

The Joint Mathematical Council of the United Kingdom

A Charitable Incorporated Organisation

Registered with the Charity Commission for England and Wales, Registered Charity Number: 1171223

Registered Office: De Morgan House, 57-58 Russell Square, London, WC1B 4HS

Minutes of the AGM and General Meeting held at De Morgan House at 11.00 a.m. on Thursday 7 November 2024

Present

Officers

Chair (AGM)	Andy Noyes
Chair (GM)	Noel-Ann Bradshaw
Deputy Chair (AGM)	Noel-Ann Bradshaw
Deputy Chair (GM)	Jenni Ingram
Secretary	Chris Chipperton
Treasurer	Jennie Golding

Representatives of Participating Bodies

Adults Learning Mathematics	Diane Dalby
Association of Mathematics Education Teachers	Fiona Curtis
Association of Teachers of Mathematics	-
British Society for Research into Learning Mathematics	Alf Coles
British Society for the History of Mathematics	June Barrow-Green
Edinburgh Mathematical Society	-
Heads of Departments of Mathematical Sciences	Mary McAlinden
Institute of Mathematics and its Applications	Paul Glaister
London Mathematical Society	Mary McAlinden
The Mathematical Association	Paul Glaister (deputy)
Mathematics in Education and Industry	Charlie Stripp
National Association for Numeracy and Mathematics in Colleges	Andrew Davies
National Association of Mathematics Advisors	Ruth Trudley
National Numeracy	-
NRICH	-
Operational Research Society	Carol McLaughlin (deputy)
Royal Academy of Engineering	-
Royal Statistical Society	-
Scottish Mathematical Council	Bill Richardson
STEM Learning	Michael Anderson
United Kingdom Mathematics Trust	-
Wales Institute of Mathematical and Computational Sciences	-

Co-opted Members

UK Representative to the International Commission on Mathematical Education	Paul Glaister
Social Media Lead	-

Representatives of Observing Bodies

Department for Education [England]	Catherine MacKenzie
Department of Education [Northern Ireland]	-
Education Scotland	John Neeson
Education and Training Foundation	-
National Centre for Excellence in the Teaching of Mathematics	Charlie Stripp (deputy)
Office for Standards in Education	Steve Wren
The Office of Qualifications and Examinations Regulation	Sarah Old
The Royal Society	Cath Boulton
The Royal Society Advisory Committee on Mathematics Education	Anthony Tomei

Scottish Qualifications Authority
Welsh Government Education Department

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In attendance

Academy for Mathematical Science
Royal Society
SMaR+
SMaR+

Lynne McClure
Tom Cryer
Laurie Jacques
Marie Joubert

1 Introduction

- 1.1 **Welcome** The Chair welcomed everyone and, in particular, Tom Cryer from the RS. He stated that there were questions around the divide between those attending in person and those online. Thought still needed to how meetings happened.

The Chair set out how the agenda was intended to operate and its rationale.

- 1.2 **Practical Arrangements** The Secretary explained the fire procedures.

- 1.3 **Apologies for absence** Apologies for absence were received from: Helen Madely (ATM); Sandi Atkinson (MA); Zoe Nye (RSS); Sofya Lyakhova (WIMCS); Richard Perring (Social Media Lead); Sue Madgwick (NCETM); Georgina Holmes (SQA); Julie Harris (DoE)

Some representatives and deputies would be joining later in the meeting.

2 Annual business

- 2.1 **Reception of the Annual Report** The Annual Report was received.

The Chair highlighted JMC's object in para 5 and that it was useful to remind ourselves of these.

- 2.2 **Reception of the Annual Accounts** The Annual Accounts were received.

The Treasurer stated that income and expenditure were approximately in line. However, a significant reserve exists and allows for generous spend on projects. It was clarified that the bye-laws state that 2 years' turnover should be held in reserve.

Council agreed that 2024-2025 subscriptions should be held at the 2023-2024 level.

- 2.3 **Approval of the Budget** The Treasurer explained that this year's expenditure was higher due to two projects being planned.

- 2.4 **Approval of the Subscription Rates** See 2.2 above.

- 2.5 **Election of Chair** The Secretary reminded Council that Noel-Ann Bradshaw had been elected as Chair at the June meeting. She would serve from the end of the annual business until the end of the AGM in November 2027.

- 2.6 **Election of Deputy Chair** The Secretary reported that Jenni Ingram had been the only nomination for Deputy Chair and was therefore elected unopposed. She would serve from the end of the annual business until the end of the AGM in November 2027.

- 2.7 **Election of Trustee** The Secretary reported that there had been two vacancies. Ruth Trundle had been the only nomination for Elected Trustee received by the deadline and was therefore elected unopposed. She would serve from the end of the annual business until the end of the AGM in November 2027.

