

# STEM Knowledge Networks

## West Midlands pilot

### Introduction

The National STEM Centre in partnership with the National Centre for Excellence in the Teaching of Mathematics (NCETM) is keen to encourage teachers of mathematics in schools and colleges to form **STEM Knowledge Networks (STEM KNs)**. These networks or communities of professional learning can be within a single school, college or other training provider institution or drawn from several establishments. They must have a specific area of interest, with an underlying focus on STEM curriculum knowledge, and involve colleagues from across STEM subject areas.

Please note that this funding is only available to maintained schools and colleges in England.

‘STEM curriculum knowledge’ for teachers of STEM subjects has three dimensions:

- Sharing subject content knowledge between teaching colleagues in STEM curriculum areas
- Developing curriculum activities that effectively teach knowledge and understanding from two or more STEM subject areas
- Embedding subject knowledge and pedagogy in practice

### Themes

The National STEM Centre and the NCETM have identified a list of proposed titles and focused areas of engagement for STEM KNs to help you get started on its work.

- Coordinating the teaching of common content areas in the STEM curriculum across a year group/key stage
- Embedding links to STEM career opportunities within schemes of work for STEM subjects
- Exploring the different experiences of learners in different STEM subjects
- Exploring the STEM experiences of learners at primary and secondary level
- Exploring the role of algebra in Science, Technology and Engineering
- Supporting gifted and talented learners in STEM subjects
- The use of the National STEM Centre resource collections to support STEM teaching and learning
- Exploring the impact of STEM events/clubs on teachers’ practice in the classroom

Knowledge Networks will be supported through regular contact with the National STEM Centre and the Regional Coordinator for the NCETM.

### **What does applying for funding involve?**

If you and your colleagues decide to set up a STEM KN, you may be eligible to apply for funding of up to £2 000.

If you apply for funding you must be prepared, collectively, to do the following:

- Engage in practitioner research or teacher enquiry into one of the key topic areas
- Commit to a programme of activity over a period of at least one term
- Use a structured approach to group activity within your network.
- Submit a report of your activity.
- Be willing to send at least one member of the network to a dissemination event and actively engage in other opportunities to share your experiences.
- Share your report and any resources developed during the project online through the National STEM Centre eLibrary and the NCETM portal.

### **Applying for funding**

The STEM Knowledge Networks are being piloted in the West Midlands from April 2010.

Please apply using attached form by Friday 26<sup>th</sup> March to [enquiries@nationalstemcentre.org.uk](mailto:enquiries@nationalstemcentre.org.uk)

For more information about the STEM Knowledge Networks please contact [enquiries@nationalstemcentre.org.uk](mailto:enquiries@nationalstemcentre.org.uk)