

# 2023/24 Maths Hubs Handbook

## Local Leaders of Mathematics Education

The **Maths Hubs Programme** works to improve mathematics education in all state-maintained schools in England. This work is done by **LLME**, experienced and knowledgeable colleagues designing and leading professional development for teachers of mathematics in order to have an impact on classroom practice.

This handbook provides an overview of the work of the **Maths Hubs** and the **NCETM** for the academic year **2023/24** and should be read in conjunction with the Network Collaborative Project (NCP) specific handbook.



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# Professional development opportunities

## Primary schools

In 2023/24, the NCETM and Maths Hubs are offering 33 different Network Collaborative Projects (NCPs). The NCPs listed below are available to primary schools and teachers.

New for 2023/24 is a targeted support offer, where identified schools who do not currently have the capacity to benefit from standard Teaching for Mastery Programmes can join at any point in the year, working with a Targeted Support Partner to design and implement a bespoke development plan.

### Work Groups

<b>NCP23-06</b>	Mastering Number at KS2 Work Groups
<b>NCP23-07a</b>	Mastering Number at Reception and KS1 Work Groups
<b>NCP23-08</b>	Mastery Readiness Work Groups
<b>NCP23-09</b>	Primary Teaching for Mastery Development Work Groups
<b>NCP23-10</b>	Primary Teaching for Mastery Embedding Work Groups
<b>NCP23-11</b>	Primary Teaching for Mastery Sustaining Work Groups
<b>NCP23-19</b>	Years 5-8 Continuity Work Groups

### Programmes

<b>NCP23-01</b>	Primary Mastery Specialist Programme (Cohort 9)
<b>NCP23-04</b>	NCETM Professional Development Lead Programmes
<b>NCP23-05</b>	NCETM School Development Lead Programme
<b>NCP23-25</b>	Specialist Knowledge for Teaching Mathematics: Early Years Teachers Programme
<b>NCP23-26</b>	Specialist Knowledge for Teaching Mathematics: Primary Teachers Programme
<b>NCP23-27</b>	Specialist Knowledge for Teaching Mathematics: Primary Teaching Assistants Programme
<b>NCP23-28a</b>	Specialist Knowledge for Teaching Mathematics: Primary Early Career Teachers – Phase 1 Programme
<b>NCP23-28b</b>	Specialist Knowledge for Teaching Mathematics: Primary Early Career Teachers – Phase 2 Programme

### Communities

<b>NCP23-07b</b>	Mastering Number Embedding the Impact Communities
<b>NCP23-09s</b>	Regional Cross-phase Special Schools Teaching for Mastery Development Communities
<b>NCP23-31</b>	Strengthening Partnerships with ITT Providers Communities

### Intensive Support

<b>NCP23-33</b>	Targeted Support in Maths
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# Professional development opportunities

## Secondary schools

In 2023/24, the NCETM and Maths Hubs are offering 33 different Network Collaborative Projects (NCPs). The NCPs listed below are available to secondary schools and teachers.

New for 2023/24 is a targeted support offer, where identified schools who do not currently have the capacity to benefit from standard Teaching for Mastery Programmes can join at any point in the year, working with a Targeted Support Partner to design and implement a bespoke development plan.

### Work Groups

<b>NCP23-12</b>	Secondary Teaching for Mastery Development Work Groups
<b>NCP23-13</b>	Secondary Teaching for Mastery Embedding Year Support Work Groups
<b>NCP23-14</b>	Secondary Teaching for Mastery Embedding and Sustaining Work Groups
<b>NCP23-19</b>	Years 5-8 Continuity Work Groups
<b>NCP23-20</b>	Cross Phase – Supporting Low Attainers to Achieve a L2 Qualification in Mathematics



### Programmes

<b>NCP23-02</b>	Secondary Mastery Specialist Programme (Cohort 7)
<b>NCP23-03</b>	Secondary Mastery Specialist Programme (Cohort 8)
<b>NCP23-04</b>	NCETM Professional Development Lead Programmes
<b>NCP23-05</b>	NCETM School Development Lead Programme
<b>NCP23-29a</b>	Specialist Knowledge for Teaching Mathematics: Secondary Early Career Teachers – Phase 1
<b>NCP23-29b</b>	Specialist Knowledge for Teaching Mathematics: Secondary Early Career Teachers – Phase 2
<b>NCP23-30</b>	Specialist Knowledge for Teaching Mathematics: Secondary Non-specialist Teachers Programme
<b>NCP23-32</b>	Specialist Knowledge for Teaching Mathematics: Secondary Teaching Assistants Programme



### Communities

<b>NCP23-09s</b>	Regional Cross-phase Special Schools Teaching for Mastery Development Communities
<b>NCP23-15</b>	Secondary Subject Leadership Community
<b>NCP23-16</b>	Secondary Maths MAT Leads Community
<b>NCP23-31</b>	Strengthening Partnerships with ITT Providers Community



### Intensive Support

<b>NCP23-33</b>	Targeted Support in Maths
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# Professional development opportunities

## Post-16 institutions

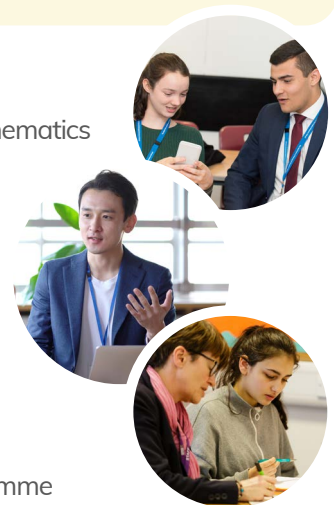
In 2023/24, the NCETM and Maths Hubs are offering 33 different Network Collaborative Projects (NCPs). These listed below are available to post-16 institutions and teachers..

