

Spring Newsletter

North West Three Maths Hub



National Centre
for Excellence in the
Teaching of Mathematics

Continuing Professional
Development
Standard

National Centre
for Excellence in the
Teaching of Mathematics

Great news! Maths Hubs get DFE vote of confidence to continue to at least 2023



£41 million was announced in July 2016 to support the TFM (Teaching for Mastery agenda), across the 35 Maths Hub networks, to lead improvement until 2020. In autumn 2017 the Government announced a further £33 million to take funding to 2023.

Teaching for Mastery programme is intended to reach 11,000 primary and secondary schools. The DFE has assured the Maths Hub community that a change in minister will not affect the funding. The impact so far has been significant on maths outcomes, attitudes and positive perceptions of maths.

Maths Hubs are firmly embedded as the DFEs key delivery partner for improving the standard of maths in England.

To view the progress of Maths Hubs so far:

<https://goo.gl/6e6aWB>

SSIF Maths Bids

Congratulations to Deep Learning TSA who were successful in securing funding in round 2 of the SSIF bid. This is supported by NW Maths Hub 3 and will focus on: Raising attainment in mathematics at key stage 4 through improved leadership, pedagogy, and subject knowledge whilst creating a positive mind-set towards the subject. The bid will support 20 schools across the NW.

Any provider wishing to apply for the SSIF funding with a focus on maths needs to ensure they are supported (endorsed) by Maths Hubs to ensure projects aren't being repeated.

Jane Jones, HMI and OFSTED's national lead for mathematics retired last term after 16 years

She said: *"What a privilege the last 16 years have been, with a special emphasis on mathematics for the last 10, trying to help teachers/leaders make mathematics education better for pupils."*

Maths Hubs had the privilege of working closely with Jane Jones and found her support invaluable. We would like to thank her and wish her well in her retirement.

NEW opportunity coming soon...

'Mastery readiness programme' (in priority areas in the Northern Powerhouse region) a lead has been appointed to work with 6 target schools to provide bespoke and professional development for schools prior to engagement with the mainstream TFM programme. Further details will be released in the summer term.

"Teachers are reporting that pupils in schools across England are developing a deeper understanding of maths that will serve them well in the future. This extension to the exchange programme will enable the NCETM and Maths Hubs to expand and deepen that work."

Charlie Stripp
NCETM Director

Thursday 31 January 2018



Primary and EYFS National and Local Projects

‘Teaching for Mastery’ – NW Maths Hub 3 supporting schools to develop an understanding of Mastery and working towards achieving this for all!

China- England Exchange- return visit hosted by Huyton with Roby Primary School, Knowsley

NW Maths Hub 3 welcomed two teachers as part of the visit- Mr Xu Kairu and Ms Qian Wenbin. During the visit they taught years 2 and 6 at Huyton with Roby Primary, welcoming 143 schools to small TRG (Teacher research group) sessions and 80 schools to larger showcase events.



As a result of the Y6 TRG, a teacher reported: *It proved fascinating viewing as our Chinese counterpart led a year 6 maths lesson this week during a TRG session.*

Mathematical Variation carefully planned and used to maximise development of learning.

As a result of the Y2 TRGs, one teacher reflected: *Year 2 were generalising about multiplication with Miss Jen today. Is it appropriate to do it in such an abstract way? Or is this suitable challenge?*

It has been announced that the China-England exchange will be funded for the next two years seeing a further 4 Mastery specialities visiting China and hosting a return visit.

Recruitment of more primary schools to Teaching for Mastery Programme

The NCETM has announced details of the next round of recruitment of schools to the funded Teaching for Mastery Programme, run by Maths Hubs across England. This year, a total of 1700 primary schools are sought. Each Maths Hub is looking for around 50 schools, for a year-long programme of professional development, led by trained Mastery Specialists. Each school will belong to a Maths Hub Work Group, consisting of six or seven primary schools, and led by a Mastery Specialist from a nearby school.

