

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 11 a.m. on Tuesday 18 February 2020 at the National Council for Voluntary Organisations

Present

Officers

Chair

Andy Noyes

Deputy Chair

Alice Rogers

Secretary

Chris Chipperton

Treasurer

Jennie Golding

Representatives of Participating Bodies

Adults Learning Mathematics

–

Association of Mathematics Education Teachers

–

Association of Teachers of Mathematics

Heather Davis

British Society for Research into Learning Mathematics

Jeremy Hodgen

British Society for the History of Mathematics

June Barrow-Green

Edinburgh Mathematical Society

–

Heads of Departments of Mathematical Sciences

Jan van den Heuvel

Institute of Mathematics and its Applications

Paul Glaister

London Mathematical Society

Kevin Houston

The Mathematical Association

Peter Ransom

Mathematics in Education and Industry

Charlie Stripp

(deputy pm: Claire Baldwin)

National Association for Numeracy and Mathematics in Colleges

Graham Griffiths

National Association of Mathematics Advisors

Matt Lewis

National Numeracy

–

NRICH

–

Operational Research Society

Evelyn Hardy

Royal Academy of Engineering

–

Royal Statistical Society

Carole Haynes

Scottish Mathematical Council

Carol Lyon

STEM Learning

Steve Lyon

United Kingdom Mathematics Trust

–

Wales Institute of Mathematical and Computational Sciences

Sofya Lyakhova

Co-opted Members

Immediate Past Chair

–

UK Representative to the

International Commission on Mathematical Instruction

–

Representatives of Observing Bodies

Department for Education [England]

–

Department of Education [Northern Ireland]

Susan O'Boyle (deputy)

Education Scotland

Andy Brown

National Centre for Excellence in the Teaching of Mathematics

Sue Madgwick

Office for Standards in Education

–

The Office of Qualifications and Examinations Regulation

Sarah Old

The Royal Society

Lynne McClure (deputy)

The Royal Society Advisory Committee on Mathematics Education

Anthony Tomei

Scottish Qualifications Authority

Sue Pope

Welsh Government Education Department

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1 Introduction

- 1.1 **Welcome** The Chair welcomed everyone present and especially those who were attending as deputies. Representatives were thanked for the high number of reports that had been received.
- 1.2 **Practical Arrangements** The Secretary went through practical arrangements for the day including the procedure for emergency evacuation.
- 1.3 **Apologies for absence** Apologies for absence were received from: Helen Farmery (AMET), Charlie Stripp – pm only (MEI), Ems Lord (NRICH), Hannah Telfer (UKMT), Alex Smith (DfE), Julie Harris (DoE), Helen Harth (Royal Society), and John Mason (Welsh Government Education Directorate).

2 Minutes of the meeting held on Tuesday 12 November 2019

- 2.1 **Approval** The minutes of the meeting held on Tuesday 19 February 2019 were approved. All actions had been completed. The Chair suggested that 'Mathematics Futures Curriculum' should now simply be 'Mathematics Futures'.

3 Reports from Trustees

- 3.1 **Chair** The Chair reported that he is engaged in ongoing discussions with RS ACME. The roles of both JMC and ACME are evolving.

A significant question exists as to what 'added value' JMC brings. Focus needs to be given to the nature and direction of travel that JMC takes and how this relates to other organisations. Within this sit issues such as the possible production of a calendar of events and BCME.

The Trustees will be having an 'away day' in September to consider these issues.

- 3.2 **Deputy Chair** As reported.
- 3.3 **Secretary** The Secretary emphasised the upcoming vacancies for Deputy Chair and Treasurer. Calls for nominations will go out next month. Nominations will be required by the end of April with elections taking place at the June meeting.
- 3.4 **Treasurer** The Treasurer thanked representatives for the payment of most subscriptions. Outstanding subscriptions were being followed up.

The Treasurer reported that the Trustees had decided to open a 95 day account which currently offers 1% interest. Most of the (restricted) BCME money and the balance of the existing deposit account will then be transferred to this account.