### Work Groups

- NCP23-20** Cross Phase – Supporting Low Attainers to Achieve a L2 Qualification in Mathematics
- NCP23-23** Developing Core Maths Pedagogy Work Groups
- NCP23-24** Developing A Level Pedagogy Work Groups

### Programmes

- NCP23-04** NCETM Professional Development Lead Programmes
- NCP23-05** NCETM School Development Lead Programme
- NCP23-21** Post-16 GCSE/FSQ Mastery Specialist Programme: Trailblazer and Cohort 1
- NCP23-22** Specialist Knowledge for Teaching Mathematics: Core Maths Teachers Programme



# Types of professional development activity

<h2>Work Group</h2>	<p>Work Groups have an emphasis on collaborating to support school- or department-wide development in maths, as well as supporting individual professional learning and development. Lead participant teachers develop their own practice by trying out new approaches in their own classrooms, and work with their colleagues in school to share ideas and establish approaches across their school or department. They also meet regularly during the year to collaborate with their peers locally. Work Groups are led by a teacher (or former teacher) expert, who is experienced in both maths education and in leading teacher professional development.</p>
<h2>Programme</h2>	<p>Programmes support individual teachers or leaders of maths in their professional development. There are two types: Specialist Knowledge for Teaching Mathematics (SKTM) programmes, where individuals develop specialist knowledge to improve their practice; and Local Leaders of Mathematics Education (LLME) development programmes, to equip practitioners to lead work with teachers and schools. Both involve participants joining a national or regional cohort of colleagues from other schools or colleges, and exploring centrally produced NCETM materials.</p>
<h2>Community</h2>	<p>Professional learning communities also emphasise supporting individual teachers or leaders of maths in their professional development. Participants collaborate formally and informally, over a sustained period of more than a year, to deepen their understanding of maths culture, curriculum, pedagogy, and professional development. Community Leads establish a professional learning culture that creates professional dialogue and mutual support, offering their own expert input where appropriate.</p>



# Strategic goals

## Primary schools

Maths Hubs support primary schools to:

- establish a culture of high expectations for all pupils (including disadvantaged pupils and pupils with SEND) in which they develop deep knowledge, understanding and confidence in mathematics, succeed in National Curriculum mathematics assessments, and are well prepared for the secondary mathematics curriculum
- introduce, embed, and sustain teaching for mastery approaches with fidelity and consistency, making effective use of high-quality resources
- ensure their mathematics curriculum is knowledge-rich and fulfils the aims of the national curriculum: every school's curriculum containing a coherent and detailed sequence of essential content to support pupils' progress over time
- ensure all teachers of mathematics have the specialist knowledge and skills required to teach mathematics effectively
- work with teachers and leaders of mathematics to establish professional cultures and practices that support ongoing development
- work in a collaborative and sustained way with other schools and local leaders of mathematics education to overcome challenges and support ongoing improvement.

## 2023/24 commentary

A key part of the Primary Schools Strategic Goal is to support teachers and leaders in primary schools to establish highly effective classroom practices through developing teaching for mastery approaches as exemplified in the [NCETM's Essence of Mathematics Teaching for Mastery](#). Developing sustainable change is a long and complex process, and these projects all aim to provide the necessary support and challenge to achieve the strategic goal and contribute to a national transformation of the teaching of mathematics in primary schools.

For some schools, their teaching for mastery journey starts with Mastery Readiness, which is particularly aimed at schools who may require additional support to get their schools into a strong position to fully benefit from future mastery Work Groups. It focuses on securing leadership within the school and establishing a shared vision of what they want to achieve. There is also a focus on arithmetic proficiency, so that pupils are in a strong place to benefit from a mastery approach. Readiness schools then move into a development Work Group the following year where most schools start their journey, followed by an Embedding Work Group. The final Work Group is Sustaining, a perma-



nent Work Group which continues, allowing schools to work collaboratively year-on-year with other schools to refine and sustain teaching for mastery.

Mastering Number projects contribute to the strategic goal. For some schools, they provide an introduction to teaching for mastery principles and approaches, and these schools are encouraged to join the full

Teaching for Mastery Programme, starting with Readiness or Development Work Groups. For schools already engaged in the Teaching for Mastery Programme, the Mastering Number Work Group helps to strengthen teaching for mastery practices through the bespoke teaching materials and professional development.

This year the 'Parent Project' will continue. This was developed last year and is aimed at schools who have previously engaged in Mastering Number and want to continue to refine and develop it through work with parents.

The development of Sustaining Work Groups will continue to be a key focus, as Maths Hubs continue to develop and refine models for a Work Group that seeks to be a permanent feature in a school's continued development.