As well as receiving this free training, the recruited schools will receive financial support to release teachers for workshops, and towards buying textbooks. **The next round of applications opens in April 2018**

Maths Mastery Specialist Teachers

12 Mastery specialist teachers are currently working on behalf of NW Maths Hub 3 supporting 98 schools on their Mastery Journey via the National TFM programme. Cohort 3 Mastery specialists have just started supporting their pilot schools.

Recruitment of a further 4 primary maths specialists to the Teaching for Mastery programme opened in February 2018 and closed on 5th March. Interviews will take place in April and successful candidates will be informed on 30th April. The specialists will attend a launch on 9th July ready to start training in autumn 2018.

Excellent Maths teacher programme

We have now trained 70 teachers/Maths leads from across the NW in supporting them to build leadership capacity within their own school and beyond. Learning from the programme has been used to develop the participant and other teachers within their context ultimately impacting positively on them as a leader, staff in the school and pupil outcomes and attitudes to maths. The programme has proven to have significant impact for the staff receiving the training in terms of personally and professionally and has ultimately impacted on improving the provision for pupils that they teach.

40 new participants started the programme in September 2017. We are now taking EOI and will be recruiting an additional 40 teachers for 2018/19. Please email- Lisa Bradshaw if you or a member of your staff is interested in being part of this.

The overall aim of the programme is to share and develop effective mathematics practice across the NW providing a school led approach to improving teaching and leadership of mathematics.



EYFS - Developing Mathematical fluency to raise expectation/number focus and progression (local project)



Wave 2 and 3 schools continue with the programme this year. All schools receiving the programme are finding this extremely valuable.

Cohort 2 delegate- Quote of the day: *"I feel as though you have helped me to put on my magic maths glasses - I can see the maths opportunities in everything"*

Due to the success of the programme and high levels of demands we have recruited a further 24 schools (Wave 4) to start in June 2018. Over 70 schools expressed an interest to be part of this programme as a result we intend to recruit and train a further 24 schools in autumn 2018. Further information will be released in the summer term newsletter.



I Can Calculate... EYFS to Y1 Focussed (local project)

This project aims to help key groups of children to progress from using counting-in-ones to calculating strategies in early mathematics. We will identify the 'number sense relationships' that children must build to be able to manipulate numbers later; we will also explore how different calculation strategies are introduced to children. By developing a strong number sense and learning to manipulate numbers, children will experience early maths as finding patterns, being creative and thinking deeply, laying the groundwork for their future mathematical success.

In 2016-17 10 schools completed the EYFS Developing number sense project. These schools are now in the final term of this programme as a progressional project to aid transition it has provided support for these members of staff to move from 'counting into calculating' when appropriate. FS and Y1 staff have all been involved in this project. This innovation WG will be extended and offered to all schools in autumn 2018-2019. **A head teacher/SLT briefing is planned for: 19th June 2018 at The World of Glass, St Helens. Schools will be given the opportunity to find out more about the programme, hear from schools that have been part of the initial roll out and be given the opportunity to sign up.**

Maths Mastery Programme (Northern Hub) working in association with NW Maths Hub 3

What the 'Mathematics Mastery' programme includes:

- In-depth training for headteachers and classroom teachers
- A mastery curriculum with detailed programmes of study
- Classroom resources for every lesson of the year
- Collaborative CPD workshops and events
- Specialist in-school support from a member of our team
- A suite of assessment tools



13 primary schools, across the NW are in their pilot year of the programme with 5 schools moving to years 2 and 3.

The following primary maths development leads will continue to deliver local training and conducting school visits on behalf of Maths Mastery Northern development team:

Sarah Lambert, Charlotte Foster, Sarah Platt and Lesley Plant.

For further information about this specific programme contact Maths Mastery directly.