4 Reports from Committees

- 4.1 **BCME Committee** The Chair stated that a previous review and discussions had led to a change of format being developed for BCME 10 due in 2022. However, multiple attempts to identify a BCME Chair or to find a collaborative approach with another organisation have been unsuccessful.

The Trustees recognise the changing landscape and are looking at a radical shift in while still keeping within the JMC's role. However, it is unlikely that there will be a BCME in 2022.

During the discussion that followed, the following were amongst the comments made and questions raised:

- Is there a sense that there is a lack of interest in attending such events?
- One forthcoming SMC conference has attracted 250 delegates.
- MA conference numbers have improved against 2 years ago, but a radically different approach has needed to be taken. One day conferences have been affected by other events run by organisations such as La salle.
- Later bookings were increasingly noticeable raising increased concerns about financial viability.
- Increasing pressures on teachers works against the desire to give up holiday time and weekends.
- Many teachers are working during Easter to run revision sessions.
- MEI still attract good numbers to events, but do not ever have certainty about this.

- Social media has had a significant impact.
- Hubs have filled the space for many.
- While there is concern for sufficient numbers, BCME 9 was seen as too big in some ways. The number of late applications was a concern.

4.3 **ICME Bursaries Committee** With one exception, ICME Bursaries have been paid the applicants.

With the current health concerns in China, it was questioned what would happen in the event of ICME being cancelled. It was recognised the money has to be paid up front and that it was likely to be lost.

5 Reports from Participating Bodies

The Chair reminded Council that he had previously encouraged reports to include any topics that would benefit from wider discussion. While the reports gave a clear sense of the community's landscape, he questioned whether there is anything that would be useful to know that isn't included. The possibility of the Secretary inviting bullet points of issues to be added to reports when the call goes out; a template wasn't seen as a way forward. Equally, prompts or broad categories could be suggested on a changing or rotating basis.

Reflections and comments included:

- There may be 'hot topics' that, for various reasons, are not included in reports.
- Topics might be identified through surfacing of key issues in reports.
- Is there a place for a report template or prompts?
- Reports are very different.
- Many of the issues are profound and obvious, e.g. teacher recruitment.
- There is a lack of knowledge as to what each of JMC's constituent bodies does, their reach and size.
- There is value in speaking to (and beyond) reports.
- There is a tension between representatives speaking to their reports and best utilisation of the time available for the meeting.
- Would it be useful to have selected speaking to reports, and on what basis?
- Could 'horizontal reporting' be used with categories listed for response? Categories could be on a changing basis or on rotation.
- In order to highlight key issues there could be an invitation for a 'news item' to be added.
- Is there a need for meetings?
- Is the council too big?
- There is a need for more short discussion opportunities within meetings.

Trustees will consider how best to incorporate 'horizontal reporting' categories or prompts in the call for papers put out by the Secretary before each meeting. **Action: Trustees; Secretary**

5.11 **Mathematics in Education and Industry** The July 2020 conference will be in Bath (not Keele).

5.20 **STEM Learning** Steve Lyon highlighted the difficulty in identifying mathematics STEM Ambassadors as opposed to those from other fields who apply mathematics such as engineers. Lynne McClure stated that a similar problem exists in relation to RS partnership grants.

6 Reports from Observing Bodies

7 Reports from Meetings

8 Discussion of Reports

There were no matters for discussion from the reports.

9 Maths Week England

Andrew Jeffrey offered reflections on MWE 2019 and some thoughts regarding the 2020 event:

- His involvement followed widespread and longstanding discussions about starting a MWE and guesting at Maths Weeks in other jurisdictions.
- He 'jumped in' but doesn't want to be the central figure responsible for the event. He regards himself as strong on ideas and initiative, but is not naturally a manager.
- The aims have been publicised and are in the report which will be circulated.

Action: Secretary

- The National Numeracy report was a key document in formulating ideas for the event.
- MWE needs to be simple, free to access and have on-line access.
- He is grateful to partners and sponsors.
- There is a small financial residue.