# Strategic goals

## Secondary schools

Maths Hubs support secondary schools to:

- establish a culture of high expectations for all students (including disadvantaged students and students with SEND) in which they develop deep knowledge, understanding and confidence in mathematics, succeed in GCSE mathematics, and are ready to continue studying mathematics post-16
- introduce, embed, and sustain teaching for mastery approaches with fidelity and consistency, making effective use of high-quality resources
- ensure their mathematics curriculum is knowledge-rich and fulfils the aims of the national curriculum: every school's curriculum containing a coherent and detailed sequence of essential content to support pupils' progress, building on prior knowledge and understanding, over time
- ensure all teachers of mathematics have the specialist knowledge and skills required to teach mathematics effectively
- work with teachers and leaders of mathematics to establish professional cultures and practices that support ongoing development
- work in a collaborative and sustained way with other schools and local leaders of mathematics education to overcome challenges and support ongoing improvement.

## 2023/24 commentary

A key part of the Secondary Schools Strategic Goal is to support teachers and leaders in secondary schools to establish highly effective classroom practices through developing teaching for mastery approaches as exemplified in the [NCETM's Essence of Mathematics Teaching for Mastery](#).

Developing sustainable change is a complex process, and these projects all aim to provide the necessary support and challenge to achieve the strategic goal and contribute to a national transformation of the teaching of mathematics in secondary schools.

One of the key challenges remains shifting from working with individual teachers to having impact across an entire department. To support this, we are strengthening the provision for Teaching for Mastery Sustaining Work Groups by helping Mastery Advocates to focus on developing a key element of teaching for mastery with their colleagues. Alongside this, we continue to work with leadership as well as beginning to work with other adults who

support mathematics teaching in the classroom.

Teaching for Mastery Sustaining Work Groups (23-14) now offer a choice of foci, which will give some additional structure to the programme whilst also allowing hubs scope to respond to local needs.

The secondary leadership NCPs (23-15 and 23-16) are continuing with provision for both the existing participants and for new participants. These have been successful in recruiting to our programmes, whilst also helping to ensure that impact is at the department (or wider) level.

2023/24 sees the introduction of a new programme for secondary teaching assistants who are working within a school already engaged with a Teaching for Mastery Work Group.

Core materials are being piloted as part of a 2022/23 RIWG. This is part of the strategy to ensure that all of those who work with students within a mathematics department have an understanding of teaching for mastery.





# Strategic goals

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

Maths Hubs, supporting and collaborating with the Advanced Mathematics Support Programme (AMSP) at Level 3 and FE colleges at GCSE resit/FSQ, support post-16 institutions to:

- establish a culture of high expectations for all students (including disadvantaged students and students with SEND) in which they develop deep knowledge, understanding and confidence in mathematics, succeed in their post-16 mathematics qualifications, and are well prepared for the mathematical requirements of their future education and career pathways
- develop teaching approaches consistent with teaching for mastery principles
- ensure their mathematics provision includes a full range of programmes appropriate for all students and that each mathematics pathway offers a coherent and detailed sequence of essential content to support students' progress, building on prior knowledge and understanding

- ensure all teachers of mathematics have the specialist knowledge and skills required to teach mathematics effectively
- work with teachers and leaders of mathematics to establish professional cultures and practices that support ongoing development
- work in a collaborative and sustained way with other schools and institutions, and local leaders of mathematics education to overcome challenges and support ongoing improvement.

**By 2027, the ambitions are:**

1. that the professional development needs of those teaching GCSE resit/FSQ mathematics are addressed through support provided by Maths Hubs and other partners
2. for Maths Hubs to have provided ongoing support for the AMSP's work to increase participation in Level 3 mathematics courses, including Core Maths.

## 2023/24 commentary

The 2023/24 academic year sees the launch of the Mastery Specialist Programme for teachers of GCSE maths resit and Functional Skills maths qualifications in post-16 institutions. A trailblazer cohort is piloting resources and strategies which are being rolled out for Cohort 1 of the programme. The programme uses principles underpinning the [NCETM's Essence of Mathematics Teaching for Mastery](#), and draws upon research from the FE Centres for Excellence in Maths project which concluded in March 2023.

Alongside the Mastery Specialist Programmes, a new NCP will focus on the cross-phase support of students who are working towards a Level 2 qualification (GCSE Maths grade 4 or Functional Skills qualification).



Participants from both secondary schools and post-16 institutions will develop effective collaborative practice to support those students who are unlikely to achieve a GCSE Maths grade 4 in Year 11, continuing to work towards a Level 2 qualification as part of their post-16 studies. This NCP has evolved from, and replaces, the 2022/23 Supporting GCSE Resit NCP.

Level 3 NCPs are carried out in partnership with the AMSP. This continues as in 2022/23, with Work Groups being agreed and run within and across regions in liaison with AMSP colleagues. An increased focus on Core Maths is anticipated and Maths Hubs will need to work closely with AMSP partners as work develops.

# Strategic goals

## Local leaders of mathematics education

Maths Hubs identify, develop and support local leaders of mathematics education (LLME) who:

- lead high-quality school and professional development in mathematics, including Teaching for Mastery Work Groups; specialist knowledge for teaching mathematics programmes; and mathematics leadership communities
- establish and sustain long-term working relationships with leadership in schools and trusts, enabling them to agree the forms of support that will be most relevant for their needs
- are well prepared for their role through the NCETM accredited LLME programmes (Mastery Specialist, Professional Development Lead, and

School Development Lead), and through participation in NCETM-led project communities

- are supported and developed by their Maths Hub leadership through participation in their local LLME Community
- are fully supported in their LLME role by their own school's leadership and have external recognition for their expert role as local leaders of mathematics education.

The ambition is for each Maths Hub to have a team of at least 50 active LLME (2,000 across the country) in any year, providing an appropriate range of expertise to address the needs of schools in the Maths Hub area.