Intervention in a Mastery Context in association with Edge Hill ECC Team (local project)

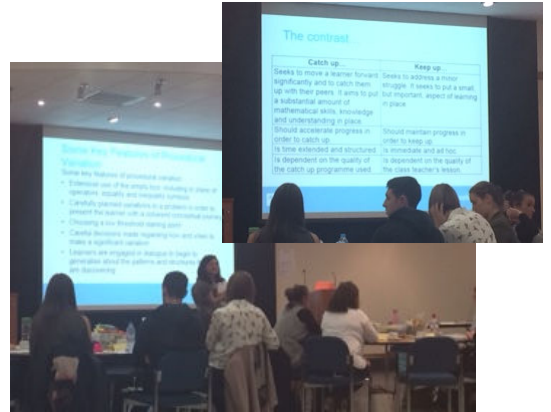
Intervention in a Mastery Context in association with Edge Hill ECC team- Teachers and TAs will develop their understanding and embed approaches to:

- **Mastery:-** teachers will develop their practice and principles ensuring that they plan for the 5 big ideas. They will meet the needs of all children and as a result of the activity outlined below will track children identified to ensure they make progress.
- Variation theory including: Three forms of procedural variation (same problem/ different method; same method/ different problem and varying examples) and Conceptual variation including different representations of mathematics; concept/ non-concept; the connective model
- Diagnostic assessment: using diagnostic assessment to prepare for planning, using diagnostic assessment to improve understanding of the learner and their needs and using diagnostic assessment to plan long term intervention.
- Managing intervention: Three levels of intervention: in class; immediate keep up and longer term catch up.

Immediate benefits of pupils: Gaps will be identified by the diagnostic assessments and targeted intervention will be applied.

So far 54 schools involving 154 participants, Teachers and TAs have been through the programme.

As a result of an Autumn term briefing we have recruited a further 20 schools to participate in the programme this year. Recruitment for the Autumn term 2018 will take place in the Summer term, dates TBC.



KS2-3 Transition

This programme includes: 3 face-to-face training days and 2 school visits. The programme is aimed at Y5, 6, 7 and 8 practitioners. The sessions will be delivered at a central venue drawing on primary and secondary schools from across Wigan, St Helens, West Lancashire, Sefton, Wirral and Manchester. The programme is being facilitated by a highly experienced Secondary maths lead- Lindsay Porter and Primary Maths SLE- Mary Anne Ramsbottom.

The final session will take place on: Wednesday 13th June - 1-4pm (plus ½ day school based visit)

Sessions will include:

- Sharing of work samples- cross phase moderation/standardisation- expectations explored
- Learning walks- school based focused visits
- Agreeing common, precise mathematical language
- CPD opportunities for the development of teacher subject knowledge and activity ideas around the four areas of calculation, algebra and fractions
- Teaching for Mastery- how to incorporate the 5 big ideas- exemplification and expectation
- CPA models used and scaffolds explored to ensure appropriate support and challenges is being provided across the two key stages
- Identifying gaps and next steps.

NEW RESOURCE - to support the EEF Improving Maths in Key Stages 2 & 3 guidance report, they've just published a Red Amber Green (RAG) self-assessment guide. It sets out what 'ineffective', 'improving' & 'exemplary' practice can look like for each recommendation: buff.ly/2F60EV4 This will be used as part of the project.



EEF- Y2 Reasoning Project (collaborative project)

The project, using materials designed by researchers at Oxford University and funded by the Education Endowment Foundation (EEF) is being run in eight Maths Hubs areas and coordinated by the NCETM. NW Maths Hub 3 is one of the eight Maths Hubs participating.

An earlier EEF trial of the programme showed a positive impact on pupils' numeracy ability.

In this larger scale project, at NW Maths Hub 3, we recruited 20 primary schools from across the NW, to participate in the project, which ran during the school year 2016/2017. The 20 schools that have been selected, half have been chosen at random to receive the teaching intervention, the other half will carry on teaching as usual. This group will receive training and the materials for use during the school year 2017/2018. The impact of this trial will be shared in Summer 2018.

Primary teaching assistant SKE development Work Groups

To develop the subject lead and TA at the same time to support and improve subject and progressional understanding. Including effective deployment, mathematical language and questioning. These sessions will take place on:

25th April 2018- full day

17th May- ½ day

19th June- ½ day

To reserve a place and find out more please contact: paula.foster@three-saints.org.uk

Journey to Mathematical Excellence - School to School support programme - supported by SLEs

Schools were nominated for one (or more) of the following reasons, either by the school/LA/TSA member:

- Improvements need to be made in attainment and/or progress in maths
- Enjoyment and participation in maths needs to be at the heart of your curriculum
- Maths SL and/or teaching staff need support/encouragement to develop mathematics provision across school, in particular year groups etc..
- Staff subject and progressional knowledge in mathematics needs improvement across the school

8 schools are involved in the project from across St Helens, Sefton, Halton, Wigan, Wirral and Knowsley.