- What went well:
 - > Social media campaign
 - > Level of participation – 200,000 students
 - > The ‘buzz’ around the event
 - > 104 schools responded to the survey with the majority giving a rating of good or better
- What could be better:
 - > An increased number of partners
 - > More sponsorship
 - > An expansion and improvement of the website
 - > Changes to the video delivery (the level of diversity was good)
 - > Quiz – develop daily questions for each year group
 - > Better reach

The discussion that followed included:

- Congratulations to Andrew for the success that had been achieved. An initial concern that MWE could be a distraction in a busy landscape proved not to be the case.
- Recognition that coordination (currently Andrew) is needed.
- What was the involvement of other organisations? How could the LMS be involved?
- Will MWE be broadened beyond schools; to under-represented groups; with more reach out? Yes, it is hoped so, but all of this requires money and personnel.
- Universities are well placed to engage, but Andrew has a lack of experience with this sector. Can universities take in students/pupils? They already do, but at times that don't necessarily match MWE.
- Universities have a significant number of individuals engaged in popularising mathematics who could be utilised.
- Supermarkets and shopping centres are prime sites for being involved.
- In Scotland, the Maths Week coordinator is now employed by National Museums rather than government.
- A change of culture needs to be developed whereby activities are ongoing rather than event weeks.
- Poster competitions already exist (e.g. University of Greenwich). Can this be utilised?
- There is a need for more organisations to sign up to MWE and for more active participation in the creation of activities.
- There are adult numeracy issues (cf. National Numeracy). Numeracy needs the same respect developed as has been the case with literacy. How can major broadcasters be brought onboard and things such as public lectures be incorporated?
- MWE taking place in November is the ‘least bad’ timing.
- How can JMC support/help? The majority of JMC organisations hadn't signed up to MWE 2019 which made it difficult to lend JMC's name to the event. JMC representatives are to be asked by email if they wish this support to be given from 2020. Representatives will also be asked if they wish their email address to be passed to Andrew Jeffrey so that direct communication can take place. **Action: Secretary**
- Can opportunity areas be harnessed? Lynne McClure, now an NN trustee, is to raise the issue with National Numeracy. **Action: Lynne McClure**

On behalf of JMC, the Treasurer offered Andrew Jeffrey a ‘big vote of thanks’ for everything he had taken on and achieved.

10 Any other business not elsewhere on the agenda

11 Discussion: Developments in 14-18 mathematics qualifications

The Chair provided an introduction to the topic with reference to developments that have occurred from the Smith report ‘Making mathematics Count’ in 2005 to the present. Against this background, three presentations were given:

- Higher Applications of Mathematics in Scotland: Sue Pope (SQA)
- GCSE Mathematics – Numeracy in Wales: Nicola Thomas and Alan Edwards (Estyn)
- Research into Core Maths in England: Matt Homer and Rachel Matthieson (University of Leeds)

The PowerPoints used are to be circulated to members of JMC.

Action: Secretary

Small group discussion was used to formulate questions and comments which included:

- Wales: Why is the GCSE called Mathematics-Numeracy? There is a link to the Literacy and Numeracy framework.

- England: The naming/signalling of qualifications is an issue.
- There are issues around the continuity of qualifications. (Scotland is addressing this with Applications of Mathematics appearing at National 4, National 5 and Higher.)
- England as a jurisdiction is very different to the rest of the UK due to being one of the biggest educational systems in the world.
- A long term view needs to be taken with the development of qualifications.
- Policy issues are key and, for example, led to the failure of the GCSE linked pair.
- There are professional development issues around new qualifications. In Scotland, there is no government funding attached. However, universities are very supportive. In Wales, professional development is delivered through four regional consortia. Support is funded. There is only one exam board (WJEC).
- The Higher Applications of Mathematics seeks to use sophistication in problem solving rather than that of (higher) mathematics.
- In Wales, a high proportion of students sit both mathematics and mathematics-numeracy which reflects a policy desire. There are issues around early entry, but these are being countered.
- There is a desire in Scotland for a move to assessments being undertaken totally online.

The presenters were thanked for their attendance and for their part in leading the discussion.