## 2023/24 commentary

There are no changes to the LLME development NCPs in 2023/24 (NCP23-01 to NCP23-05). The NCETM School Development Lead Programme is now an established part of the suite of LLME development programmes, adding to the comprehensive offer for the development of LLME expertise.

In addition to the NCETM LLME development programmes, it is recognised that LLME also have opportunities to develop within their community, at both the local and national tiers.

- Maths Hub LLME Communities are long term professional learning communities working together to achieve a shared vision for mathematics across the Maths Hub area.
- NCP LLME Communities are linked to Network Collaborative Projects, which support their development in the context of the project.

An important strategic objective in this area is to ensure there is understanding and coherence across the different activity that supports LLME development, whether it is designed and led locally or across the network.



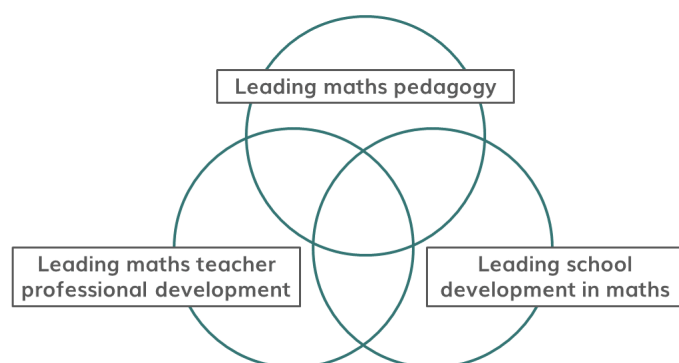
# The role of an LLME

The work of the Maths Hubs Programme is to improve the teaching and learning of mathematics in England. At its most fundamental level, this involves experienced and knowledgeable colleagues designing and leading professional development for teachers of mathematics, in order to have an impact on classroom practice.

All those engaged in this leadership are known as local leaders of mathematics education (LLME), encompassing Mastery Specialists, Work Group Leads, Cohort Leads and various other roles within Maths Hubs across the national programme.

## Three elements of LLME expertise

- 1. Leading maths pedagogy:** LLME have expertise in the practice, theory and ongoing research into how mathematics is taught and learnt
- 2. Leading maths teacher professional development:** LLME have expertise in designing professional development that has a lasting impact on teachers' classroom practice and their understanding of how children learn mathematics
- 3. Leading school development in mathematics:** LLME have expertise working with whole departments, schools and trusts to effect sustainable improvement in mathematics education

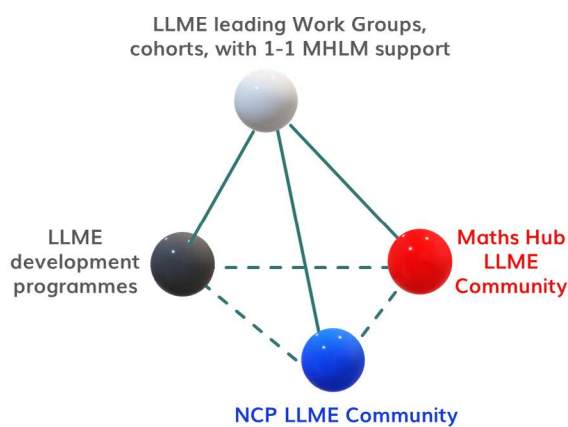
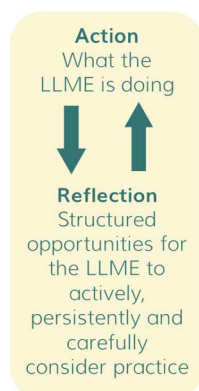


Every LLME has and is developing these three elements of expertise

## Support and development of LLME

All LLME have expertise in each of these three elements and continue to develop these through the work that they undertake and through their participation in communities of LLME at both a network and a local level (supported by the [LLME Toolkit](#)).

- NCP LLME Communities
- Local Maths Hub LLME Community
- LLME development programmes



## NCP LLME Communities

Every NCP holds national workshops several times per year, bringing all of that NCP's LLME together to reflect on ongoing work in the NCP, and to focus on project-specific professional development.

LLME are funded for the equivalent of three days of national NCP workshops, at which attendance is a requirement.

Designed and led by the NCP Project Coordination Team (PCT), these national workshops provide opportunities for the sustained development of LLME expertise through mutual dialogue and collaborative inquiry.

### Local Leaders of Mathematics Education:

- will be part of a project-specific community that meets across the year to share, review and develop their work
- will develop their professional knowledge through engaging with tasks, sharing expertise and reflecting on the way they work within the project and the implications of this for wider work
- will develop their leadership practice through collaborating with other local leads and evaluating their work.

### National workshops are designed to:

- facilitate project-specific knowledge exchange
- provide collaborative opportunities
- deepen thinking about professional knowledge and leadership practices
- develop the LLME network/engagement with the maths community.

NCP national workshops are a site of LLME professional development. Further details of the NCP-specific LLME professional development are included in NCP handbooks.

Each NCP has nationally specified outcomes, which LLME tailor to have an impact on the teachers they are working with. Support is provided at national workshops to develop the design of the local professional development programme. This is articulated in the Hub Activity, Plan, Progress and Impact (HAPPI) form.

Alongside the national workshops, LLME join relevant Basecamp projects where professional dialogue can continue within the community. Dates of central workshops are in the Maths Hub calendar and in the Basecamp project(s).



