

SYMH Secondary Update

October 2017

*The October update is coming early as we have so much to promote that schools need to be aware of now. As you know the bulk of Maths Hubs' work is done through **work groups**. These are opportunities for teachers to work together collaboratively on one aspect of maths education over a period of time. Usually meeting 3-6 times throughout the year and trialling ideas in the classroom before reflecting and learning from each other's experiences.*

Please do take the time to consider which work groups may be relevant for you and your schools continuing development and please also bring to the attention of your colleagues in and beyond your school.

The links given are to the South Yorkshire Maths Hub website where the WGL contact details will be found and further information updated as appropriate. However should you wish to discuss your school's specific needs please don't hesitate to get in touch.

Best wishes.

Pete

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Work groups for 2017/8

Y5-8 continuity work group

Schools are invited to collaborate with primary partners to explore common approaches to a particular conceptual development (Multiplicative Reasoning) that crosses the key stage 2/3 divide. Schools are particularly encouraged to participate with one or more of their feeder primary schools.

[Click here for link to SYMH website and further details](#)

Mathematical thinking and the new GCSE

Developing this element of the curriculum that underpins much of what is taught has been a challenge for many schools. This work group aims to address the issues that teachers can sometimes find frustratingly difficult to engender in their learners but is increasingly essential for learners to develop if they are to realise their potential.

[Click here for link to SYMH website and further details](#)

Hard to teach GCSE topics

This is part of a national initiative in which colleagues are encouraged to collaboratively develop strategies to address specific topics. Strategies and resources will be freely shared and whilst there will be an element of “quick wins” considered, the longer term implications for learning at KS3 will also be reviewed.

[Click here for link to SYMH website and further details](#)

Incorporating Technology into learning

This work group will focus on developing strategies and resources to support teachers at GCSE and beyond to incorporate this aspect into everyday teaching. This will include resource development and trialling ideas out in the classroom followed by collaborative reflection and review. It is anticipated that the use of Geogebra as a tool for graphing, geometric modelling and a statistical analysis is investigated.

[Click here for link to SYMH website and further details](#)

Arithmetic skills in KS3

Addressing the basic skills and understanding of numeracy in the key stage 3 years is essential for future success at GCSE. This work group will provide support for schools wishing to develop and incorporate the Rainbow Arithmetic strategy into their curriculum. Schools are offered free resources and a proven successful strategy to address the catch-up and consolidation of these skills.

[Click here for link to SYMH website and further details](#)

Teaching for mastery programme

South Yorkshire is lucky enough to have seven secondary teaching for mastery specialists within our region, four of whom are sponsored by SYMH. Consequently a number of teacher research groups (TRGs) will be available across the region throughout the year for schools to engage in. These will include collaborative planning sessions as well as lesson observations and reflections.

[Click here for link to SYMH website and further details](#)

Student Enrichment events

Maths Inspiration event – Thursday 26 October

Tickets still available for the new **Maths Inspiration** event aimed at y9 – y11's

“Playing for Real: How Maths can help you win”

at the Sheffield Crucible Theatre on 26 October – [follow this link for details](#).

A reminder too that both SYMH and FMSP provide a number of opportunities for student enrichment activities. Most of these are free but all are aimed at encouraging a positive attitude towards Maths and encouraging future study in STEM subjects. There is a new enrichment coordinator for South Yorkshire who will be in touch with schools soon.

Barnsley Maths Feast invitation – 17th October

An invitation from Dan Russell at Horizon Community College

“Following the success of last year’s second Barnsley Maths Feast, we are happy to invite you to the third edition. This will take place at Horizon Community College on Tuesday 17th October at 12:45pm for a 1pm start, to finish no later than 3.30pm.

The Maths Feast is aimed at Y10 top achievers, and comprises of up to six rounds, in order to test pupils’ mathematical, communication, and teamwork skills, in a competitive environment.

