

**Maths Hub Specification**

**Introduction/Background**

1. Mathematics has a critical role to play in the future of the UK economy. Mathematical and quantitative skills can increase individual productivity, earnings, and employment opportunities, and are increasingly required for a wide range of future careers as well as being important in everyday life. ​
2. The Department has invested to support and enhance mathematics teaching across the country through the creation of the Maths Hubs Programme, which began in 2014. The programme aims to enhance the quality of mathematics teaching through a collaborative national network of mathematics education professionals. There are now 40 Maths Hubs, each locally led by a Lead School, College or Trust.
3. Through a school-led model, the hubs aim to harness maths leadership and expertise within an area to develop and spread excellent practice, for the benefit of all students.
4. Each Maths Hub is open to working with any school or college, from Reception through to post-16, in the broad geographical area that it covers. The hubs draw on the expertise of Local Leaders of Mathematics Education (LLME) across their area and the support of strategic partners including Teaching School Hubs, universities, maths experts and employers.
5. Since 2016, Maths Hubs have been leading the Teaching for Mastery programme, a pedagogical method of teaching mathematics based on teaching methods seen in top performing international jurisdictions for maths attainment, such as Shanghai. Teaching for Mastery (TfM) emphasises whole class teaching that builds understanding systematically and in depth, allowing students to see the connections between topics and building up knowledge of mathematics as a cohesive whole. By the end of academic year 2022/23, Maths Hubs aim to have engaged 60% of primary schools and 50% of secondary schools in the Teaching for Mastery programme.
6. The Maths Hubs work, including the Teaching for Mastery programme, is coordinated and managed by the National Centre for Excellence in the Teaching of Mathematics (NCETM), who also provide them with specialist advice, training and support to ensure that good practice is shared among the whole network.
7. TheNCETM supports and challenges Maths Hubs to develop and deliver annual plans in line with the programme aims and strategic goals (Annex A) agreed with DfE and ensures these are consistent across the network. Further information can be found on NCETM’s website through the following links: <https://www.ncetm.org.uk/maths-hubs/> and <https://ncetm.org.uk/teaching-for-mastery/>

**The role and expectations of the Lead School/Trust**

1. Each Maths hub is led by a Lead School, College or Trust who leads a partnership of schools, colleges and other organisations working and leading together to improve maths education in an area. Leading a Maths Hub is a significant and demanding system leadership role. The Lead School/College/Trust is responsible for:
   1. Building and sustaining leadership partnership/capacity, including:
      1. the Maths Hub leadership group that draws on a breadth of expertise from within the Maths Hub area
      2. the Maths Hub LLME community that is made up of local leaders from across the Maths Hub area, including LLME from the Lead School/Trust
      3. leadership partnership with other system leaders (e.g. Teaching School Hubs)
   2. Building operational management infrastructure, including the required:
      1. project management
      2. financial management
      3. data and reporting management
      4. communications infrastructure
   3. Ensuring the Maths Hub is accountable to stakeholders, by
      1. meeting all DfE grant agreement and reporting requirements (see Annex B)
      2. maintaining a local Strategic Board that represents relevant stakeholders
      3. consistently evaluating the quality, reach and impact of the Maths Hub’s work
      4. gathering feedback from schools that are being served and adapting work to best address their needs
   4. Continuing to demonstrate mathematics leadership through:
      1. strong mathematics pupil performance within the Lead School
      2. commitment to teaching for mastery within the Lead School (and trust, if applicable)
      3. its effective support for mathematics improvement in schools, within its own trust and beyond.
2. A full list of the expectations for Maths Hubs Leadership and Management (MHLM) Team composition can be found in Annex C.