## Maths Hub LLME Community

Every hub maintains its own local LLME community, supporting the long-term individual development of LLME, and establishing a collective identity that reflects the group's commitment to inquire, innovate and act to improve maths education in the Maths Hub area, which is evident in all LLMEs' work across the hub

The Maths Hub LLME Community includes every leader of Maths Hub activity in the hub area, including Maths Hub Leads (MHLs), Assistant Maths Hub Leads (AMHLs), Cohort Leads, Work Group Leads and Community Leads.

The active participation of LLME in their local Maths Hub LLME Community is a stated aim of the LLME Strategic Goal. The community is led by three of its senior members, often the Maths Hub Lead and two Assistant Maths Hub Leads. Through the use of five LLME Community design principles, this leadership designs a programme of activity to build on individual and collective strengths, building collaborative professionalism as the Maths Hub LLME Community matures.

As part of the LLME Community, all LLME will be supported by their Maths Hubs to develop their professional learning and leadership practice development as follows.

### Community culture

#### In a community of practice, Local Leaders of Mathematics Education:

- build collective autonomy, taking authority and looking to each other as the source of accountability and standards
- instigate continual cycles of collaborative inquiry, relying on a wide range of evidence and each other's honesty and openness to refine and decide on steps for improved practice
- celebrate and exploit the diversity and accumulated expertise within the LLME Community.

### Professional learning

#### Locals Leaders of Mathematics Education:

- make decisions based on their increasingly well-informed interpretation of the expectations in effectively planning, leading and evaluating hub activity
- have their thinking constructively challenged and develop new ideas, including through critical engagement with research
- understand how the five LLME Community design principles can apply to their own practice
- deepen their own understanding of how students learn maths
- deepen their own understanding of how teachers learn and develop
- deepen their own understanding of how better to develop and influence the work and learning of leaders.

### Leadership practice development

#### Locals Leaders of Mathematics Education:

- further develop their expertise in leading maths pedagogy
- further develop their expertise in leading maths professional development
- further develop their expertise in leading school development in maths
- advance their practice in leading hub activity.



## LLME development programmes

There is a suite of professional development programmes run nationally to support the coherent development of LLME. All LLME are considered to have three elements of expertise, each of which has an emphasis in the different LLME development programmes.

- Mastery Specialist Programmes support individuals to develop and embed expertise in leading mathematics pedagogy and knowledge of how pupils learn mathematics.
- NCETM Professional Development Lead Programmes support individuals to develop and embed expertise in leading mathematics professional development and knowledge of how teachers of mathematics learn and develop.
- The NCETM School Development Lead Programme supports individuals to develop and embed expertise in leading mathematics school development and knowledge of how leaders of mathematics learn and develop.

## Five core questions

All LLME leading hub activity complete the NCETM Professional Development Lead Programme. The programme is structured around five core questions, designed to highlight key considerations in the design, leadership and evaluation of high-quality professional development.

These questions form a shared framework across the Maths Hubs Programme.

- ? The PD question**  
How do teachers develop professionally? What do you think 'good' professional development is?
- ? The knowledge question**  
What does a teacher of mathematics need to know in order to teach the subject well?
- ? The programme design question**  
Why is this programme needed? How do you decide the structure of a PD programme?
- ? The task/activity question**  
What is your purpose at this point in the session? What participant activity will promote this? How do you design tasks to enable this to happen?
- ? The evidence/impact question**  
What is the impact of your PD? How does your evidence support your evaluation?

# Impact evaluation and quality assurance

There is little point leading a project which does not lead to sustainable change. Impact evaluation explores how professional activity is happening, to what extent activity is taking place as planned, and whether and how it is having a positive effect.

We look at impact through different lenses, adapted from Guskey's (2002)<sup>1</sup> model of professional development evaluation:

## 1. Outcomes in mathematics for students, schools, and departments.

We expect our activity to cultivate a more positive attitude towards maths, greater engagement with maths, and a deeper understanding of maths, by children in participating schools. This can only happen at scale if our activity improves culture, structures, curriculum, and practice in participating schools. All Work Groups and SKTM programmes should include expected outcomes for pupils, and all Work Groups, professional learning communities and LLME professional development programmes should include expected outcomes for schools or departments.

## 2. Outcomes for professional learning and practice in doing, teaching and leading mathematics.

We expect our activity to improve both knowledge and practice in planning, teaching, assessment, reflection, collaboration, and scholarship from participating teachers. All our projects should include expected outcomes for professional practice.

## Evaluation or quality assurance?

Quality assurance (QA) focuses on understanding the nature of the work taking place in projects, Maths Hub activity, and in schools, and whether it reflects what we expect.

A report by the EEF (2021)<sup>2</sup> identified a correlation between four effective mechanisms for teacher professional development (build knowledge, motivate staff, develop teaching techniques, and embed practice), and the impact of that professional development on pupils. Network collaborative projects (NCPs) are carefully designed to incorporate specific aspects of these mechanisms, and we expect LLME to lead their programmes as directed by their Project Leads.

Whilst inevitably the line separating evaluation and QA is sometimes blurred, the impact sections of surveys and reports focus on evaluation. QA evidence is largely collected and reported internally to inform future development of projects and leadership. Field work undertaken by evaluation leads will not have a QA focus.



<sup>1</sup> Guskey, T.R. (2002). Professional Development and Teacher Change. *Teachers and Teaching: Theory and Practice*, 8, 381-391. <http://dx.doi.org/10.1080/135406002100000512>.