Pupils work in teams of 4, and we would be happy to accommodate as many teams as you want to bring. (Last year schools brought between 1 and 3 teams).”

To book a place please contact Dan by email at dRussell2@horizoncc.co.uk

Professional Development opportunities

Subject Knowledge Enhancement for non-specialists

A FREE professional development programme to improve the subject knowledge of teachers of Mathematics.

Who is this course suitable for?

The courses are designed for non-specialist teachers

What is the content of the CPD?

This is a year long programme, including both twilights and time within the school day throughout the year.

The programme will be 10 face to face sessions run as twilights during the Spring and Summer term of 2018 which will be facilitated by outstanding Mathematics specialists.

The sessions will focus on different mathematical topics and will develop not only subject knowledge but will give teachers ideas and inspiration to develop their teaching methods.

If you would like more information about this FREE course and would like to enquire about a place on the course please email sbillingham@notredame-high.co.uk

[Follow this link for flyer and further details](#)

Extension & Enrichment (Schools receive £360 funding to attend)

NEW Three day CPD programme

Reasoning, Extending and Problem Solving with 11-16 students

18 Oct, 25 Jan, 11 May Outwood IoE Conference Centre, Doncaster

The course consists of three separate face-to-face professional development days with some online support between the three sessions.

Delegates have the chance to obtain and try out a wide range of materials targeted specifically at secondary school students. Teachers will also have opportunities to reflect on provision and pedagogy associated with the topics covered and to consider different ways in which individuals and groups can be appropriately challenged. Teachers will look at how colleagues can be supported in developing their professional practice and it is expected that delegates will work with colleagues in their schools between the second and third days of the course.

These courses are funded by the DfE and are offered free of charge to teachers working in state-funded schools, colleges and academies. In addition, participants' schools will be eligible to claim £360 per teacher

For further details and to book [follow this link](#)

Critical Thinking (17 Nov & 25 Jan)

With much greater focus on mathematical problem solving and critical thinking in the revised curriculum, deeper and independent learning skills are ever more important in the classroom. The British Council has collaborated with the NCETM to offer this **free** course at **Notre Dame High School, Sheffield** to support and help you to explore practical ways of developing and implementing these fundamental elements of mathematics teaching and learning

This course is recommended for those teaching or leading mathematics at key stages 3 and 4, who wish to develop the use of problem solving skills and critical thinking in this challenging, new aspect of the curriculum

[Follow this link for FLYER](#)

MEI online course – Thinking Mathematically

MEI has recently developed a new online course, well suited to those new to teaching 11-16 Mathematics.

The month-long course features four live online sessions, recorded for easy playback, set in MEI's new online classroom. Anyone enrolling on the course will also gain access to high quality classroom resources, including those designed to support the use of technology.

The fee for this course is **just £50**. Any participant who subsequently enrolls on [Teaching GCSE Mathematics](#) (TGM), our extended offering for teachers new to 11-16 maths, will receive a £50 discount for that course.

For further details [click here](#) or contact the course leader debbie.barker@mei.org.uk

Enthuse Funded Professional Development

The “Enthuse funding” initiative focuses on STEM subjects and allows teachers to access a wide variety of professional development programmes.

The costs of the courses are awarded to schools after completion of the training, so essentially you get the training for FREE and many of these are residential based at the STEM centre York.

[Follow this link for the latest opportunities available](#)

Yorkshire Ridings Maths Hub Secondary Maths Conference 20th October

This one day conference is designed for anyone who has a role challenging and supporting mathematics in a secondary school or college including senior leaders and heads of department.

Keynotes from Dr Colin Foster (What makes good maths teaching?) and Jane Jones (Challenging and supporting your mathematics department: a view from Ofsted)

Workshop sessions will be available from NRich, Underground maths, Jonny Griffiths, Further Maths Support Programme, ICCAMS project, and a number of local Maths Hubs.

[Follow this link for further details and to book](#)