

East Midlands invests in STEM education

Phil Hope, Minister for the East Midlands, describes how a focus on science, technology, engineering and maths (STEM) is taking hold in the region.

The future prosperity of the East Midlands and its ability to compete on the global stage relies heavily on a strong supply of talented individuals going into science, technology, engineering and mathematics (STEM) careers. East Midlands Development Agency (emda) together with major regional organisations have set out a vision for more coherent, effective STEM education, reaching out to all learners and offering better support to educators.

Andrew Morgan, emda's Skills and Communities Director, is looking to the future: "The UK produces just 25,000 STEM graduates each year, compared to over 2 million in China and India. This is why we need to take action now to inspire the next generation of scientists, engineers, technologists and mathematicians. Our STEM initiative, which we launched in early 2008, marks a £6m investment over three years in a range of projects - including Ignition*, the STEM Student Journalist scheme, 'Lab in a Lorry,' and a Space Academy - to help achieve this goal."

Emda's initiative is in response to the recommendations of both The STEM Programme Report 2006 published by the then DTI and DfES, and 'The Race to the Top - A review of Government's



Chris Bishop, one of the 3M ambassadors with students from the Ivanhoe School in Ashby and Sam Houghton (5), Britain's youngest patent-holder for his double-headed broom.

Science and Innovation Policies' undertaken by Lord Sainsbury in 2007. The latter looks into how the UK is competing against the emerging economies and advocates both collaboration across education and business, and a widening of STEM literacy in the UK population.

An integral part of emda's investment programme is the East Midlands STEM Partnership, which is the voice for science, technology, engineering and mathematics (STEM) education in the region. Bringing together all those involved in STEM - delivery organisations, businesses and educators at all levels, the Partnership supports the challenge to get more young people interested in STEM subjects and into the industries that need them.

Several of the region's leading businesses are already involved in education and skills work. 3M Health Care Limited, Rolls-Royce and Siemens understand the commercial benefits from proactive involvement, and through the STEM Partnership more companies will find it easier to join in this skills drive.

Ignition* is a further example of how the emda funding is being applied. The three-year programme aims to transform the region's achievements in STEM subjects by inspiring the next generation of enquiring minds. At a recent workshop at Leicestershire's Snibston Discovery Park, which showcased the talent for invention and creativity of 11-14 year olds, 3M Health Care Limited science and technology staff shared their expertise with the students and put their curiosity to the test.

Chris Bishop, Senior Project Engineer from 3M Health Care Limited, attended the event as a mentor: "Working with children on STEM



activities has been exceptionally rewarding in many ways. It has challenged me to think about how I communicate information at a level appropriate to my audience. It has given me the opportunity to share my own interest and enthusiasm for STEM subjects and try to foster those same feelings in the next generation. It has provided constant surprises in the shape of children's genuinely novel and innovative solutions to a brief. All this, and it's been great fun too."

By getting involved with local schools, colleges and universities, businesses are also helping with specific projects. For example, the 'Lab in a Lorry' has already visited 6,500 students in the region and is currently recruiting for more volunteers to support activities with budding scientists and engineers. Companies such as AstraZeneca are supporting the STEM Student Journalist project by encouraging summer placement students to create news reports on their work experience.

Taking the long view by resourcing science, technology, engineering and maths promotion over the next three years is a bold step on the part of emda. I am in no doubt as to the significance of the STEM skills agenda, not least at a time of ever greater global competition. The East Midlands will be judged on its ability to innovate and to reflect better the skills and competences that employers need. Calls for greater efforts to work together and share good practice are essential and the emerging East Midlands STEM Partnership is helping to mobilise these skills.

For more information on all these activities, visit www.emstempartnership.org.uk or call 0115 984 7021.