<sup>2</sup> Education Endowment Foundation EEF (2021). *Effective Professional Development Guidance Report*, available at <https://educationendowmentfoundation.org.uk/education-evidence/guidance-reports/effective-professional-development> (accessed 21/08/2023).

## NCP evaluation – role of LLME

LLME leading hub activity collect evaluation data as a snapshot of a project's success (for internal and external stakeholders), and to inform future developments.

## Evaluating at a national level

The NCETM collects and analyses national evaluation data through national surveys, project reporting, and field work by project leadership and evaluation leads. Most project surveys have an 'early' and 'summer' survey to help measure impact over a year. National evaluation data are reported to the Department for Education (who fund the Maths Hubs Programme), the NCETM directorship and MHLM teams. We may also report national impact within maths education professional and research communities. National evaluation data help us understand the extent to which our collective activity is improving maths education for children and young people, maths culture, structures, curriculum, and practice in schools and colleges, and national maths leadership capacity in England.

The NCETM and MHLM collect and analyse national QA data through specific sections of surveys, and QA visits by the MHLM and project leadership team. QA data is used internally to identify aspects of project design and leadership that are working particularly effectively, and areas for future development.

LLME contribute to national evaluation and QA through encouraging and facilitating a 100% completion rate in participant national surveys, completing the LLME survey, attending and contributing to national workshops, completing their Hub Activity Plan, Progress and Impact (HAPPI) document to a high standard, and contributing to field work.

## Evaluating at a local level

MHLM, Project Leads and LLME collect and analyse data about the activity and impact of specific Work Groups, programmes, communities, projects, and Maths Hubs. Local evaluation data are reported to NCETM strands, MHLM and project leadership. LLME may also report local impact within local maths education professional and research communities. Local evaluation data help us understand the extent to which individual activities and projects are improving schools and practitioners.

LLME lead local evaluation and QA through collecting appropriate data about impact and process from their participants, as directed and advised by their Project Lead and MHLM. LLME can access their own participants' national survey data, but may prefer other data collection methods, such as reflection on participants' engagement and school-based work, visits to participants' schools, case study work, or a local survey. LLME report on their local evaluation completing the LLME survey, attending and contributing to national workshops, completing their HAPPI documents to a high standard, and contributing to field work.





## Indicative evaluation timeline for LLME

### Before the start of the Maths Hub activity

#### What

- Attend and contribute to the first national workshop.
- Understand the national and local impact outcomes.
- Understand the expectations for programme leadership.

#### Contribution to development

- National workshop feedback informs programme development and national field visits.

### At the start of the Maths Hub activity

#### What

- Choose your local data collection methods in consultation with your Project Lead and MHLM.
- Complete and submit the planning section of the HAPPI form.
- Encourage a 100% completion rate for the participant autumn survey.

#### Contribution to reporting

- Effective local data collection plan enhances quality of LLME reporting.
- Autumn survey results provide a national evaluation baseline.

#### Contribution to development

- Autumn survey results inform programme development.

### During the Maths Hub activity

#### What

- Attend and contribute to the second national workshop.
- Update your HAPPI form as your activity develops.
- Conduct local field work.
- Engage in national field work.

#### Contribution to reporting

- Effective local data collection enhances quality of LLME reporting.
- Engaging with national field work enhances national reporting.

#### Contribution to development

- National workshop feedback informs programme development.
- Reflection on your activity informs your future sessions.

### At the end of the Maths Hub activity

#### What

- Attend and contribute to the final national workshop.
- Encourage a 100% completion rate for the participant summer survey.
- Complete LLME survey.
- Collate and analyse your own evaluation evidence.
- Complete and submit your HAPPI form.

#### Contribution to reporting

- National workshop feedback informs programme development.
- Summer participant and LLME survey results inform national reporting.
- HAPPI form inform national reporting.

#### Contribution to development

- National workshop feedback informs programme development.
- National reporting informs future development.

# Practicalities

## NCETM Axis – events

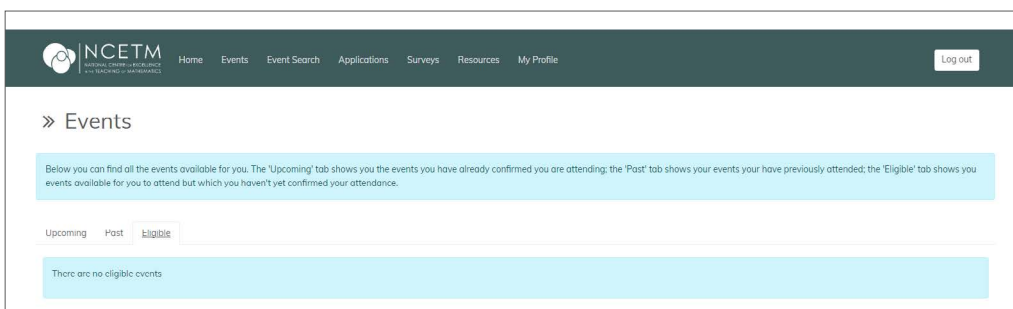
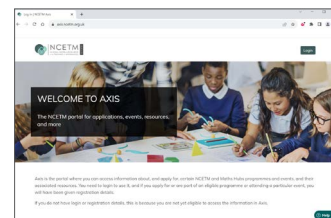
NCETM Axis is a secure online portal to access and manage all Maths Hubs Programme events you are eligible to attend.

