

JMC**Joint Mathematical Council
of the United Kingdom****Minutes of the JMC Council meeting
held at the Royal Society
on Tuesday 8 November 2011**

The JMC is grateful for the financial support of the Royal Society

Present*Officers*

Duncan Lawson	Chair
Gerald Goodall	Honorary Secretary
Paul Harris	Honorary Treasurer

Executive Secretary

David Martin	Executive Secretary
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Members

Jenni Back	Association of Mathematics Education Teachers
Peter Lacey	Association of Teachers of Mathematics
Ian Jones	British Society for Research into Learning Mathematics
June Barrow-Green	British Society for the History of Mathematics
---	Conference of Heads of Departments of Mathematical Sciences
Colin Campbell	Edinburgh Mathematical Society
Nigel Steele	Institute of Mathematics and its Applications
Elizabeth Winstanley	London Mathematical Society
Alison Clark-Wilson	Mathematical Association
Charlie Stripp	Mathematics in Education and Industry
Sally Barton	National Association for Numeracy and Mathematics in Colleges
---	National Association of Mathematics Advisors
Lynne McClure [see also ACME below]	NRICH representing the Millennium Mathematics Project
Lydia Showan	National STEM Centre
Louise Orpin	Operational Research Society
Roeland Beerten	Royal Statistical Society
---	WIMCS

Co-opted members

Ros Sutherland JMC International Representative
--- International Commission on Mathematical Instruction

Observers

Lynne McClure [see also NRICH above] Advisory Committee on Mathematics Education
--- Adults Learning Mathematics
--- Department for Education
--- Department for Education and Skills [Wales]
--- Department of Education [Northern Ireland]
--- The Higher Education Academy Mathematics, Statistics and OR Network
Celia Hoyles National Centre for Excellence in the Teaching of Mathematics
Jane Jones Office for Standards in Education
Nick von Behr Royal Society
Paul Scruton School Mathematics Project
--- Sector Skills Council for science, engineering and manufacturing
technologies in the UK
--- Training and Development Agency for Schools
Bill Richardson United Kingdom Mathematics Trust

Also present

Rosalind Mist ACME Head of Secretariat
Marie-Claude Dupuis and Martin Smith (Royal Society/ACME), by invitation, for presentation of Digital Technologies Working Group Report and for afternoon discussion item

- 1 Apologies** Paul Andrews (UK representative to ICMI), Lynn Churchman (NAMA), Diana Coben (ALM), Jeff Evans (ALM Alternate), Angela Mabee (TDA), John Marriott (HEA MSOR Network), John Monaghan (BSRLM), Libby Steele (Royal Society), Nick Todd (DENI).
- 2 Welcome to new representatives, alternates, guests and visitors** New representative: Roeland Beerten (Royal Statistical Society).
Representatives of newly admitted organisations: Lynne McClure (NRICH; also present as representative of ACME), Lydia Showan (National STEM Centre); also Louise Orpin for OR Society, newly admitted as a Participating Society rather than an Observing Society. [**Note.** It had not been possible for WIMCS, newly admitted, to send a representative to this meeting.]
Alternates: Ian Jones (BSRLM), Nick von Behr (Royal Society).
Guest: Rosalind Mist (ACME Head of Secretariat).
Visitor: Lydia Showan (National STEM Centre).
Marie-Claude Dupuis and Martin Smith (Royal Society/ACME) were also welcomed for the presentation of the Digital Technologies Working Group Report and for the afternoon discussion item.
- 3 Appreciation of departing representatives** Catharine Darnton (RSS).
- 4 Minutes of the meeting of Tuesday 7 June 2011** *Paper JMC-2011-June-Minutes*
Accepted.
- 5 Consideration of any matters arising from the Minutes that do not appear on the main agenda**
1. Attendance list, representative of HoDoMS.
Duncan Lawson reported that clarification of who was the current HoDoMS representative was in hand.
 2. Minute 7(v) [venue for JMC meetings].
Duncan Lawson reported that, in consequence of the acceptance of the JMC Strategy document at the AGM immediately preceding this meeting of Council, the venue for all JMC meetings from now on would be the Royal Statistical Society, unless and until an announcement was made to the contrary.
 3. Minute 18(i) [representation from DfES (Wales)].
Duncan Lawson reported that DfES was not at present able to participate formally in JMC. However, a mathematician within DfES had been located and corresponded with, and would be invited to JMC as a regular guest for the time being.

6 Reports from JMC Executive

i. Chair

- (1) Duncan Lawson reported that he had attended, officially as Chair of JMC, the first meeting of the new STEM Ministerial Advisory Group, held on 20 September 2011 and chaired jointly by David Willetts and Nick Gibb. This had, in effect, replaced the former STEM High-Level Strategy Group. He thought that the new Group appeared more lively than the previous one had been; the Ministers appeared to value it. Meetings were expected to occur approximately every six months.
- (2) Duncan Lawson also reminded the meeting that his period of office as Chair would end at the November 2012 AGM; a new Chair would need to be determined, by the established procedures

ii. Secretary

Nothing to report.

iii. Treasurer

Nothing to report.

iv. Chair of Nominations Committee

One nomination had recently been made, of Joan Ashley to attend a conference.