As a result, we have developed a 'bespoke' innovation project that will be 'fully funded' for 12 months. The impact of this programme will be communicated in autumn 2018-19.

Developing Local Expertise across the Teaching Schools Network – partnership collaboration

SLE (Specialist leaders in Education) training programme (for newly appointed and established SLEs working in both primary and secondary phases)

The Programme will include 6 full days of CPD/Networking across the year:

Day 1- Friday 3rd November 2017, 9-3pm, Sefton venue

Day 2- Friday 1st December 2017, 9-3pm, Warrington venue

Day 3- Friday 26th January 2018, 9-3pm, Halton venue

Day 4- Tuesday 6th March 2018, 9-3pm, Wirral venue

Day 5- Wednesday 25th April 2018, 9-3pm, Knowsley venue

Day 6- Wednesday 20th June 2018, 9-3pm, Liverpool venue

Themes to include: Current updates, teaching for mastery, school to school support preparing a mathematical diagnostic, developing reasoning, meeting the 3 aims of the NC, coaching, representation and structures in maths, progression in problem solving, leading CPD in schools, mathematical thinking, developing and securing fluency, professional learning conversations, SKE including mathematical themes i.e. fractions, developing and promoting maths across the curriculum, assessment/moderation and evaluating impact and much more.....

The Maths SLE programme will be accredited by Maths Hub NW3. This does mean that when Maths SLEs, leading on school improvement in schools on behalf of your teaching school, will have accessed an accredited programme to ensure they remain high quality and current in sharing good practice.

Do you know a school teacher whose students would benefit from SUPER fun maths sessions??

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Primary Maths CPD opportunities

In the Autumn and Spring terms we have delivered: Introduction to the 'Mathematical Toolkit', Catering for Higher attaining pupils (rapid graspers) in a mastery context, Mathematical lesson design and structure, Bar Modelling, Year 6 Preparation for SATs, EYFS- Using a story/topic based approach to plan a mathematical sequence and Assessment of Mastery - including moderation and standardisation.

Coming up in the summer term:

Mathematics lesson design and structure: next session Y4 - Monday 12th March

Achieving Greater Depth in a Mastery Context:

Greater Depth in KS2: 7th June 2018, 9.00-3.30pm @ Nutgrove Primary School

New and experienced years 5 and 6 teachers and support staff, Maths SLs

Greater Depth in KS1: Thursday 21st June 2018, 9.00-3.30pm @ Nutgrove Primary School

New and experienced years 3 and 4 teachers and support staff, Maths SLs

Differentiation Within a Mastery Context:

Differentiation Within a Mastery Curriculum: Lower KS2 - Wednesday 21st March 2018, 9.00-3.30pm @ Nutgrove Primary School

New and experienced years 3 and 4 teachers and support staff, Maths SLs

Differentiation Within a Mastery Curriculum: KS1 - Tuesday 20th March, 9.00-3.30pm @ Nutgrove Primary School

New and experienced years 1 and 2 teachers and support staff, Maths SLs

Find further details here: <http://bit.ly/2cWgFBV>

Primary Maths Subject Leader Networks :

Mathematics Subject Leader Day 3- Friday 22nd June 2018 9.00am – 3.30pm, St Helens Chamber

Mathematical updates and current thinking. There will also be an opportunity for quality assurance of Maths practice via NW Maths Hub 3 as they share their experiences from current national practice and policy.

Secondary National and Local Projects

Secondary Maths TSST in collaboration with Liverpool Hope University

An exciting offer for serving and returning secondary teachers who are moving into teaching mathematics, but do not have a previous mathematical qualification. It will enable staff to develop a deeper knowledge and understanding of all aspects of mathematics.