The first time you login to [NCETM Axis](#) will need to create an account. Click Login and then enter your email address and press Continue. You will be prompted to re-enter your email address and then enter a verification code. Once verified, you can create a password and continue.

If you have already set-up your Axis account, click on Login, enter your email address, and then you will then be able to login.

Note: The email address that you use to set up your account must be the same one that the NCETM has as your main contact email address and will be the one used to send you invitations for your events. If your email address needs updating, please ask your local Maths Hub to do this for you.

To view the events that you are eligible to attend, click on Events at the top of home page, or in the menu bar, and then select the 'Eligible' tab.



### Online events

For online events you need to confirm your attendance at least two working days before your event. As soon as you have confirmed your place, the event will be updated to include a Connect button. At the time of the event, you will need to:

- login to Axis
- find the event in the Upcoming tab in the Events section
- click on the title of the event
- select the Connect button.

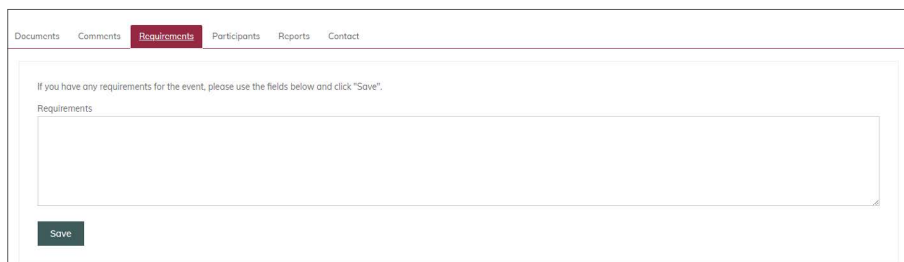


### Face-to-face events

For face-to-face events you need to confirm your attendance at least ten working days before your event. Once you have confirmed your place, scroll to the foot of the event description page to view the Requirements tab and provide your dietary, access or any other requirements for the day.

Once you have confirmed your attendance of an event you will have access to additional information tabs at the foot of the page including Documents, Comments, Requirements and Contact.

## Attendance at online events



The screenshot shows a web interface with a navigation bar at the top containing 'Documents', 'Comments', 'Requirements' (highlighted in red), 'Participants', 'Reports', and 'Contact'. Below the navigation bar is a text area with the instruction: 'If you have any requirements for the event, please use the fields below and click "Save".' Underneath this is a large empty text box labeled 'Requirements' and a 'Save' button at the bottom left.

Please do not share Zoom links. We maintain our attendance records using the Zoom registration function. If unique Zoom links are shared, you may appear to have joined multiple times and the person(s) you have shared the link with may not be registered as attending.

If you are joining an online session as a group and are using one Zoom link or one computer to log in, please ensure that you inform [mathshubs@ncetm.org.uk](mailto:mathshubs@ncetm.org.uk) so that we can ensure all attendees are marked as having attended. If we are not made aware via [mathshubs@ncetm.org.uk](mailto:mathshubs@ncetm.org.uk), there is a risk that only the participant whose Zoom link was used will be marked as having attended.

## NCETM Axis – HAPPI Forms

Starting in 2023/24, HAPPI forms will be filled in online using Axis. To create and update your HAPPI form you will need to:

- login to Axis
- click on 'Hub Activities' in the top menu bar
- select the Hub Activity you are leading
- click on the 'Plan, Progress, and Impact form'.

From there you will see a button to create the form if it's the first time, or edit it if you've already created it.

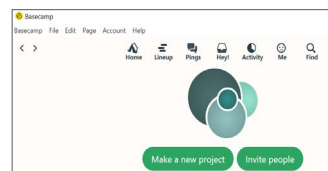
## Basecamp

Basecamp is the platform the NCETM and Maths Hubs use to manage on-line communication and collaboration within the Maths Hubs Programme. For 2023/24, you will need to access two Basecamp accounts:

1. the NCETM Basecamp (to access the NCP LLME Community)
2. your hub Basecamp (to access the hub LLME Community).

It is important that you **register for both the Basecamp accounts using the same email address** as this will allow you to easily switch between the accounts.

In Basecamp, you will be able to support each other and discuss aspects of each programme, and you will be sent a link to join your Basecamp Project when it's available. The invitation to join a Basecamp Project also includes documents which contain key information and getting started guides.



## When to use it

- Documents on Basecamp cannot be edited by several people; they need to be downloaded and re-uploaded, but the history of all documents remains. Use Basecamp if you are working on documents where you need to share different versions and compare changes made.
- If you wish to create a document that can be edited by several people, create a Basecamp document instead of uploading a Word document (**New > Start a new doc**). This can be edited by everyone in a Project.
- As with email, be mindful of other people's working hours and not causing them to open their laptop to dozens of notifications. You can always save a message as a draft, and post it during working hours, even if you wrote it outside them. Try to avoid making multiple posts or replies overnight or at the weekend.

## Receiving notifications

- You can customise your notifications in Basecamp so you do not receive an email notification about every message that is posted. A useful way of keeping abreast of everything that happens is to receive a daily digest, which you receive at 7am every morning, summarising the previous day's activity in all your Teams/Projects. You can select to receive this, and customise what else you receive, in your notifications (**Profile > Change your notification settings**).
- Another useful way to keep an eye on Basecamp without receiving lots of emails is to download the app. If you drag the small Basecamp icon into your toolbar at the bottom of the screen, you can see when a red dot appears in it. This means there is something new; you can choose whether you look at it or wait until a more convenient time.