There being no other nominations, the Trustees had acted under 12.6.7 of the constitution and appointed Sofya Lyakhova to fill the role for one year until the end of the AGM in November 2025.

- 2.8 **Co-option of Trustees** The Secretary explained that the Trustees had considered the vacancies for Co-opted Trustees and the desire for the trustees' body to have as broad and balanced make-up as possible. With this in mind, the Trustees proposed that Michael Anderson be appointed to one of the roles to serve until the end of the AGM in November 2025. This was approved unanimously.

Council delegated the selection of a second Co-opted Trustee to the Trustees.

3 Minutes of the meetings held on 22 June 2024

- 3.1 **Minutes of the General Meeting held on Thursday 22 June 2024** There was one amendment to the name of an attendee.

3.2 **Approval** The minutes of the meeting held on Thursday 22 June were approved.

3.3 **Matters arising not elsewhere on the agenda** There were no matters arising.

4 Reports from Trustees

4.1 **Immediate Past Chair** The Immediate Past Chair

4.2 **Chair** The Chair expressed thanks to Andy Noyes for his time as JMC Chair and the efforts he had made in reshaping JMC's Activities.

4.3 **Secretary** The Secretary's report was noted. Attention was drawn to Trustee's who had stepped down and

The Secretary echoed the Chair's thanks .

Council was reminded that the Secretary had now entered his last year in the role. Elections for a replacement will be held in June 2025.

4.4 **Treasurer** There was no report from the Treasurer beyond items 2.2, 2.3 and 2.4 above.

4.5 **Constitution** It was noted that no changes were necessary.

4.6 **Bye laws** It was noted that no changes were necessary.

4.7 **Policies** It was noted that no changes were necessary.

4.8 **Risk register** It was noted that the Trustees had reviewed the Risk Register.

5 Reports from Committees

5.1 **BCME** As one of the BCME Co-Chairs, Ruth Trundley gave a detailed update on the progress towards BCME10. The presentation slides have been circulated. Headlines included:

Bridging was a major focus and had been discussed a lot.

No Northern Ireland re presentation had been identified for the committee.

The aim had taken note of the reflections and recommendations from BCME9. The cost was to be kept as low as possible. A Friday-Saturday in October had been identified rather than three days. Nottingham was being looked at for the location with a school being the venue. (Derby College was suggested as an alternative.) Accommodation would not be included. Funding was being sought and it is hoped to be able to support active teachers.

Reducing the financial risk is important. By keeping the main costs as venue hire, catering and organisational support it was thought this had been achieved. The MA's CEO has offered the MA to lead on organisational issues.

A sub-committee structure was being developed covering programme, communications, hybrid/technology, logistics and published proceedings. Additional volunteers from JMC organisations' memberships would be welcomed.

The envisaged programme will have ten parallel sessions. This will require eight classrooms and two larger spaces. It is intended that more teachers will be encouraged to attend. Ways of supporting new presenters is being considered. And co-presenting encouraged. It is hoped that practitioners will be involved in half the sessions; 'practitioners' needs to be more clearly defined.

A number of suggestions were offered such as there being mixed length sessions, supporting the collaboration between researchers and practitioners, there being common interest groups, and support to help write for publication.

5.2 **MMSA** The minutes of the last meeting were noted.

'5 into 1' is still progressing although it is a slower process than had been hoped for by some. However, all five associations have agreed to go to stage 2 so that a proposal can go to members for a vote. Stage 1 had seen all associations undertake due diligence to ensure that moving forward would not jeopardise any members.

The legal process is lengthier than had been realised and is very expensive.

5.3 **Academy for the Mathematical Sciences** Lynne McClure presented on some of the background and progress of the Academy for the Mathematical Sciences. The presentation slides have been circulated.

The development of the Academy's aim and the addition of education to this was important. Public advocacy in the objective was also regarded as important.

The Academy has been a Charitable Incorporated Institution for a year. Alison Etheridge was appointed as Founding President. There is funding from the Newton Institute and four paid employees; there is an interim CEO. Disappointingly, no funding came from DSIT, but other conversations about funding are taking place.

There are a number of trustees and this is being expanded to ensure appropriate expertise, e.g. legal and finance. The executive committee of sixteen includes the workstream chairs. Structures and workstreams are being refined. A CEO designate has been appointed. Relationships across the board need to add value.

Criteria and expectations for fellowships have been developed. However, these do not work for practitioners in education. The Academy will discuss this with JMC to help create appropriate ones.

Two members working in the policy unit have produced a report on *Quantifying the UK economic contribution of the mathematical sciences in 2023*. The original by Deloitte's was in 2013.