St Helens TSA has successfully run this project in since 2014-15 with 32 delegates completing the training programme so far. In 2016-17, we trained 26 candidates; this innovative Subject Knowledge Enhancement (SKE/TSST) course is delivered in partnership with experienced staff from Rainford High School working to support the Maths Hub alongside extremely

experienced staff from Liverpool Hope University. In 2017-18 we have recruited 30 candidates.

Please see this flyer <http://bit.ly/25NGyek> for more details, including a proposed schedule for the training. All school based sessions will be delivered at Rainford High School.

Expressions of interest are now being taken to start training in Sept 2018. We have 30 places available with two recruitment windows (October and January starts). This programme is free of charge. Please contact: Lisa Bradshaw for further details.

Secondary Maths Mastery

30 secondary schools from across the NW are in their pilot year with Rainford High School (St Helens) are in their 3rd year of the programme.

For further details about this programme please contact Maths Mastery directly.



Teaching for Mastery NCP - Mastery Lead Teachers and Work Group Schools

The Secondary Masters who are leading the national programme on behalf of NWMathsHub 3 are as follows:

Alex Cooper—Rainford High School, St Helens

Nicole Speer - Lord Derby Academy, Knowsley

Rebecca Ward - Deyes High School/ Lydiate Learning Trust High School, Liverpool

Matthew Thornley - Hawkey Hall High School, Wigan

Lindsay Porter, Secondary Maths Hub Lead is coordinating this work.

The Mastery Work Group Schools have been involved in two TRGs (Teacher Research Group) with positive feedback provided.

The work group schools are involved in a programme of support and development work involving all teachers from the lead and participating schools designed to introduce and encourage a teaching for mastery approach across the mathematics departments in those schools. Activities will include the following: collaborative planning workshops, TRG-style lesson observations and dialogue in each of the "Mastery Specialist" schools during the year, visits between WG schools to support sharing of practice, visits to primary Mastery Specialist school for TRG-style lesson observations and occasional wider open-lesson events for other interested schools.

Associated schools will move into year 2 of the project these schools are Rose Bridge Academy, Haydock High, The Heath, Tottington High School, Aspire Federation (Landgate / Oakfield special schools), Alder Grange, All Saints High School and Up Holland High School.

A further 3 secondary masters have successfully gained a place on the programme (Feb/March 2018):

- Ruth Swietlik, Byrchall High School-Wigan
- Liz Cowdell, St Hilda's CE High school- Liverpool
- Amanda Sharples, Up Holland High School- Lancashire

The lead teacher will participate fully in the development programme and work on developing both understanding and practice:

- Working with the support of the subject leader, the lead teacher will support the department in developing its approach to teaching for mastery
- Working with the Maths Hub, the lead teacher will help with the wider work of the Hub, particularly in Year 3
- The school's senior leadership will support the department in its teaching for mastery development work, including ensuring the lead teacher receives the required release time

Secondary Maths CPD Network (Whole school department opportunity)

Throughout 2017-18 the secondary maths network will continue. As a result of extremely positive feedback in 2016-17 the secondary maths CPD network will continue this year. Whole Secondary Maths departments meet on a half termly basis to explore key mathematical themes. All themes have been selected based on need. Secondary Maths departments from across the NW have had the opportunity to engage in high quality CPD from experts in their field. It has provided an opportunity to network and share good practice. This network has been a huge success with over 25 secondary maths departments attending on a regular basis.

The next meetings will take place on:

Tuesday 13th March 2018: Rainford High School, Higher Ln, Rainford, Saint Helens WA11 8NY

Andrew Jeffrey - Mathematician Focus: Deepening and problem solving at KS3 with a focus at GCSE and clarity on delivering lessons at KS3 and 4.

Monday 23th April 2018: Rainford High School, Higher Ln, Rainford, Saint Helens WA11 8NY

Craig Barton - Mr Barton Maths, Diagnostic Questions

Focus: "10 things I wish I knew"

Craig will present a selection of things he wished he knew when he first started teaching based on findings from cognitive science, memory and psychology. These are simple, practical principles that can significantly enhance the teaching, learning and enjoyment of mathematics.