## Reducing notifications you send and receive

- Boosts are a great way to leave a short message or emoji in response to an individual comment. If you boost someone, everyone can see it, but it avoids everyone in a thread getting a notification. If you want to simply say 'Thank you', for example, or give a thumbs up to show that you agree with or acknowledge a message, click on the rocket icon at the bottom right of the message, and type your boost, then press return.
- If you are notified about a thread or discussion and feel confident that you won't need to be notified of any further comments, you can unsubscribe from the thread. You will still be able to see it, but won't get a notification every time someone comments. Scroll to the bottom of the message below the list of people in the thread, and click '**Unsubscribe me**'.
- Anything you post in a Project or Team on Basecamp can be shared publicly. Any comment or document has a setting which enables a public link to it to be created, and whole threads can be taken from one Basecamp area to another. Be mindful of this with anything you post on Basecamp.

## Contacting the Project Team

If you have any questions or queries with regards to the programmes you are involved with, please contact us at [mathshubs@ncetm.org.uk](mailto:mathshubs@ncetm.org.uk).

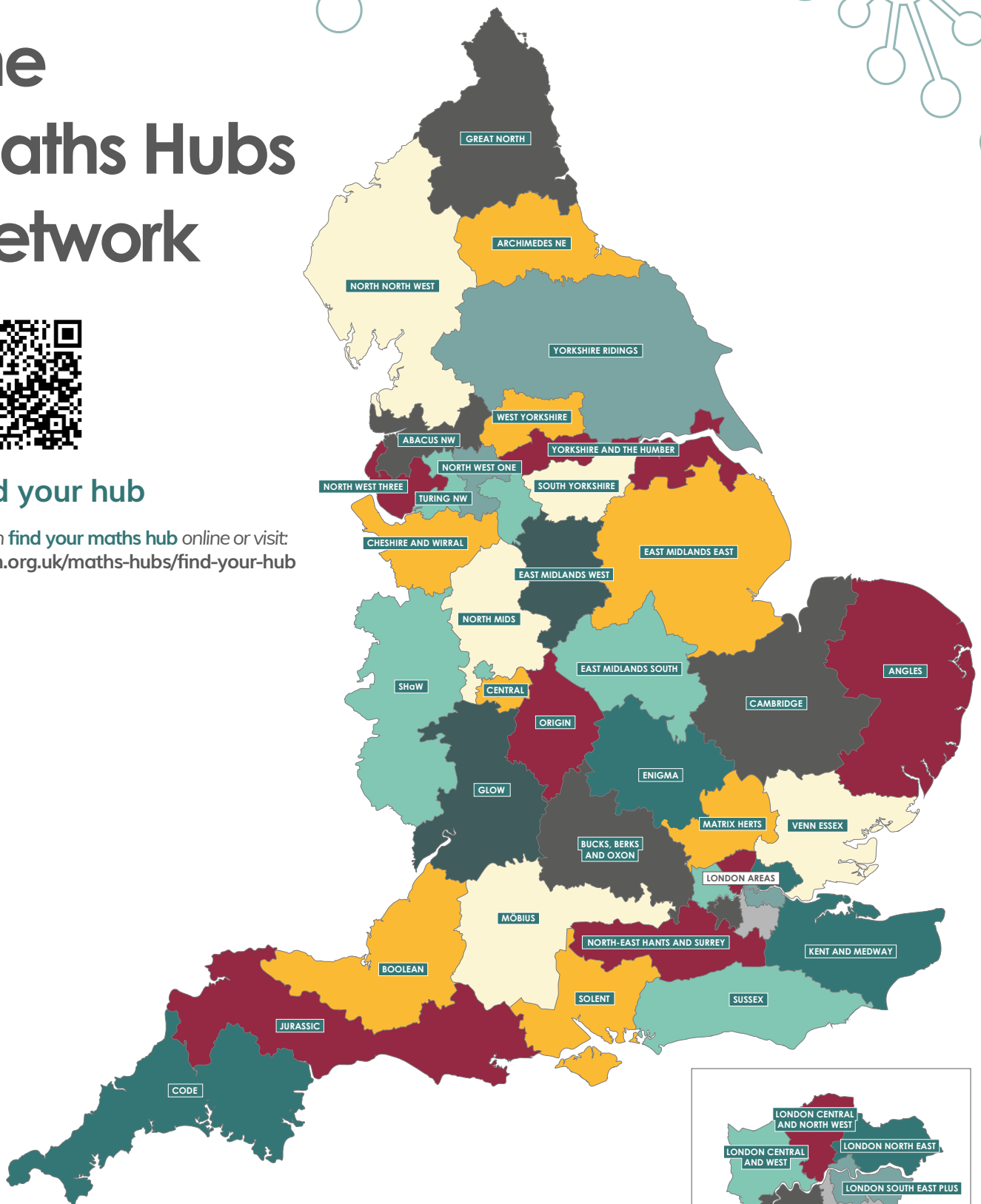


# The Maths Hubs Network



## Find your hub

Search [find your maths hub](https://www.ncetm.org.uk/maths-hubs/find-your-hub) online or visit:  
[ncetm.org.uk/maths-hubs/find-your-hub](https://www.ncetm.org.uk/maths-hubs/find-your-hub)



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