

**UK faces inadequate supply of STEM graduates to meet
business requirements**


**- new report calls for essential investment to create skilled workforce needed to
maintain Britain's competitive position -**

Businesses in the UK will face a shortage of qualified employees within the next few years unless Government funding is found for the development of STEM (science, technology, engineering, mathematics) subjects, says a report issued today by the CIHE (Council for Industry and Higher Education) and LogicaCMG, the leading European IT and business services company.

A future built on knowledge intensive organisations requires more graduates and post-graduates with STEM skills who also have a capability to innovate, to be enterprising and to have networking and communication skills. Worryingly, the review¹ found that whilst the numbers of STEM graduates has increased since 2002, the number of those taking STEM A-levels - and therefore the next generation of graduates - has declined, with considerable falls in those taking mathematics (15% decline), physics (14% decline) and computer sciences (47% decline).

The review found that an absence of adequate funding was resulting in a deficit of qualified teachers, lack of up-to-date laboratories, poor careers guidance and, increasingly, university department closures. Additionally, issues around the current STEM curriculum were identified, such as students being forced to focus their subject choices too early, thereby limiting their options for future studies.

¹"STEM Review – the Science, Technology, Engineering, Maths Supply Chain", was commissioned to review progress against recommendations made in "SET for Success" (2002) by Professor Sir Gareth Roberts and "Making Mathematics Count" (2004), and makes recommendations on what else might be done to develop the graduates and post-graduates who have the STEM skills that businesses need.




The review suggests that the Government should consider incentives to encourage teachers to take up CPD (continued professional development) opportunities, including bursaries to cover fees and supply costs. Training qualified STEM teachers is vital as students need to be inspired by those who know their subject and can bring it to life. The review also recommends the Government takes the issue of laboratory funding more seriously if students are to have access to the equipment required to train them to technician level or progression to higher education.

A criticism of the current curriculum is that it narrows students' choices too early. The review suggests that the Government should do more to publicise and promote what is happening to evolve the curriculum and continuously review and report to Parliament on how the curriculum in England can keep open the subject options for students. The post 16 curriculum in England must retain breadth while still allowing those who wish to pursue STEM subjects in depth to do so.

The review also suggests that the National STEM Director should urgently consider what early levers can be pulled to radically improve the STEM skills supply chain and that he should not rule out incentives for passing STEM A-levels, Government bursaries for STEM students, or weighting STEM subjects in UCAS points.

Richard A Brown, CEO of CIHE, commented: "The problem is that some students see the IT and science curriculum as dull. We need to inspire them with the roles they can take on after school and university and demonstrate what they will be able to achieve with a background in these important subjects. This report has shown that STEM subjects are also still seen as very stereotypical with girls making up only 15 percent of engineering and technology subjects. We need to do more to change the attitude of a generation. Those with STEM degrees underpin our knowledge intensive and world leading financial services as well as pharmaceutical and manufacturing sectors. So a STEM degree opens all sorts of opportunities."



“The work that LogicaCMG does is at the heart of our customers’ business,” said Dr Martin Read, Group CEO of LogicaCMG. “We are at the cutting edge of new technologies and provide rewarding, exciting and potentially high earning careers. As the UK’s fight to remain at the forefront of the knowledge economy intensifies, we must ensure that our schools and universities produce high quality STEM graduates with world leading technical capabilities. Their skills are needed not just in LogicaCMG’s sector of IT and business services but also across many other important areas of the UK economy, including banking and finance, manufacturing and pharmaceuticals. This report outlines some practical measures that can be taken to address the issues in the STEM supply chain.

“It is also important to stress that the challenge facing the UK is much wider than just increasing the number of STEM graduates. We need graduates with independent, inquisitive minds who can formulate ideas and solutions and articulate them clearly. We need our education system to train young people to think for themselves rather than simply learning by rote. Our education system must produce young people who are not just technically proficient but who also have strong problem-solving, innovation and communication skills. The UK education sector, working in collaboration with industry, must act now to ensure that we protect the UK’s competitive position in the longer term.”

Rt Hon Alan Johnson MP, Secretary of State for Education and Skills, welcomed the report and its recommendations: “If students are not inspired about what they are going to get out of their studies, we can’t expect them to stay in education. The UK is a thriving economy and our capacity to innovate and excel in science and technology is vital to our global competitiveness. To remain this way our young people need to qualify at the highest levels in STEM subjects.

“Over the past six months we have set out in the STEM Programme Report work towards a vision that aims to ensure that STEM support is delivered in the most effective way to every school, college, learning provider and learner. To this end we have introduced a high level STEM Strategy Group and a National STEM Director to drive forward delivery. The STEM review from the CIHE and LogicaCMG offers some valuable suggestions on how we might continue to improve on the education options we offer to our students.”

R e l e a s i n g y o u r p o t e n t i a l

The STEM review makes a number of additional conclusions and recommendations. To read it in full please go to: www.logicacmg.com/STEMreview.

NOTES TO EDITORS

About LogicaCMG

LogicaCMG is a major international force in IT and business services. It employs around 40,000 people across 41 countries. LogicaCMG's focus is on enabling its customers to build and maintain leadership positions using LogicaCMG's deep industry knowledge and its track record for successful delivery. The company provides business consulting, systems integration and IT and business process outsourcing across diverse markets including telecoms and media, financial services, energy and utilities, industry, distribution and transport and the public sector. Headquartered in Europe, LogicaCMG is listed on both the London Stock Exchange and Euronext (Amsterdam) (LSE:LOG; Euronext:LOG) and traded on the Xternal List of the Nordic Exchange in Stockholm. More information is available at www.logicacmg.com

About the CIHE

CIHE aims to foster close working and understanding between business and higher education so that world-class learning and research can improve the international competitiveness of both sectors and the capabilities of graduates and those already in the workforce.

The Council leads in developing an agreed agenda on the higher level learning issues that affect our global competitiveness, social cohesion and individual development; commissioning research so that policy can be better based on evidence; debating our agenda and research with Government and its agencies, and working with them and other organisations to effect change.

The CIHE is a Council of leading people from a wide range of businesses, universities and colleges.

For further information please contact:

Louise Fisk, LogicaCMG: tel: +44 (0)20 7446 2887, email: louise.fisk@logicacmg.com
Richard Brown, CIHE: tel: +44 (0)20 7383 7667, email: cihe@cihe-uk.com