**New Lead Schools**

1. Following nine successful years of leading the Lead School for SHaW Maths Hub is stepping down from the role at the end of academic year 2022/23. ShaW Maths Hub covers the local authority areas of **Herefordshire; Shropshire; Telford and Wrekin; Wolverhampton**. The Department is therefore undertaking a competitive grant process to appoint and fund one new accountable lead entity (Lead School, College or Trust).
2. The successful applicant must have an eligible named school or college located in one of the local authority areas listed above. We will also consider applications from secondary schools which meet all except the EBacc criterion in AY 2022, and can evidence their EBacc entry data *will* meet the benchmark in 2023.
3. The new Lead School will be expected to continue and build upon the successful work of the previous Lead School. In particular, the new Lead School should ensure maximum continuity during the transition from the current Lead School (see paragraph 19 onwards for staffing information). The Maths Hub name is expected to be maintained.
4. Being a Maths Hub Lead School is a very significant system leadership role, which provides the opportunity to enhance the quality of mathematics education and the outcomes for pupils across a wide area. You will be part of a national network of schools that are transforming mathematics education and so changing the lives of children and young people across England.
5. To be a Maths Hub Lead School you must meet the Maths Hub Eligibility Criteria as set out in Document 3 Award Criteria. The full process for applying to become a Lead School can also be found in Document 3 including the scoring mechanism, application questions and information on the interview process.
6. If you are interested in applying, we also advise that you attend the online briefing held by NCETM on 8 February. Register for the briefing by emailing [mathshubs@ncetm.org.uk](mailto:mathshubs@ncetm.org.uk)by midday, (7 February). Please give details of who will be attending, and put “New Lead School briefing” in the subject line.

**Management Information**

1. The full details for providing management information is outlined in the example list of objectives in Annex B below, which represents an example of Annex F the Grant Offer Letter (Document 6). This list of objectives forms part of the Grant Funding Agreement. The Grant Funding Agreement is made up of the Grant Terms and Conditions, Grant Offer Letter, Annexes and accompanying policies.

**Funding arrangements**

1. All funding for the Maths Hub programme is subject to internal departmental financial approval. Grant payments are made up of a fixed leadership and management cost, and a variable amount depending on the number of projects run by the hub and school participation in those projects. In academic year 2022/23 Maths Hubs received funding ranging from £450,000 to £850,000. Funding amounts will vary each year and will be discussed with the hub in advance of the academic year based on action plans that are agreed with NCETM and the Department. All Maths Hubs activity is funded so professional development is free to participants.
2. The exact funding arrangements, including timings for payments, will be agreed through the Grant Offer Letter which forms part of the Grant Funding Agreement. Adjustments or clawback will be made to reflect underspend. Schools will be expected to identify a named programme lead responsible for coordinating this financial activity. If you wish to hear more about the fixed cost funding arrangements for the leadership and management team of the hub, please join the relevant briefings (paragraph 15) in the first instance, then use the messaging facility in the Jaggaer eSourcing Portal if you have any further questions. You must register for a Jaggaer account in order to use this facility.

**Staffing and TUPE (Transfer of Undertakings, Protection of Employment)**

1. To support the smooth and effective transfer from one lead school to another, the current and successor Lead School must secure their own legal and HR advice to clarify requirements and support the TUPE process. Potential Bidders should not rely on DfE for advice. DfE will only work as a third party to collate/share TUPE information from current Lead Schools.
2. DfE considers that TUPE is likely to apply in principle as there is likely to be a service provision change. Where it is envisaged staff are liable to transfer, the current Maths Hub Lead School has provided high level staffing TUPE details in Document 5 Personnel TUPE data template to support applying schools in their decision-making process. You must request the password to access Document 5 through Jaggaer and must first sign and submit the Declaration of Confidentiality (Document 4).
3. Once the successor school is appointed, DfE and the NCETM will work with the current and incoming school to implement the Maths Hub Lead School exit management plan and oversee the transition of programme activities. This will include:
   1. the current school providing detailed personnel TUPE information required to enable the successor school, as incoming employer, to inform and consult on any planned measures towards the employees after the transfer, considering any implications of the employees’ terms and conditions of employment, including pensions.
   2. discussions between the current and incoming Lead Schools to agree transition arrangements for both staff and those working to a Service Level Agreement (SLA).
4. The overarching principle in managing the change is to ensure maximum continuity during and following the transition from the current Lead School to the incoming Lead School. In particular:
   1. for schools being supported by the Maths Hub, the change of Lead School should be largely invisible to them
   2. for the LLME community, there should be no changes other than the normal turnover in the community at the end of a year
   3. for the Maths Hub Leadership & Management Team, the intention is to maximise continuity in the successor year, with a smooth transition by essentially retaining the same personnel, where they remain available. The one role that would be expected to change is the Senior Leadership Link.
5. It is expected that the successor body will comply with its obligations under TUPE and make arrangements to manage staff effectively. To support continuity the new lead school will aim to renew relationships with all other people working for the Maths Hub (that are not employed by the current lead school) through new service level agreements, especially in their initial year, this includes all LLME.
6. During the transition of Lead School responsibilities over academic year 2022/23 funding will be provided to the successor Lead School through an SLA with the current Lead School to ensure time can be dedicated to transition. Funding amounts will be discussed once a successor school has been identified.