Full programme details: <http://bit.ly/2jdqK0D>

Secondary Heads of Department Meetings

Lindsay Porter (AQA associate and Secondary Maths lead) will continue to deliver this network in St Helens and Wigan. We now have 25 HOD regularly attending. This is an opportunity for all Heads of departments to come together to review and share approaches to current national and local initiatives.

Spring term sessions will take place on:

St Helens/Knowsley/Sefton and surrounding LAs: Friday 29th June 2018, 1.30-3.30pm Rainhill high School, Warrington Rd, Rainhill, Prescott L35 6NY

Wigan/Bolton/Warrington and surrounding LAs: Wednesday 4th July 2018, 1.30 -3.30pm, Byrchall CPD Cente, Warrington Rd, Ashton-in-Makerfield, Wigan WN4 9PQ

Wirral and surrounding LAs: Tuesday 3rd July 2018, 1.30-3.30pm, Prenton High School for Girls, Birkenhead CH42 6RS

Themes to include: experience gained from the first round of the new GCSEs and associated implications for future rounds, changes implemented at KS3, Mastery- teaching for depth, lesson design (including the 5 big ideas), transition from KS2, effective collaboration from local schools and national updates.

Details: <http://bit.ly/2ArYy1j>

Secondary Maths NQT Programme

A key aim of this work group is to support teachers new to the profession to ensure they are providing a strong curriculum, teaching and professional development practices that can be shared amongst the departments they are working in and across the Hub region. This Work Group has run successfully for the past two years and we intend to review and evaluate this programme on an annual basis to ensure we are continuing to meet the needs of all Maths secondary NQTs across the patch.

Trainees will:

- Become more confident when planning and organising effective mathematical opportunities
- Have the opportunity to network with colleagues that are new to the progression
- Learn how to manage a smoothly run maths classroom ensuring all learners are engaged
- Improve progressional understanding
- Have an improved understanding of what depth looks like leading to mastery
- Create and share good quality maths resources
- Motivate pupils to enjoy maths
- Learn to embed problem solving and develop reasoning opportunities in every lesson
- Reflect and evaluate practice ready to start their RQT year

This programme is being offered again in 2017-18.

Details: <http://bit.ly/2ArZyCy>

Useful links include:

NCETM: <https://www.ncetm.org.uk/>

Maths Hub website: <http://www.nwmathshub3.co.uk/>

Nrich: <http://nrich.maths.org>

Maths No Problem: <http://www.mathsnoproblem.co.uk/>

Inspire (OUP): <https://global.oup.com/education/content/primary/series/inspire-maths/?region=uk>

Maths Associations: <http://www.nwmathshub3.co.uk/associations.html>

FMSP: <http://www.http://furthermaths.org.uk/>

CMSP: <http://www.core-maths.org>

Maths Mastery (Ark): <https://www.mathematicsmastery.org/>

MEI: <http://www.mei.org.uk/>



Mathematical thinking for the New GCSE

This Work Group offers teachers and their departments nationally coordinated support to address the reasoning and problem-solving challenges of the mathematics curriculum and its assessment in the new GCSE. Many departments will be considering not only the long-term development of these skills across KS3 and into KS4, but also the immediate needs of current KS4 pupils facing the challenges of the new GCSE. This Work Group aims to support both these aspects through professional development activities focusing on practical and accessible classroom-based approaches. Participation also offers the opportunity to develop departmental professional development processes and produce longer-term improvement plans.

Who is this for? All secondary schools wishing to begin or continue a programme of professional development to address the teaching and learning implications of the new curriculum and GCSE. Ideally, each school will send two members of department (at least one of whom is experienced and has some leadership responsibility) to maximise the impact of the professional development within the department.

What is involved? 4 x half day workshops focused on developing reasoning and problem-solving skills in all lessons. These sessions will take place on: Wed 06/12/17 1-4pm, Wed 24/01/18 1-4pm. **Wed 25/04/18 1-4pm, Wed 20/06/18 1-4pm**

Gap tasks between the workshops will include Lesson Study, allowing wider department participation in the professional development. There will be an evaluation process focusing on the impact of activities on pupils and the wider department.

Maths and SEND CPD programme

25 schools were selected to be part of the programme for 2017-18.

