



CaSE Press Release: 20<sup>th</sup> August 2009

## **Rising numbers of A level students in mathematics and some sciences but CaSE cautions against complacency**

The **Campaign for Science and Engineering** is delighted that recent rises seen in A level entries to mathematics and further mathematics have been sustained for another year. **Mathematics** entries were up 7,882 (12%) and **further mathematics** up 1,382 (15%). A rise of 1,340 to 29,436 was seen in the number of students taking **physics** A level which resulted in the first increase in the share of A levels that were physics in years (up from 3.4 to 3.5% of all entries). **Chemistry** also increased 811 to 42,491, although this did not increase preference for chemistry (static at 5.0% of all entries). Unfortunately, entries in **biology** dropped by 525 to 55,485 (from 6.8 to 6.6%).

CaSE's Assistant Director, Dr Hilary Leever, commented:

"At last we have turned a corner for physics and seen rises in both the number of A levels and the percentage of entries into this subject. The numbers of entries into chemistry increased, but not its "market share" of A levels. Unfortunately, there was a small fall in the number of students sitting biology. Happily, increases in mathematics and further mathematics continue to be sustained."

"Overall there was little change in the number and no change in the proportion of science A levels, although it was positive to see interest in physics finally picking up."

"This year has, for the first time, given notable rises in all of the science AS levels (8-10%) as well as mathematics (22%), and further mathematics (47%). We sincerely hope that these translate into A level rises next year."

### **Grades**

"Overall subjects, 27% of candidates received A grades but more did so in some sciences and mathematics, averaging 34% in chemistry, 32% in physics, 45% in mathematics and 58% in further mathematics. This clearly shows that there is scope for many more students to take these subjects."

### **Improving uptake**

"There is a plethora of initiatives to increase student interest in the sciences, but even taken all together they are barely achieving an upward drift and are unlikely to produce the necessary change anytime soon. We cannot be complacent in thinking that the problem has been solved - more radical steps need to be taken to increase the number of science students."

**"Awarding higher UCAS points for science and mathematics should encourage schools to prioritise these strategically important subjects and more students to study them."**

"There is clearly a really long way to go before we produce enough scientists and mathematicians to provide for the UK's future. Without enough researchers and workers

skilled in science, engineering and mathematics it is difficult to see how we can make informed science policy decisions or how we can encourage industry to invest in the UK. Without science and engineering we simply will not be able to tackle the local and global challenges that we face now let alone those of the future. Until there are enough skilled mathematics and science teachers to inspire students in *every* school, we must work to improve uptake of these strategic subjects.”

### **Opportunities for all**

“A simple way to increase uptake is to make sure that all students have the opportunity to study science and mathematics A levels. We are still suffering shortages of mathematics and science specialist teachers, particularly in disadvantaged areas. And the government is still a way off its target for *September 2008* for all children with aptitude to be offered triple science GCSEs.”

### **ENDS**

Notes to Editors

1. Contact: Dr Hilary Leever, Assistant Director, [hilary@sciencecampaign.org.uk](mailto:hilary@sciencecampaign.org.uk), 020 7679 4995, 07905 304702.

2. Campaign for Science & Engineering (CaSE) is a policy advocate for science and engineering in the UK. CaSE is supported by its members, which includes individuals, corporations, universities and learned societies. Further information on CaSE can be found on our website: <http://www.sciencecampaign.org.uk>

3. For more information on higher UCAS points for science and mathematics see <http://www.sciencecampaign.org.uk/press/releases/2008/pr040808.pdf>.  
For a briefing on the delivery of science GCSEs prior to next week's GCSE results see: <http://www.sciencecampaign.org.uk/documents/2009/GCSEdelivery.pdf>

4. All figures can be viewed at [www.jcq.org.uk](http://www.jcq.org.uk).