**Annex A – Maths Hubs Programme Strategic Goals (2020-23)**

The Maths Hubs Network provides school-based system leadership to enable the continuous improvement of mathematics education for all pupils and students in all England’s schools and colleges. Maths Hubs work with teachers and leaders across all phases, from Reception through to Post-16.

**Primary schools**

Maths Hubs support teachers and leaders in primary schools to establish teaching for mastery approaches so that all pupils develop deep knowledge, understanding and confidence, and are well prepared for the secondary mathematics curriculum. This includes:

* providing support for participating schools to introduce, embed and sustain teaching for mastery with fidelity and consistency, encouraging the effective use of high-quality resources such as textbooks
* working with schools to address specific challenges they may face as they seek to embed and sustain teaching for mastery (for example, mixed-age classes or same-day intervention or supporting pupils with special educational needs and disabilities (SEND))
* working with schools that need initial support to put key foundations into place so that they are ready to introduce teaching for mastery (for example, schools receiving support from National Leaders of Education)
* developing the knowledge and practice of Reception year practitioners to ensure that all children develop a secure foundation in mathematics and are well prepared for teaching for mastery in Key Stage 1

By 2023, the aim is for 60% of primary schools to have engaged with the teaching for mastery support provided through the Maths Hubs Network.

**Secondary schools**

Maths Hubs support teachers and leaders in secondary schools to establish teaching for mastery approaches, while also supporting them to address the challenges of teaching GCSE Mathematics, so that all pupils develop deep knowledge, understanding and confidence, and are well prepared for progression to post-16 education. This includes:

* providing support for participating schools to introduce, embed and sustain teaching for mastery with fidelity and consistency, encouraging the effective use of high-quality resources such as textbooks
* working with schools to address specific challenges in secondary mathematics teaching through the use of teaching for mastery approaches (for example, Year 5-8 continuity, mathematical thinking for GCSE, and supporting pupils with SEND)
* working with schools that need initial support to put key foundations into place so that they are ready to introduce teaching for mastery (for example, schools receiving NLE support)

By 2023, the aim is for 50% of secondary schools to have engaged with the teaching for mastery support provided through the Maths Hubs Network.

**Post-16 institutions (including 11-18 schools)**

Maths Hubs support teachers and leaders in post-16 schools and colleges to increase participation in Level 3 mathematics education, and enhance the quality of teaching at all levels, so that all students studying mathematics post-16 make good progress and are well-prepared for their future education and career pathways. Maths Hubs carry out this work by working closely with the funded programmes for post-16 mathematics (the Advanced Maths Support, FE Centres for Excellence and the Maths Schools Programmes) and activity is coordinated in conjunction with these programmes.

**Local leaders of mathematics education**

In order to carry out their work, Maths Hubs identify, develop and support local leaders of maths education (LLME). The LLME work together as part of their Maths Hub team to support schools and colleges across their Maths Hub area. Maths Hubs encourage the LLME to:

* be active members of their Maths Hub LLME community
* successfully complete at least one of the national LLME development programmes (for example, the Mastery Specialist Programme or the PD Lead Programme)
* regularly lead Maths Hub work
* regularly participate in Network Collaborative Projects and so benefit from membership of the associated national project community

By 2023, the aim is for the Maths Hubs Network to be working with 2000 LLME and for there to be widespread understanding of the importance of their role in the system.

