The National HE STEM Programme

The National HE STEM Programme supports Higher Education Institutions in the exploration of new approaches to recruiting students and delivering programmes of study within the Science, Technology, Engineering and Mathematics (STEM) disciplines. It is supported through a three-year grant from the Higher Education Funding Councils for England and Wales (HEFCE & HEFCW).

The Programme’s aim is to influence long-term university practices at an individual, departmental and faculty level by engaging staff directly in the development and delivery of activities. Through collaboration and shared working it seeks to embed sustainable approaches that will be a core part of Higher Education STEM sector practice for years to come.

Programme activities are focused upon the disciplines of Chemistry, Engineering, Mathematics and Physics which were deemed strategically important and vulnerable by the Higher Education Funding Council for England (HEFCE) in 2004.

Since its inception in 2009 the Programme has initiated a wide range of activities across England and Wales of varying scales related to its three areas of activity:

A. Widening participation within the STEM disciplines at university level, by supporting HEIs to work with those currently within the school and FE sectors;

B. Higher education curriculum developments focusing upon course delivery and design and student support to enhance student knowledge, progression and skills;

C. Encouraging those currently within the workforce and society to engage with further study to develop enhanced knowledge and skills.

The Programme has been working with a range of partners to encourage and support projects to investigate the three themes above across the four disciplines, including work in mathematics with the Institute of Mathematics and its Applications, the MSOR Network and sigma.

Over 350 projects have been initiated under the Programme, with those covering mathematics activities including a group exploring the transition to university mathematics led by Garrod Musto in Bath, a major national collaboration on e-assessment in maths and stats led by Bill Foster at Newcastle and a project making explicit links between the HE maths curriculum and applications in science, technology, business and industry led by Vivien Easson at Queen Mary, to name just three!

This special edition of Connections presents some of the work supported by the National HE STEM Programme. Find out more about work undertaken by the Programme from www.hestem.ac.uk.