In combination with other workstreams, education has responded to the current call for evidence for the Curriculum and Assessment Review. Conversations with the DfE are ongoing. Consideration is being given to the low number of practitioners in the education committee.

The JMC Chair will continue the dialogue with the Academy as part of her role.

- 5.4 **Commissioned Report – Draft call for EOI: Mathematics teacher recruitment** The draft of a call for expressions of interest for work of mathematics teacher recruitment had been circulated with the agenda. Council was supportive of the project. There were some suggestions for improving the key questions

Council's attention was drawn to the MEI paper on teacher recruitment

<https://mei.org.uk/reports/recruiting-developing-and-retaining-the-mathematics-teaching-workforce-in-england-an-mei-discussion-paper/>

and the Maths Careers article on entry tariffs to degrees <https://www.mathscareers.org.uk/you-dont-need-an-a-or-a-to-study-mathematics-at-university/>

6 Reports from Participating Bodies

The Chair thanked representatives for the submitted reports. A number of points were drawn out including the number referring to CPD. The sharing of the CPD landscape was suggested as being something to consider, possibly as a future discussion topic.

7 Reports from Observing Bodies

The written reports were noted.

Additional oral reports were received from. By agreement minutes of these were not taken.

8 Discussion of Reports

No discussion was requested.

9 Any other business not elsewhere on the agenda

- 9.1 Consideration was given to how to facilitate the online aspect of JMC meetings in the future. It was agreed that a Zoom account would be useful and is to be investigated.

10 Discussion: Adult numeracy

- 10.1 **A vision for meaningful data education across the four nations of the UK** A presentation on the commissioned work was given by Laurie Jacques and Marie Joubert from SMaR+.

The context to the work was given as there being increasingly data-driven work, UK citizens being sources and answers, and the relatively high PISA performance in uncertainty and data.

The distinction between data skills and data education was explored.

In looking at data skills in work a range of people were spoken to and consideration was given to collecting and preparation, analysing and interpreting, and story-telling.

In viewing current practice in data education, it was recognised as being widely used in the workplace. There is interest in classroom practice. A considerable amount of material exists, but needs curating. There are gaps in the research particularly in relation to what does and does not work.

Data education across the four nations of the UK has some variety, but tends to converge by age 16. Expectations are unambitious and assessment is limited. There are gaps in research.

A vision for the future would see the development of competences (building on work by Cathy Smith). There should be expectations for end of primary, end of lower secondary, and at school leaving age.

Practice in New Zealand was considered.

The recommendations have a good deal of similarity to those in the Royal Society's Mathematical Futures report. There are also suggestions as to who should be responsible for these. It is proposed that there should be: an ambassador for data education across all four jurisdictions of the UK; data ambassadors for STEM learning (similar to maths ambassadors; data education included in the role of the UK Statistics Authority).

It was agreed that wide distribution of the work would be beneficial.

- 10.2 **RS Mathematics Futures Report** Published in September, the report is the culmination of 4 years work and follows the interim report of 2013. It identifies mathematical competences and how the system needs to change to achieve these. The timing is pleasing and has been used to contribute to the Francis Review.

Mathematics is being thought of in a different way. This will benefit young people by thinking of mathematics more broadly and combining it with data education.

There are three core elements: fundamental and advanced mathematics (FAM); general quantitative literacy (GQL); domain-specific competences (DSC).

Recommendations are for a long-term project (although there are some short-term steps). These cover the areas of: implementation; curriculum; qualifications and assessment; computational tools and technologies; teachers (teacher workforce).

The thinking has been shared widely.

It is possible that the task force will evolve into a long-term body.

The language and understanding of mathematics need to go across all subjects.

- 10.3 **Future JMC Projects** Trustees were suggesting two further projects for this year:

a) A commissioned project on *Mathematics education and AI*.

This would follow on from the recent work on technology and the June discussion. It is intended that there will be a series of articles/thought spaces that can be brought together by a guest editor. Suggestions for possible contributors and/or topics are welcome.

It was suggested that this work could be out of date quite quickly.

Case studies from teachers could be useful.

Two aspects were proposed for inclusion – reducing teacher workload, and the use of AI to enhance students' learning and students' use of AI.

Does consideration need to be given to accommodating responses to the outcomes and, if so, how this could be achieved.

b) A working group to consider *KS3/transition to secondary school*.

A chair to lead on this is being sought.

11 Conclusion

The Chair thanked everyone for their attendance and participation, and closed the meeting.

12 Dates of future meetings

Thursday 13 February 2025 at De Morgan House (deadline for papers: Thursday 30 January 2024)

Thursday 12 June 2025 at De Morgan House (deadline for papers: Thursday 29 May 2025)

Thursday 6 November 2025 at De Morgan House (deadline for papers: Thursday 23 October 2025)

All meetings are scheduled to begin at 11.00am