

# Higher Education at Work High Skills: High Value

## Response Form

We welcome views and comments from all those involved in higher education – as customers, learners or providers, and from others with an interest in it.

Your responses may be sent by email, fax or post to one of the following:-

By email to: [highlevelskills.consultation@dius.gsi.gov.uk](mailto:highlevelskills.consultation@dius.gsi.gov.uk)

By post to: High Level Skills Consultation, DIUS, Higher Education Group, N4, Moorfoot, Sheffield, S1 4PQ.

By fax to: 0114 259 1102.

**The deadline for responses is Monday 7 July 2008.**

We expect to publish a summary of responses in due course. Individual respondents will not be identified in this but please note the Freedom of Information statement below.

Please email any enquiries to [highlevelskills.consultation@dius.gsi.gov.uk](mailto:highlevelskills.consultation@dius.gsi.gov.uk)

### Name

Nick Dusic

### Position in organisation

Director

### Organisation (if applicable)

Campaign for Science & Engineering

### Address

29-30 Tavistock Square, London, WC1H 9QU

**Please indicate with a tick which type of organisation you represent**

Higher education institution	
Further education institution	
Private training/learning provider	
Sector Skills Council	
Representative organisation or Professional body	
Trade union	
Employer	
Employee	
Learner	
Other – please specify	Campaign Group

Please note that the boxes below can be extended to accommodate your views.

***Question 1: What incentives would encourage employers to be more involved in providing careers information, advice and guidance both before, and during university?***

University is often too late as by then many students will have made a number of decisions, which could cut off a career path. This is unfortunately often the case in science and engineering. Careers advice in schools must encourage students to keep open the maximum number of opportunities for as long as possible. The focus of career advice should be to communicate opportunities available given different choices. Students should also receive accurate information on both the employability and rewards of different sectors, and they should be given an appreciation that studying a challenging and stimulating subjects, such as STEM subjects, opens up a wide range of career choices beyond those immediate subjects.

As we understand it, employers do get engaged in careers advice, but there needs to be co-ordination and support. SMEs may need financial support to get engaged careers advice.

***Question 2a: Given that subject choice at 14 and GCSE and A level attainment are critical factors, is there a case for specific incentives to prospective students to take Science, Technology, Engineering and Mathematics (STEM) subjects?***

The top incentive should be to give A-levels in STEM more UCAS points. Various studies have shown them to be harder subjects, which discourages some students and may even prevent schools from promoting these subjects as it would affect their standing in the league tables.

The pleasure of learning about and understanding STEM subjects should be a wonderful incentive— sadly, too few pupils have the specialist teachers, practical experience, or even subject choices to foster this.

Make sure that the entitlement to study three separate science GCSEs is implemented in September and expanded so that all students have the opportunity to take them in their school. Increase access to further mathematics in schools.

Increase the number of specialist teachers in science and mathematics. Bursaries could be given to university students to foster a new pool of STEM teachers, by sponsoring those that commit to a teaching job at the end of University. Golden hellos are too late to increase the overall number of STEM graduates that will could into teaching.

***Question 2b: How could any incentives avoid simply reinforcing the decisions of people who would have chosen STEM subjects anyway?***

Focus effort on schools that currently have inadequate STEM education provision, which should include targeting specialist teachers into schools with persistent vacancies. Ensure that outreach efforts take diversity into account. Ensure that they attract an equal number of boys and girls and are representative of the ethnic makeup of the school.

Bursaries could fund the top 10% of students in each school wishing to take STEM subjects – possibly targeted to schools which currently under-achieve. The students should be bright but have simply not had their potential developed – it is a way to maximize your investment and could simplify the bursary system, as students currently are poorly informed of the different funding available. A similar “top 10% plan” is running in Texas, USA (not limited to STEM).

**Question 2c: More generally, is there a case for providing incentives to universities or employers to encourage more young people to study STEM and pursue careers in it?**

Yes. There should be bursaries at university for students studying science, engineering and mathematics. Also at university there needs to be a correction in the level of funding given to universities to teach science and engineering students. The current level of 1.7 of library based subjects is insufficient and must be increased to over 2.

**Question 3: What support and incentives would help universities offer access to the workplace for all their students?**

**Question 4: How can we help employers better articulate their needs for broad based employability skills?**

**Question 5: What more can we do to provide more graduates with the language skills and cultural awareness to thrive in a global marketplace?**

Simple, make a foreign-language GCSE compulsory again.

**Question 6a: What further incentives are needed to stimulate and meet employer demand for high level skills?**

**Question 6b: How can we best build on the contributions of further education colleges and providers and their links (in particular) to networks of small and medium sized enterprises?**

**Question 6c: How well does the framework for high level skills support employer engagement?**

It is critical that there is employer engagement. There are a number of specific skills shortages in the STEM workforces. For example, there has been a lot of work on the need to improve in-vivo skills by the Biosciences Federation and others.

**Question 7a: How can we best work with businesses and employers, Trade Unions and employees to encourage demand for high level skills?**

There is a tension between market (student) driven universities and employer skills.

**Question 7b: How can we encourage rapid implementation of an effective framework for credit accumulation and transfer?**

**Question 8: Do we have the right incentives to encourage higher education providers to be more responsive to business and employer demand?**

**Question 9: What should be the key features of a model for regional and sectoral bodies to play a much greater role in solving local skills problems and linking higher education institutions and businesses?**



**Question 10: How can we encourage Regional Development Agencies and Sector Skills Councils to work together to solve local and sectoral skills needs?**

**Question 11a: What further incentives are needed in universities – e.g. through internal appraisals, promotion processes – to increase demand from academic staff for business secondments?**

**Question 11b: And how can we encourage movement in the other direction so that business people are increasingly contributing directly to course content, design and teaching?**

**Question 12: How can we do more to increase the level of STEM skills in the existing workforce?**

There needs to be a full exemption for people who study a STEM degree as an Equivalent or Lower Qualification.

Technical skills need to be valued equivalent to academic training and should be supported by funding.

**Other comments**

**Please let us have any other comments not covered by the above.**

The information you provide in your response will be subject to the Freedom of Information Act 2000 and Environmental Information Regulations, which allow public access to information held by the Department.

This does not necessarily mean that your response can be made available to the public as there are exemptions relating to information provided in confidence and information to which the Data Protection Act 1998 applies.

You may request confidentiality by ticking the box provided, but you should note that this will not necessarily exclude the public right of access.

Thank you for taking the time to let us have your views. We do not intend to acknowledge individual responses unless you place an 'X' in the box below.

**Please acknowledge this reply**

All UK national public consultations are required to conform to the following standards:

1. Consult widely throughout the process, allowing a minimum of 12 weeks for written consultation at least once during the development of the policy.
2. Be clear about what your proposals are, who may be affected, what questions are being asked and the timescale for responses.
3. Ensure that your consultation is clear, concise and widely accessible.
4. Give feedback regarding the responses received and how the consultation process influenced the policy.
5. Monitor your department's effectiveness at consultation, including through the use of a designated consultation co-ordinator.
6. Ensure your consultation follows better regulation best practice, including carrying out a Regulatory Impact Assessment if appropriate.

Further information on the Code of Practice can be accessed through the Cabinet Office Website: <http://www.cabinetoffice.gov.uk/regulation/consultation-guidance/content/introduction/index.asp>