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 General Meeting held at De Morgan House at 11.00 am on Thursday 9 June 2022

Present

Officers	
Chair Deputy Chair Secretary Treasurer	Andy Noyes Noel-Ann Bradshaw Chris Chipperton Jennie Golding
Representatives of Participating Bodies	
Adults Learning Mathematics Association of Mathematics Education Teachers Association of Teachers of Mathematics British Society for Research into Learning Mathematics British Society for the History of Mathematics Edinburgh Mathematical Society Heads of Departments of Mathematical Sciences Institute of Mathematics and its Applications London Mathematical Society The Mathematical Association Mathematics in Education and Industry National Association for Numeracy and Mathematics in Colleges	David Kaye (deputy) Fiona Curtis Hayden Rissbrook Jeremy Hodgen June Barrow-Green - - Paul Glaister Kevin Houston Tom Roper - Graham Griffiths
National Association of Mathematics Advisors National Numeracy	Jane Liddle (deputy)
NRICH Operational Research Society Royal Academy of Engineering Royal Statistical Society Scottish Mathematical Council STEM Learning United Kingdom Mathematics Trust Wales Institute of Mathematical and Computational Sciences	- Fay Moore (online) - - Carol Lyon (online) Michael Anderson (deputy) - Sofya Lyakhova
Co-opted Members	
UK Representative to the International Commission on Mathematical Instruction	Chris Budd
Representatives of Observing Bodies	
Department for Education [England] Department of Education [Northern Ireland] Education Scotland National Centre for Excellence in the Teaching of Mathematics Office for Standards in Education The Office of Qualifications and Examinations Regulation The Royal Society The Royal Society Advisory Committee on Mathematics Education	Catherine Mackenzie Julie Harris - Sue Madgwick Steve Wren Sarah Old Catherine Boulton Anthony Tomei

1 Introduction

1.1 **Welcome** The Chair welcomed everyone present and opened the meeting. He noted that it was the first in-person meeting of JMC since February 2020. Additionally, two members were also joining on Teams and the technical arrangements for this hybrid meeting seemed very good.

The Chair thanked those representatives who had travelled for the meeting and those who had submitted reports. He commented that reading the reports gave an interesting overview of what is happening across the community and important issues that are emerging, particularly with regards new emerging forms of hybrid working.

- 1.2 **Practical Arrangements** The Secretary went through the arrangements for fire evacuation, lunch and access to the garden.
- 1.3 **Apologies for absence** Apologies for absence were received from: Beth Kelly (ALM), Jan van den Heuvel (HoDoMS), Charlie Stripp (MEI), Ruth Trundley (NAMA), Paul Milner (National Numeracy), Ems Lord (NRICH), Steve Lyon (STEM Learning), Alex Smith (DfE), Pamela Di Nardo (Education Scotland); Sue Pope (SQA)

New members and deputies were welcomed to the meeting and gave short introductions of themselves.

2 Minutes of the meeting held on 11 November 2021

2.1 Approval of the minutes of the meeting on Thursday 11 November The minutes were approved.

Re. Item 3.2 – There has been no response to the call for a social media lead. It was suggested that a less formal approach might be worth trying. The possibility of using one of the member organisations was raised, but concern about a possible conflict of interests was one consideration that needs to be taken into account.

Re. item 13 – Following the 'maths pipeline' discussion at the February meeting, Cathy Hobbs had spoken at HoDoMS about the reduction in the number of places for low and medium tariff students looking to study mathematical sciences in HEIs. The issue is being taken up by CMS and further work is to be commissioned.

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

3 Reports from Trustees

3.1 **Chair** The Chair's report was noted.

The Chair reminded Council of the past steps that had occurred in relation to the possible establishment of a National Academy for Mathematical Sciences (NAMS):

- A consultation in 2021-2 had led to JMC holding an extra general meeting to inform JMC's response. Following the consultation, the steering group had produced a report for CMS.
- A broad structure has been proposed with educational affairs, academic affairs and practitioner affairs.
- In April 2022, CMS gave the 'green light' to proceed to the next stage.
- The CMS paper was circulated to the learned societies for discussion at their councils.
- Under Alison Etheridge, CMS Chair, the process for appointing a founding CEO and founding president was started. The target date is before the summer.

The Chair has met with Martin Taylor, ACME Chair, to discuss the impact of a National Academy on JMC and ACME. There are still questions about how a National Academy would reach and represent groups such as teachers.

There seems to be something of a lull at the moment. This might be accounted for in the difficulty of identifying individuals capable of meeting the wide brief of the founding CEO and president positions.

- 3.3 **Secretary** The Secretary's report was noted.
- 3.4 **Treasurer** The Treasurer's report was noted.

4 Reports from Committees

4.1 **BCME** A discussion took place in 2018 regarding a reshaping of BCME. Attempts were made to find someone to take on the leadership of the event, but no one was forthcoming.

Recently, there has been comments on Twitter asking why BCME is not happening and indicating an emerging interest in having BCME taking place again. Ed Southall and Ruth Trundley have been involved in this. Kevin Houston picked up on the comments and has followed up with Ed Southall and Ruth Trundley. They are both willing to be involved in working to enabling BCME to happen, probably in 2024. A small group with Kevin Houston as Chair is to explore this further. Anyone interested in joining the group should contact him either directly or via the Secretary.

4.2 **MMSA** The report was noted.

Council was informed that the trustees had approved a request from MMSA for a restricted fund to be established within JMC's accounts. This is to hold money raised by MMSA to assist in the proposed merger of the organisations. There are no financial implications for JMC.

5 Reports from Participating Bodies

The reports were noted with some additional oral comments being taken:

6.1 **ALM** The forthcoming conference will be face-to-face in Barcelona. Committee meetings are always held online.