**Specialist knowledge for teaching mathematics programmes**

Maths Hubs work with a range of partners to ensure there is effective initial training and professional development of new teachers of mathematics in primary and secondary schools (and other mathematics classroom practitioners), so that they have the specialist knowledge required to support the learning of mathematics. This includes:

* working with ITT providers to support the development and delivery of ITT programmes
* working with relevant partners to develop and/or deliver in-service specialist knowledge for teaching mathematics (SKTM) programmes for practitioners in primary and secondary schools

By 2023, the aim is for all engaged ITT and SKTM programmes to include initial preparation for teaching for mastery.

**Professional and school development models**

Maths Hubs use a range of collaborative professional and school development models to develop mathematics teaching in schools. Through these models they support teachers’ professional learning and practice development; establish school/department-wide approaches to teaching and professional development; and improve pupils’ and students’ experience and outcomes. These models include:

* supporting schools to establish sustainable in-school approaches to collaboration and development for mathematics teaching
* running Maths Hub Work Groups which enable schools to work together over a sustained period led by a teacher (or former teacher) expert, whose expertise is in both mathematics education and in leading teacher professional development
* creating Network Collaborative Projects where Work Group Leads from across the Maths Hubs Network work together with the NCETM and other national expertise to innovate, develop, and evaluate particular Work Group models and professional development programmes

By 2023, the aim is for the vast majority of schools to regularly participate in a Maths Hubs Work Group and understand how participation can become a routine, ongoing part of their approach to professional and school development in mathematics.

(Note: Each year the Maths Hubs Network and the NCETM develop and agree annual plans with the DfE which specify:

* the particular projects needed to address the goals that year
* the number, types and location of schools to be supported based on policy priorities
* the funding required to address the goal

**Annex B: Grant Offer Letter Aims and Objectives 2022/23**

**Purpose of grant**

Lead a Maths Hub to support schools and colleges to achieve excellence in mathematics education from primary to post-16. Build strong capability for local leadership of mathematics and, ensure there is sufficient talent and expertise within the Maths Hub to lead and deliver change to teaching practice that will have a positive impact on standards.

**Governance documentation / activity required. Expectations for 2022-23 include:**

**Maths Hub Leadership and Management team:**

* People are appointed to each of the official MHLM roles required by the programme
* Each member of the leadership and management team has a clear job description and understands the roles of their other team members using the supporting NCETM documentation
* Anyone taking up a new role in the MHLM team participates fully in the NCETM Induction Programme
* There are effective internal induction processes
* The hub establishes the required full capacity leadership and management team at the beginning of the academic year
* The hub has contingency plans to address the risk of unexpected loss of leadership and management capacity during the year

**Strategic Board and partners:**

* The hub appoints an independent Chair
* The board has a balance of members (as outlined within the published terms of reference)
* Membership of the board is published on the hub’s website
* The Chair and hub Senior Leadership Link work together to set the agenda and agree meeting notes
* The Strategic Board (operating within the published terms of reference) reviews the Maths Hub plans, delivery and evaluation three times per year
* The hub establishes working relationships with appropriate local partners to help increase its reach and sustain relationships with schools
* The hub draws upon organisations with specialist expertise such as universities and national programmes (e.g., AMSP) to help shape its work
* When hubs are working within formal priority areas (e.g., Education Investment Areas), they, in partnership with NCETM, work with local leadership to agree work that addresses identified priorities

**Local leaders of mathematics education (LLME):**

* The hub identifies and recruits adequate numbers of Work Group, Cohort and Community Leads to implement its annual plan
* The hub ensures that LLME engage appropriately with the national LLME development programmes and NCP workshops
* The hub ensures that Work Group, Cohort and Community Leads understand their role backed up by clear service level agreements
* The hub establishes and sustains a professional community of local leaders of maths education