7 Proposal for amendment of JMC Regulations

Paper JMC-2011-Nov-Regulations.

There were two proposals:

- (i) Subject to the constitutional amendment presented to the AGM having been passed, to delete the current Regulation 3, which refers to arrangements for the election of the Honorary Secretary and Treasurer and is entirely covered by the constitutional amendment.
- (ii) To insert a new Regulation 3 to regularise procedures for electronic communication.

These were accepted.

8 JMC International Representative

- (1) Ros Sutherland reported that sponsorship to fund bursaries for attending ICME 12 (in South Korea, 8 to 15 July 2012) was being finalised; a letter had recently been circulated to JMC organisations. The bursaries would be advertised as soon as the amount of money available was known. It was noted that a committee would be needed to administer the bursaries.

(2) Ros Sutherland also reported that the one-day meeting of interested parties to identify key impact messages of international studies had now happened. It had been a success. A summary report would be produced.

9 UK Representative to ICMI Paul Andrews was not present so there was no report. Many notices and other general information had been circulated to JMC organisations by email.

10 BCME 8 (to be held in 2014) Bill Richardson reported that work was still on-going. A meeting had been held on 17 October 2011 at the East Midlands Conference Centre. Contracts were likely to be exchanged soon. The dates seemed very likely to be 14–17 April 2014.

A programme committee was planned. It would be chaired by Paul Andrews.

A website was being constructed.

11 Report from Primary Working Group Unfortunately Lynn Churchman had found herself unable to attend the present meeting at a very late stage. In her absence, Duncan Lawson reported that the Group had engaged in desk research and had met by Skype, but further progress now required them to meet physically. The source of funding for this had still to be decided. Following decisions at the immediately preceding Annual General Meeting, JMC Executive Committee could now consider providing support (but without pre-determination of the outcome). Contact had also been made with ACME.

12 Reports received from JMC Organisations

i. Higher Education

Paper JMC-2011-Nov-Higher_Education.

Elizabeth Winstanley introduced the paper, noting that it was already out of date in some respects as the situation was changing rapidly.

UCAS applications up to the 15 October Oxford/Cambridge deadline were down by about 8% compared with last year, but it was too early to predict the final situation.

A UCAS consultation was open until 20 January 2012 on a possible move to a post-qualification applications system.

It was thought that the HE White Paper for England might still impose quotas on AAB admissions. Colin Campbell spoke briefly regarding the situation in Scotland. Duncan Lawson commented that the "four nations" aspect of current HE developments was very challenging. The Welsh Assembly Government had restricted fees to £3400 and had announced that it would support Wales-domiciled students studying in England. However, the Northern Ireland Government would not support NI-domiciled students in England.

June Barrow-Green noted that there were special problems for the Open University regarding fees.

ii. Teacher Education

Paper JMC-2011-Nov-AMET.

Jenni Back had little to add to the paper except to comment that the situation was difficult to assess and remained unclear for the long term.

iii. MEI

Paper JMC-2011-Nov-MEI.

Charlie Stripp introduced the paper on a new MEI project "Integrating Mathematical Problem Solving" funded by the Clothworkers' Foundation. He would be pleased to hear from any other organisations working in the area.

13 Report from ACME *Paper JMC-2011-Nov-ACME*

Lynne McClure elaborated on some points in the report, mostly in the nature of minor updates. Important points included: emerging issues regarding primary pedagogy; the controversy regarding early entry for GCSE, information concerning which was being sought from Awarding Bodies; and the bringing forward of the evaluation of the GCSE Pair Pilot, with ACME stating that no decisions should be made until proper information was available and had been assimilated.

14 Report from NCETM *Paper JMC-2011-Nov-NCETM*

Celia Hoyles highlighted key features of the paper, especially the NCETM Essentials Collection on the web portal. She commented that the contract for the successor body had not yet been determined.

15 Update on current developments **i. Northern Ireland**

Paper JMC-2011-Nov-NI

The paper was received. Unfortunately Nick Todd was unavoidably absent and it had not been possible to send an alternate, so there was no discussion.

ii. Ofsted

Jane Jones reported that there had been cutbacks within Ofsted including loss of support time for mathematics activities, but there had still been 45 primary

and 45 secondary mathematics inspections. A new framework for inspections would come into effect in January 2012. New guidelines would follow later. A report on good practice in teaching primary arithmetic was expected very soon.

iii. TDA

Angela Mabee had sent apologies so this item was not taken.

16 Reports from meetings

i. ACME *Mathematical Needs Project*

This had been launched at an event at the Wellcome Trust on 14 June 2011. It was covered in the ACME report for the present meeting (see Minute 13).

ii. Report of the "Carol Vorderman task force", *A world-class mathematics education for ALL our young people*

This had been launched at an event chaired by John Holman at the Royal Statistical Society on 8 August 2011. Duncan Lawson commented that he had been struck by Michael Gove's apparent wholesale acceptance of the report, notably of the special position and importance of mathematics.