The aims of the programme are to:

Develop teachers knowledge and understanding of the early stages of learning in maths.

Consider what an effective mastery approach to teaching, learning and assessment of mathematics for pupils with SEN looks like.

Develop the use of manipulatives and concrete modelling for SEN students.

Use action research in teaching for mastery in the SEN context.

During the programme participants will be given opportunities to:

Develop an understanding of the fundamental concepts which underpin mathematics learning and how pupils with specific difficulties experience particular difficulties in making progress and mastering these concepts.

Develop strategies for addressing misconceptions or misunderstandings around the fundamental concepts

Develop strategies to aid retention of understanding

Support teaching and learning through the use of concrete modelling and manipulatives

Be supported in disseminating the ideas and practices to the whole school staff

Be part of and contribute to a collaborative and supportive network of teachers

Prepare and run parent workshops to enable them to try out and enjoy 'mastery at home' activities with their children

Summer Term: Friday 15th June 9:30 – 12:30 (1/2 day)

The full programme will be led by Independent Consultant Jan Parry and facilitated by Lisa Bradshaw on behalf of NW3 Maths Hub.

Exciting opportunity to be involved in a new Key Stage 3 mathematics project

The mathematics team at Manchester Metropolitan University has been working with Realistic Mathematics Education for more than 10 years. We have designed and developed a range of successful materials based on this approach. We are now inviting schools to take part in a 2-year trial using these materials, fully funded by the Education Endowment Foundation (EEF), and involving students beginning Year 7 in September 2018. You can find more details of the trial on the EEF website here:

<https://educationendowmentfoundation.org.uk/projects-and-evaluation/projects/realistic-maths-education/>

The materials aim to:

- raise student attainment and engagement
- develop students' problem-solving abilities
- support the development of a deep conceptual understanding
- enable students to develop mastery in mathematics
- support progress in both mixed and setted groups
- positively impact on pupil premium students



Education
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Foundation

Post-16 National and Local Projects

CMSP – Core Maths Support Programme

Why Core Maths? Do you want to find out more about this qualification? Is it suitable for your school and your students?

- Gain a secure knowledge of the Core Maths curriculum and exams and understand the differences between different exam boards.
- Learn more about the strategies to use in your schools and colleges regarding how Core Maths can practically fit into the post-16 curriculum, how to staff it etc. by exploring case studies and hearing from schools and colleges who are already teaching it.
- Understand the philosophy of Core Maths – Maths in a real life context through problem solving.

Don't hesitate in contacting- Steven Nixon: s.nixon@priestley.ac.uk (NW Maths Hub 3 CMSP regional advisor) or Catherine Van Saarloos, Catherine.VanSaarloos@liv-coll.ac.uk (Post 16 Lead).

The intention is that the number of schools delivering core maths will increase.

[core:maths] support programme

Year 10 Core Maths engagement event

Due to the success of the core maths engagement event that took place in summer 2017 for year 10 students, alongside NW1 and NW2. All schools from across the North West will be invited once again in the spring term. Schools will be asked to select approx. 4 or 5 students that are keen but predicted to get a 4 or 5 in their GCSE. **Y10 Maths Feasts 2018**. The Year 10 Maths Feast is an enjoyable and challenging team competition testing mathematical, team-working and communication skills. More details: bit.ly/2Gig4rl

In-School 'Core Mathematics Roadshow' - Enrichment Opportunities for Y10 students

FREE 1-hour enrichment sessions held in your school, targeting Y10 students working towards GCSE grades 4 – 6. Focus on practical and real-world mathematics applications. For schools who are considering offering the Level 3 'Core Maths' qualification post-16.