**Planning, monitoring and evaluation:**

* The annual plan is produced, revised and adapted at agreed points during the year in line with the Annual Planning Guidelines
* Work Group, Programme and Community plans are produced for all groups and uploaded on MHPod
* The hub monitors the quality of the Work Group, Cohort and Community Leads’ work and intervenes where appropriate
* The hub provides the regular progress reports required by the NCETM/DfE (at published dates), highlighting any issues regarding delivery and intended mitigating actions and discussing these with the NCETM at regular progress review meetings
* All participating schools, LLME and hub leadership understand and fulfil their responsibilities in contributing to the programme evaluation processes
* Work Group, Programme and Community evaluation reports are completed by their Leads using the standard report templates
* The hub completes the annual reporting required by the NCETM/DfE (at published date)

**Communication, engagement and recruitment:**

* The MHLM team systematically uses the programme’s internal communications tools including the weekly Bulletin; the Programme Calendar; Knowledge Base and the relevant online communities
* The hub uses external communication channels, such as websites; newsletters and social media to inform schools of the opportunities available
* The hub uses engagement activities in order to recruit and retain schools for Work Groups and programmes
* The hub has clear processes for schools wishing to express interest or apply to participate and responds in a timely manner to enquiries and expressions of interest from schools
* The hub recruits and retains the expected numbers of schools and/or participants agreed with the NCETM for defined NCPs

**Financial and data management:**

* The hub provides ongoing forecasts and final figures for its expenditure within MHPod, reporting any risks of underspend/overspend and the contingency plans initiated
* Formal financial agreements with schools and individuals are in place for any payments that are made by the Maths Hub, including for leadership roles and participant schools that receive grants
* An external audit of the Maths Hubs expenditure is carried out, within the expected window, as part of the DfE’s Grant Funding Agreement Annex G requirement
* Participation data is recorded and reported as required by the NCETM within MHPod
* The hub completes a Data Protection Impact Assessment (DPIA) and consistently follows the requirements set out by the DfE (data controller) in its role as data processor, including GDPR compliance
* The hub has a strategy to report and manage the loss of data, such as through a cyber-attack. Measures, such as key contact data Cloud uploads, will be considered to ensure access and continuity. Refer to Annex K data requirements

**Working with the Maths Hubs Network, the NCETM, and the DfE:**

* All MHLM team members participate fully in the appropriate national forums openly sharing successes and challenges from their practice
* The Maths Hub Lead (unless in first year of role) participates in a Strategic Leadership Group and acts as an MHL Link to a Maths Hubs Network Project
* The NCETM is notified immediately of any issue that may cause a risk to the reputation of the Maths Hub or the wider programme
* The NCETM is informed in a timely manner of any risk to their lead school eligibility or intended changes to the MHLM team
* The Senior Leadership Link fully understands the expectations of the DfE as laid out in the grant funding agreement and ensures full understanding within the MHLM team. The Grant Offer Letter, relevant annexes, grant Terms and Conditions and policies, together make up the Grant Funding Agreement.

**Annex C: Expectations for MHLM Team composition in 2022/23**

Each MHLM Team is expected to have a leadership group and operational management team. Below, in both cases, the overall expected functions are first specified and then this is followed by any role-specific requirements. The total grant for the MHLM Team in 2022/23 is £249,500.

**Leadership group (functions)**

The leadership group should have a total minimum capacity equivalent to 11 days/week. The leadership group members should collectively have the capacity to fulfil the following functions:

1. providing system leadership for mathematics pedagogy and curriculum, mathematics professional development, and school-wide development of mathematics for the schools and groups of schools within the Maths Hub area. This includes:

* working as a group to strategically model, plan and evaluate the Maths Hub’s provision
* working with LLME to plan, lead, and evaluate high quality, high impact, support for schools

1. identifying, developing, monitoring, and supporting local leaders of mathematics education. This includes:

* leadership of the Maths Hub LLME Community
* one-to-one monitoring and support of all active LLME
* securing the ongoing support of LLME schools
* identification of potential future LLME

1. communicating vision for mathematics education and advocating for the opportunities provided by the Maths Hub. This includes:

* presenting to school and subject leaders in diverse stakeholder settings
* developing and communicating case studies and stories
* inviting and encouraging participation in fulfilling the vision

1. seeking to understand needs and priorities of schools and to be accountable for the support provided to schools. This includes:

* working closely with their Strategic Board
* dialogue with trust, school, and subject leaders
* analysing and responding to feedback and evaluation from participant schools

1. contributing to national and regional leadership of mathematics education. This includes:

* participation in Maths Hubs Network activity such as national forums, national projects, and regional collaborative groups
* working with other types of regional system leaders to ensure coherent support for schools, for example, with Teaching School Hubs, Research Schools and other Curriculum Hubs within the region

**Leadership Group (role-specific requirements)**

The MHLM Team must have at least one person named for the following roles:

* + - Senior Leadership Link
    - Maths Hub Lead
    - Assistant Maths Hub Lead (primary)
    - Assistant Maths Hub Lead (secondary)
    - Assistant Maths Hub Lead (post-16)
    - Headteacher Advocate (primary)

Other roles are also permitted.

Specific expectations regarding the Senior Leadership Link role include:

* Line managing the MHL, providing support, challenge, and performance feedback
* Identifying development needs of the MHL, supporting and where possible facilitating that development
* Managing the effective running of the Strategic Board
* Final quality assurance and sign-off of formal reports to the DfE (including financial reports)
* Working with the MHL to ensure that contingency plans exist to mitigate against unexpected changes in the leadership and management capacity

Specific expectations regarding the Maths Hub Lead role include:

* Leading MHLM team ensuring shared strategic direction, vision, and goals
* Leading team meetings
* Line managing and quality assuring MHLM team
* Identifying development needs of the MHLM team
* Initial quality assurance of formal reports to the DfE
* Reporting regularly to SLL and Lead School leadership team/ internal governance
* Working with the SLLL to ensure that contingency plans exist to mitigate against unexpected changes in the leadership and management capacity

**Operational management team (functions)**

The operational management team should have a total minimum capacity equivalent to 10 days/week. The **function** of the operational management team is to **provide operational support to the leadership group, LLME, and hub activity participants, and to develop and use clear and effective processes and systems** needed for:

1. co-ordination of all plans, reports and data collection required within the programme, including:

* reviewing programme timelines and planning to ensure deadlines are met
* ensuring all plans and reports are collected from MHLM Team members and LLME as required
* ensuring all data submission and validation work is completed as required

1. administration of events, workshops, and meetings, including:
   * booking venues and securing best value
   * setting up and supporting online workshops
   * ensuring feedback is collected and processed
   * scheduling MHLM Team meetings
   * scheduling Strategic Board meetings and producing associated documents
2. managing internal communications (with the leadership group, LLME, and hub activity participants) and external communication processes (with schools and stakeholders), including:
   * managing e-mail inboxes
   * managing communication with Maths Hub activity participants
   * setting up and managing online communities (e.g., Basecamp)
   * managing the Maths Hub website
   * managing the production of newsletters and social media content
3. managing finances and service level agreements, including:
   * monitoring financial plans and expenditure
   * working closely with school finance team to ensure accurate accounting of the Maths Hub finances
   * co-ordinating the production and communication of all service level/financial agreements for MHLM Team members, LLME and participant schools
   * co-ordinating and monitoring process for payments
   * managing the travel claims processes for Maths Hub activity
4. working in partnership with other Maths Hubs, the NCETM, and the DfE, including:

* participating in national forums and online community
* working with other local Maths Hubs operational management teams to promote clear support across the region
* working with NCETM team members, especially Regional Leads and the NCETM Operations Team
* liaising with the DFE as required, including regarding external audit requirements

**Operational management team (role-specific requirements)**

The operational management team must have at least one person named for the following roles:

* + - Maths Hub Co-ordinator, or
    - Maths Hub Project Manager

Other roles are also permitted.

The distribution of roles across the team can be decided locally. It is expected that aspects of roles may change when the Maths Hub moves towards a more senior operational management role. The NCETM will enable Maths Hubs to exchange practice and information regarding this type of role.