Note. Web links to the report and to some comments on it are given at the end of these Minutes.

iii. OCR Mathematics Consultative Forum

The second meeting of this Forum had been held on 12 October 2011. David Martin had attended to represent JMC and would circulate a report later.

17 National Curriculum Review

No news was available as the matter was still under deep discussion within DfE.

Post-meeting note. The meeting of JMC in February 2012 will include a discussion item on the National Curriculum Review led by Stefano Pozzi.

18 Report of the Digital Technologies Working Group

The full Report and an Executive Summary had been circulated electronically before the meeting. Paper copies of the Executive Summary were available at the meeting.

The report was introduced by Ros Sutherland and Alison Clark-Wilson, who asked that it be distributed widely. It was emphasised that schools have a key role in promoting digital technologies in the mathematics context. There was a need for sustained professional development to help bring this about. Jane Jones commented that it might be possible to persuade schools to devote whole-school training days to ICT-related matters.

In an extensive discussion, the report was widely welcomed. In respect of curriculum and assessment issues, it was emphasised that real curriculum reform was necessary and needed to be much more explicit than bland statements such as "use of appropriate technology"; a major change of assessment methods was also needed, though it was not obvious whether this was best brought about incrementally or as one large step.

Recommendation 5 was that DfE and DBIS should establish a task force to take the issues forward. Duncan Lawson stated that he would send copies of the report to the ministers who chair the STEM Ministerial Advisory Group.

Note. The Report and the Executive Summary may be downloaded as PDF files from the "activities" page of the JMC public-access website <http://www.jmc.org.uk>.

19 Any other business None.

20 Dates of future meetings All future meetings will be at the Royal Statistical Society, unless and until there is an announcement to the contrary.

Tuesday 28 February 2012

Tuesday 12 June 2012

Tuesday 6 November 2012 (immediately following the JMC AGM)

[**Note.** The June 2012 meeting is one week later than normal to avoid the public holiday that has been called to celebrate the Queen's Diamond Jubilee.]

DISCUSSION ITEM

Discussion led by ACME (Lynne McClure) on developing ACME's next policy projects

Lynne McClure first briefly reviewed ACME's work, stressing that ACME does not operate in isolation but in collaboration with JMC and with many other organisations. The work is both reactive and proactive: reactive work includes dealing with a very large number of consultations, proactive work is intended to be strategic and includes production of reports such as *Mathematical Needs* and *Post-16 in 2016*.

(See <http://www.acme-uk.org/news/news-items-repository/2011/6/launch-of-the-acme-mathematical-needs-project> and <http://www.acme-uk.org/news/news-items-repository/2010/7/launch-post-16-in-2016-position-paper>. Links checked and found to be working on 18 December 2011.)

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The intended next proactive projects were on "The knowledge base for mathematics teaching", which would focus on issues of initial teacher education and continuing professional development, and on "Post-16 pathways – making it happen".

An outline discussion paper had been prepared for the first of these. Members were invited to consider aspects of this in small groups; Lynne McClure took notes of the reports from these groups.

A more open discussion of the second took place. There was general enthusiasm for trying to bring about a real improvement, including by building on work done for the development of AEA/STEP-type awards and for FSMQs. It would naturally be important to engage with other disciplines. Funding issues would also be important, as would issues of professional development.

Further suggestions would be welcome and should be emailed to Rosalind Mist, Head of ACME Secretariat (rosalind.mist@royalsociety.org).

Web links regarding the report of the "Carol Vorderman task force", *A world-class mathematics education for ALL our young people*

All links given below were checked and found to be working in advance of the meeting, on 20 October 2011.

The report (be aware that this is a substantial document – 108 pages in the printed version) is available at http://www.conservatives.com/News/News_stories/2011/08/~/_media/Files/Downloadable%20Files/Vorderman%20maths%20report.ashx

and perhaps other places too.

Some JMC organisations issued comments on the report. The following web links, including also commentary from CBI, have kindly been collated by the ACME secretariat.

ACME: <http://www.acme-uk.org/news/news-items-repository/2011/8/acme-comments-on-the-maths-task-force-report>

IMA: http://www.ima.org.uk/viewItem.cfm?cit_id=383799

MEI: http://www.mei.org.uk/files/pdf/MEI_media_release_on_Vorderman_report_8_August_2011.pdf

NCETM: <https://www.ncetm.org.uk/news/34709>

The Royal Society: <http://royalsociety.org/news/vorderman-report/>

CBI: <http://www.cbi.org.uk/ndbs/press.nsf/0363c1f07c6ca12a8025671c00381cc7/90fe4145e8126880802578e6003299aa?OpenDocument>

In addition, commentary from the RSS is available at <http://www.rssnews.org.uk/articles/20110809>.