12 Conclusion

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

13 Dates of future meetings

Tuesday 2 June 2020 at The London Mathematical Society, De Morgan House,

57-58 Russell Square, London WC1B 4HS (deadline for papers: Tuesday 19 May 2020)

Thursday 12 November 2020 at The National Council for Voluntary Organisations, Regents Wharf,

8 All Saints Street, London N1 9RL (deadline for papers: Thursday 29 October 2020)

Tuesday 16 February 2021 at The National Council for Voluntary Organisations, Regents Wharf,

8 All Saints Street, London N1 9RL (deadline for papers: Tuesday 2 February 2021)

These meetings will begin at 11 a.m.

Summary Minutes of the Meeting of the Trustees of The Joint Mathematical Council of the United Kingdom held at the National Council for Voluntary Organisations at 9 a.m. on Tuesday 18 February 2020

Present Andy Noyes (Chair), Alice Rogers (Deputy Chair), Chris Chipperton (Secretary), Jennie Golding (Treasurer), Heather Davis, Graham Griffiths, Kevin Houston, Sofya Lyakhova.

1 Introduction

1.1 **Welcome** The Chair welcomed those present.

1.2 **Practical Arrangements** The Secretary made known the procedure for emergency evacuation.

1.3 **Apologies for Absence** None.

1.4 **Declarations of Conflicts of Interest** There were no new conflicts of interest. It was clarified that any conflicts could be raised as topics arose.

2 Previous Business

2.1 **Approval of the minutes of the meeting held on Tuesday**

2.4 **Matters arising not elsewhere on the agenda**

3 Officers

3.1 **Chair** Conversations have taken place with awarding organisations. There is an interest from them in joining the JMC for a discussion item.

There have been a number of conversations regarding Maths Week England.

A series of conversations have taken place with NCETM in relation to teacher professional development.

A lot of time has been spent managing the unexpected resignation of the Secretary.

3.2 **Deputy Chair** None.

3.3 **Secretary** None.

3.3 **Treasurer** A 90 day deposit account has been opened with Chris Chipperton added as a signatory along with the Chair and Treasurer.

Income is exceeding expenditure due to the JMC not currently being so active. Capability exists to make expenditure.

It was agreed for the Trustees to hold a planning day in the autumn.

4 **Committees**

4.1 **BCME Committee** The model of three linked days is to be tried for BCME10. There is a need to campaign for the recruitment of a BCME Chair. The engagement of a professional conference organiser is to be considered, but there is still a need for specialist knowledge for the conference content. The administration needs to be contracted out.

The General Meeting needs to vote on a resolution to support the three linked days model to ensure engagement.

4.2 **GCSE Working Group** The Chair asked what happened to the concerns raised by the working group. Jennie Golding stated that these will be passed to the 11-16 Contact Group. In response to a question by the Deputy Chair, Jennie Golding stated that there was a helpful link through her. There was a shared view that the two groups can complement one another.

4.4 **MMSA SIG** Jennie Golding reported that she had ceased to be a member of the group. It was agreed that she could continue her involvement, but as the representative of the JMC.

5 **Risk Assessment** In the light of experience following the Secretary's resignation, the risk register was considered again. Further thought will be given to relevant issues on the Trustees' planning day.

6 **Matters for Decision**

6.1 **JMC Engagement with Awarding Organisations** A number of conversations have taken place with awarding organisations. Hopefully there will be a broadening of their involvement with the JMC.

7 **Future Business**

7.1 **Business of the General Meeting** Maths Week England – JMC representatives are to be asked to consider engagement with their organisations and to feedback to the Chair and Acting Secretary.

7.2 **Dates of Future Meetings** The next meetings are due to be held on 12 November 2019 and 18 February 2020. The June 2020 meeting is to be arranged.

7.3 **Discussion Sessions at General Meetings** The afternoon discussion on 12 November 2019 will concern the professional development landscape across the UK.

The discussion item for 18 February 2020 will consider 14-18 qualifications across the UK. It is hoped that awarding organisations from all jurisdictions will be represented.

8 **Any other business not elsewhere on the agenda**

There will be a need for three new trustees in November.

A Trustees' planning day is to be held in September 2020.