- To help develop students' practical and real-world problem-solving skills.
- To help explain to schools the benefits of post-16 mathematics study, especially the Level 3 Core Mathematics qualification: <https://www.stem.org.uk/core-maths>

Further details:

Alongside the enrichment session with students, we would welcome the opportunity to spend some time with HoD / members of dept / SLT to discuss whether offering the Core Maths qualification in your school in your school might be an option [Note: we DON'T promote the qualification directly to students]

Booking a visit:

Please contact Catherine van Saarloos catherine.vansaarloos@liv-coll.ac.uk (Post-16 lead for NW Maths Hub 3), or

Martin Bamber m.bamber@liverpool.ac.uk (FMSP Area Co-ordinator, NW)



Making Sense of Maths Programme

Following the success of last year, Maths Hubs NW1 and NW3 are delighted to be hosting 'Making Sense of Maths', a **FREE 5 day course running throughout 2018 and 2019**. This is a transformative course which has received great feedback and is suitable for teachers of GCSE Resit at colleges, those who are teaching students at the 3/4 borderline in schools and teachers in PRUs.

Day 1 is on 14th March—Please find full details on this flier: <https://goo.gl/zKiLXq> and do not hesitate to contacting Catherine Van Saarloos if you require any further information.

GCSE Resits workshops- main priority areas for this group are:

- Improving the support of SLT and vocational tutors for the teaching of GCSE Maths (including the use of contextualisation to encourage maths and vocational staff to work together more closely).
- Enhancing the confidence and knowledge of those delivering GCSE resits who are non-maths specialists.
- Restructuring how we deliver and approach teaching GCSE Maths resits (moving away from more of the same but quicker!)

For further details please contact: Catherine.VanSaarloos@liv-coll.ac.uk

Local leaders network

Facilitated by Post 16 Lead - Catherine Van Saarloos Catherine.VanSaarloos@liv-coll.ac.uk

16 to 19 funding: advanced maths premium announced

The advanced maths premium is funding for additional students studying specified level 3 maths qualifications.

The advanced maths premium is paid at a rate of £600 per year per additional student for one or 2 years, depending on the type and size of qualification studied.

The premium will first be paid automatically in 16 to 19 funding allocations for the academic year 2019 to 2020. For this payment, the number of additional students will be measured between the average of academic years 2015 to 2016 and 2016 to 2017 and academic year 2018 to 2019

Background and purpose:

Sir Adrian Smith's review of post 16 mathematics confirmed the strong case for raising participation in advanced post-16 maths. We are therefore introducing an advanced maths premium to deliver additional funding to providers over the next 3 years. This will support schools, colleges and other providers in tackling the barriers that they themselves had identified and will enable them to build capacity further in the short to medium term.

This additional funding will increase opportunity and choice for more pupils to take maths at A or AS level, potentially with further maths alongside. Additionally, many more, who do not choose A level maths, will be able to study core maths, including those who wish to go on to study non- mathematical degrees that still require good quantitative skills.

Good mathematical and quantitative skills are necessary elements of everyday life and are increasingly required in more and more occupations, as the pace of technological innovation increases. They are also necessary in many higher education courses, extending beyond the mathematical and physical sciences to the social sciences, the humanities and the creative arts.

Increased participation in level 3 maths would be likely to deliver longer-term economic benefits, including increased productivity and improved international competitiveness.

We know schools, colleges and other providers have already done much to increase maths take-up through building capacity to teach the subject and promoting the value of maths to students. Whilst take-up has grown, we need to do more, especially for girls, disadvantaged pupils and those in areas of low participation, helping to boost social mobility. Although the premium is not specifically targeted at these groups, a universal programme to increase participation will help tackle the barriers some students can face – including opportunity and choice.

The advanced maths premium demonstrates the commitment we have made to, and the importance we place on, supporting greater participation in maths post-16.



For further information in relation to National and Local work streams that Maths Hub NW3 is involved in please visit:

<http://www.nwmathshub3.co.uk/index.html>



or follow us on Twitter



[@NWmathshub3](https://twitter.com/NWmathshub3)

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About our work:

As a Maths Hub we provide support to all schools in the area and the NW, across all areas of maths education, including:

The overall aim:

All Maths Hubs working together to support primary practitioners through to post 16 to have a chance to change/influence maths education across the country.

Recruitment of maths specialists into teaching.

Initial training of maths teachers and converting existing teachers into maths.

Co-ordinating and delivering a wide range of maths continuing professional development (CPD) and school-to-school support.

Ensuring maths leadership is developed, e.g. running a programme for aspiring heads of maths departments.

Helping maths enrichment programmes to reach a large number of pupils from primary school onwards.

