EXETER MATHS SCHOOL

FREEDOM FOR THINKERS

Outreach at EMS

Four Parts

An overview of outreach development
Lessons learnt
Measuring Impact
New developments…

An Overview of Outreach Development

Context for EMS
Early Days
Maths Student Community
Range of Programmes
Lessons Learnt

Context for EMS

Education Landscape
Geographical Spread
Outreach v Recruitment

Recruitment Activities
Taster Days
Careers Fairs
Careers talks and assemblies
Writing to schools
Online and press advertising
Coverage in the news
Social Media

The early Days

Year 10 summer residential at the university

Video Competition

Maths Student Community for year 8 and year 10

Workshops in schools

Maths Student Community

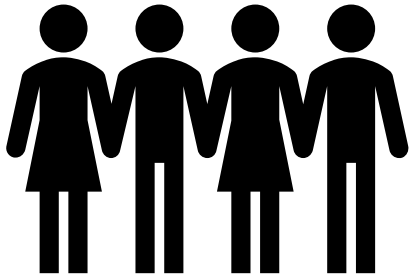
Target: who stand out for their achievement in and/or enthusiasm for maths.

Aim: to provide students, who might otherwise be isolated, with a community of like-minded peers to explore challenging and interesting mathematics

Format: 5 enrichment days at EMS per year and give problems to solve in between

Ages: from year 8 to year 11

Explore mathematics beyond the school curriculum and develop problem solving



Range of Programmes

Subject	Teacher Events	Student Events
Maths	Teacher Subject Specialist Training AMSP Teacher Network MA/ATM Teacher Network MEI Further Maths Workgroup Host meetings/events for NCETM, Babcock SW, CODE Maths Hub etc. Teaching Internships A-level teacher workgroup	Maths Student Community (yr 8 to 11) GCSE Enhancement Course Primary RI workshops Year 9 RI workshops Workshops in schools Careers assemblies Primary Poster Competition
Physics	Teacher Subject Specialist Training IOP Lead School NQT/RQT course SPN South West Regional Meeting IOP Network meetings Isaac Physics Teacher CPD Teaching Internships	Physics Student Community (yr 8 to 11) GCSE Enhancement Course KS4 Physics Team Challenge KS5 Physics Team Challenge Isaac Physics for year 10 and year 12
Computer Science	Network meetings NCCE CPD NCCE Bespoke Support for Schools	Year 9 RI workshops Year 10 Computational Thinking Support to run Teen Tech Awards
Other	Babcock South West meetings	Sidmouth Science Festival

Lessons Learnt

Engaging teachers
Partnerships
Not only Maths

Partnerships

Not only Maths

"My physics teacher is always playing your teacher's physics videos in lessons – he's a big fan so I thought I'd find out more about the school"

"Your teachers train other teachers so I thought they must be experts"

Teach Computing

Measuring Impact

Each activity has a clearly defined aim.

How we will measure the programme's effectiveness is part of the initial planning.

Tools include data from schools, attitudinal surveys, tracking attendance and feedback forms.

Longer term measures through use of HEAT tracker.

Looking to the future

Maths Circles

New courses sponsored by Alex Gerko through MESME (Maths Education for Social Mobility and Excellence).

Aim to increase number of home-grown Maths PhD students, particularly from socially disadvantaged backgrounds

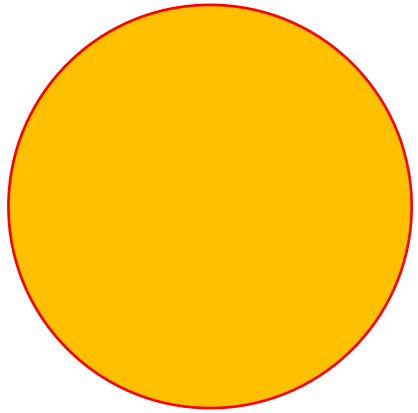
Led by Dan Abramson (Kings)

30 weeks per year on mentoring to develop problem solving

Pilots this year

EMS model is online with Alumni as mentors, supported by teachers

Opportunity for significant impact across the Maths School Network



Idea for further collaboration?

Teacher development?

Sharing resources?

National challenge?

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