6.3 **ATM** A two-day face-to-face conference was held over Easter with a virtual conference scheduled for October. There will also be a meeting in October concerning the 'five-to-one' project.

6.4 **BSRLM** The first face-to-face conferences are due to be held.

6.8 **IMA** IMA had attended the meeting about Teaching Mathematics as a Career (TeMaC). DfE have reduced the target for teacher training numbers. Applications for teacher training places and for scholarships are both significantly down on last year.

6.10 **MA** A split face-to-face/online conference had been held. While seeming a good idea, in practice the events had been too close together which made it difficult for participants to transfer between them. It was thought that there was definitely a place for hybrid events which open up attendance.

6.12 NANAMIC NANAMIC will be continuing with online conferences.

6.13 **NAMA** As a smaller organisation, it has been very useful being online. This has allowed international speakers to be brought in, the cost of which would be prohibitive for face-to-face events.

6.19 **SMC** SMC acknowledge that there is a place for hybrid conferences including the ability to bring in international speakers. However, the value of networking at physical events is recognised. Consideration is being given to holding two conferences, one face-to-face and one online.

It was reported that this would be carol Lyon's last JMC meeting as Alan Walker will be taking over as Chair in September. Carol Lyon was thanked for her participation and contributions during her time with Council.

6.20 **STEM Learning** Attention was drawn to the STEM Ambassadors. Any thoughts on how these can be best utilised would be welcomed.

6.22 **WIMCS** The JMC commissioned reports on gender and mathematics education have proved to be very useful.

6 Reports from Observing Bodies

The report from NCETM was noted.

Other reports were received orally. In line with Council practice minutes of were not taken.

7 Reports from Meetings

The were no reports.

8 Discussion of Reports

No items were raised in advance of the meeting.

The Chair opened a discussion about how and where future meetings of the Council should be held. The main outcomes were:

- While there are some benefits to holding meetings in other parts of country, London provides a more convenient location, including for some of those travelling furthest.
- In considering whether to hold meetings face-to-face or online, thought should be given to the substance/purpose.
- Face-to-face meetings should run as hybrids so as to offer representatives the option of joining online.
- February meetings will be solely online as previously agreed, but this will be kept under review.
- Timings should be considered, especially for online meetings.
- Ad hoc 'extraordinary' general meetings will be online.
- In general, reports should be taken as read.
- During the morning sessions, here should be opportunity for significant inputs (e.g. 15 minutes discussion items) and representatives were asked to consider tabling such items.

9 Projects

9.1 Mathematics Education and Gender

The full and summary reports on Mathematics Education 14-19 and Gender, and the summary report on Mathematics Education 5-14 and Gender are available on the website. The full report for the 5-14 age range has now been received and will be circulated to Council as a draft before being considered at the next meeting of the trustees. **Action: Secretary**

9.2 Digital Technology and Mathematics Education Working Group

The Working group have held five meetings. There have been some changes to the membership including the loss of the only practicing teacher member.

Areas of activity are as follows:

- Current practice and the impact of Covid. There is a survey of practicing teachers which has just gone live. It is hoped that this will have a high level of response to support the authority of the Working Group's voice when it reports.
- International case studies. A call for Eol on a rapid review has just closed.
- Assessment and curriculum has two cases under development, the impact of embedding digital technology in assessment, and the use of technology for working with data.
- Stakeholder engagement for which contact or meetings with key people are taking place or are being planned.

An all-day meeting is scheduled for July which will allow consideration of:

- Next steps.
- The report outline.
- Further stakeholder engagement.
- Additional lines of inquiry.

It is expected that the report will be published towards the end of the year (or early 2023) and there is a possibility that a draft might be available for the November Council meeting.

10 Membership of the Council

The Chair reported that procedures for organisations to join JMC had been investigated. There is no clearly stated process for organisations to become observing bodies.

Officers and trustees had discussed the issue at some length as well as the distinction between participating and observing bodies. While this is an area that might benefit from review it was not thought to be appropriate currently given the possible impact on JMC if NAMS comes into being.

Consideration of the Education and Training Foundation (ETF) as an Observing Body

A proposal was put to the Council that ETF became an Observing Body. ETF supports teachers and teaching in FE and has a lead for mathematics. The proposal was passed and ETF will be invited to join JMC. Action: Secretary and Treasurer

11 Any other business not elsewhere on the agenda

There was no other business.

12 Discussion: RS ACME Mathematical Futures Programme

Cath Boulton from the Royal Society gave a presentation on the background to the Mathematical Futures Programme, its progress to date, and the next stages. (The PowerPoint has been shared separately.) Council then went into groups to discuss three questions:

- 1. What are the greatest Challenges?
- 2. What are the Opportunities?
- 3. Who else do we need to talk to?

For each of four areas:

- Diversity, inequality and engagement in mathematical education in the future.
- The intersection between mathematics, statistics, data science and computing.
- The role of 'Edutech' in mathematical education.
- The needs of the teachers and teaching in the future education system.

Detailed notes on the feedback will be provided by the Royal Society, but some consistent themes emerged from the groups. These included:

- The mathematics curriculum needs to be re-thought and consideration given to the drivers for what is included.
- There is an opportunity to develop a 'core' mathematics of what is useful and accessible.
- Mathematics across the breadth of the curriculum needs to be viewed and a common language developed.
- The accessibility of digital technology should be embraced
- The availability of sufficient teaching workforce needs to be addressed and supported.
- There is a need for perceptions to be changes including those of academic mathematicians and parents.

13 Conclusion

The Chair thanked everyone present for their contributions and closed the meeting.

14 Dates of future meetings

• Thursday 10 November 2022 – venue to be arranged