meeting there was consideration of a revised draft of a constitution for the JMC as a Charitable Incorporated Organisation. So that members might be better informed of the work of the Executive Committee, the Council agreed that summary agenda and minutes for meetings of the Executive Committee would be circulated with the agenda and minutes of Council meetings; it was also agreed that this practice would be reviewed after one year. In order that the Council did not inadvertently fail to fulfil safeguarding requirements it was agreed that the JMC would not work directly with children or vulnerable adults unless the Council has specifically authorised that work and all checks required by law had been carried out. In the afternoon there was a discussion on developments regarding GCSE Mathematics in England led by Sue Pope, Debbie Barker and Lynn Churchman.

14 June 2016 A Special General Meeting was held immediately before the Council meeting to approve a draft constitution and other provisions for the Charitable Incorporated Organisation that the JMC is seeking to become and for which application was subsequently made to Charity Commission for England and Wales in August 2016.

The Council's discussions included initial teacher education (and the inadequacy of data on the teaching workforce) in England, recent changes to the curriculum in Scotland and the JMC's relationship with the National Maths Hubs Forum. Peter Thomas was elected unopposed to serve for a further term as Honorary Secretary from after the AGM in 2016 to that in 2019. In the afternoon there was a discussion on Pedagogy for Secondary Mathematics Teaching led by Ros Hyde.

BCME Committee

The ninth British Congress of Mathematics Education (BCME9) is an integrated programme of practitioner and research sessions celebrating mathematics education planned to be held on Tuesday 3rd to Friday 6th April 2018 at the University of Warwick for 500 delegates. The BCME committee of the JMC organise this event with a Memorandum of Understanding between the JMC, ATM and the MA. The BCME Committee is chaired by David Martin with Peter Ransom as Secretary and Paul Metcalf as Treasurer and has met Tuesday 17 March 2015, Thursday 24 September 2015, Wednesday 9 March 2016 and Tuesday 27 September 2016. This committee is supported in its work by a Communications Committee chaired by Natthapoj Vincent Trakulphadetkrai, a Programme Committee chaired by Sue Pope, and a Venue Committee chaired by Karen Gladwin. The JMC is very grateful for the work of these committees and for the JMC Reference Group members who will act as a key point of contact with JMC Participating Societies for BCME9 planning. Initial work towards BCME9 has focussed on selection of venue, development of an outline programme, invitations to plenary speakers, and the creation of a new BCME website. We have welcomed the particular support from the British Society for Research into Learning Mathematics (BSRLM) to further integrate practitioner and research components of the programme. Plenary speakers so far arranged include: Professor Sir David Spiegelhalter FRS (Opening Plenary), Professor Paul Ernest (Closing Plenary), Professor Ruth Merttens, Dr Vicky Neale, Dr Hannah Fry (After Dinner Speaker) and Tom Roper (The MA Presidential Address). Sponsorship is being sought.

David Martin (Chair, BCME Committee)

ICME Bursaries Committee

The membership of the Committee comprised:

- Chris Budd, Chair, London Mathematical Society (LMS)
- Hilary Povey, Joint Mathematical Council, (JMC)
- Tony Cotton, Association of Teachers of Mathematics, (ATM)
- Janet Ainley, British Society for Research in Mathematics Education (BSRLM)
- Nigel Steele, Institute of Mathematics and its Applications (IMA)
- Peter Ransom, Mathematical Association (MA)

The criteria for the award were as previously agreed by JMC:

1. That the candidate will benefit academically and professionally from attending ICME-13 and needs bursary funds to attend ICME
2. That the candidate will contribute to UK presence at ICME-13 by attending and presenting
3. That the candidate will feed back into policy, practice or research in mathematics education in the UK

Bursaries of up to £600 were offered competitively for outstanding mathematics educators, attending and presenting at ICME-13. Applications were encouraged from the full range of those working in all areas of mathematics and mathematics education in the UK, including teachers, researchers and postgraduate students who were able to demonstrate a benefit from attending. Application was made by completing a form and supplying a supporting statement from a referee.

The LMS and the IMA generously provided £4800. There were 12 applicants. The Committee decided to award £400 to each applicant. These were Irene Biza, Jeff Evans, Rosie Everley, Jennie Golding, Racheal Horsman, Barbara Jaworski, Keith Jones, David Kaye, Mary Stevenson, Vivien Townsend, Michael Umameh and Lotta Viika.

The start of the work of the Committee was somewhat delayed which meant that requests to provide financial support were made too late for some potential funders. I suggest that the Committee for ICME-14 might usefully be formed early in 2018.

Hilary Povey (JMC representative, ICME-13 Bursaries Committee)

GCSE Working Group

At its February 2016 meeting JMC agreed to establish a working group looking at the new GCSE amid concerns about the impact of the changes on schools, teachers, learners and end users. The group distributed an initial position statement through JMC participating organisations that provoked responses from teachers and others about what was happening on the ground. The working group met to take stock, conduct a risk analysis and identify possible actions. This was shared with the JMC executive who gave the go ahead to write to Ofqual and DfE. Letters were sent in June. In September we had a fruitful meeting with Ofqual who recognised the special case of mathematics and that some subject specific messaging might be necessary. Ofqual intends to ensure compatibility with the accredited materials and comparability across the awarding organisations. A contact in DfE communications team was suggested and information has been sent, following a conversation. The meeting with DfE scheduled for September was cancelled due to illness and we have been promised an alternative in the near future.

Sue Pope (Convenor, GCSE Working Group)

ACME

The JMC has continued to work with the Advisory Committee on Mathematics Education, to mutual benefit. At each meeting of the Council, it considers an update from ACME on its work and issues of concern. The Executive Committee was joined for part of its June meeting each year by representatives of ACME to discuss ACME's Annual Report. In addition, JMC is represented formally by its Chair, or his deputy, at the termly ACME meetings when the DfE is present. JMC has also carried out its usual functions in respect of appointment of new members to ACME and review of publications.

The Royal Society is reviewing the governance arrangements for ACME in discussion with JMC and the Council for the Mathematical Sciences.

Representation

Council for Subject Associations The JMC is represented by Alison Clark-Wilson.

National Maths Hubs Forum The JMC is represented by Tony Cotton

Numeracy Forum The JMC is represented by Sally Barton.

Ofqual A Level Mathematics Working Group The JMC was represented by Sue Pope and Peter Thomas on this group which met from 16 April 2015 to 6 July 2015.

OCR Mathematics Consultative Forum The JMC is represented by David Martin.

Websites

The JMC's electronic document archives are hosted by the Open University; the JMC is very grateful to the OU and its staff for this support. The website and email server for the JMC (www.jmc.org.uk) and those for BCME (www.bcme.org.uk) are hosted commercially by 1&1.