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### CaSE Response to the Secondary School Survey

CaSE was worried by the results of the *Secondary School Curriculum and Staffing Survey 2007* published by the DCSF today although Dr Hilary Leever, Assistant Director of CaSE, commented: "It is very useful to get a detailed picture of the situation in schools to enable us to identify and really focus on addressing the key issues."

The **situation in mathematics** is a great cause of concern – only 74% of mathematics teachers have a post-A level mathematics qualification. The Government target is for 95% of mathematics lessons to be delivered by a mathematics specialist, but this was only the case in 84% of lessons, down from 88% in 2002. There are also large inequalities in teaching with school type: 75% of mathematics lessons at grammar schools are taught by teachers with a degree in mathematics, compared with just under half (47%) of lessons in comprehensives to age 16 and 58% of comprehensives to age 18.

The impact of school type is even greater for general science teaching, but less for the individual sciences. As new teachers qualify, it is important that a strategy is developed to target them to the schools with persistent vacancies in these areas.

Unfortunately, the analyses did not recognize the **importance of specialist teachers teaching the separate sciences** – it was stated that over 90% of physics, chemistry and biology lessons were delivered by teachers with an appropriate post-A level science qualification, but this included those with just general or combined science. Hilary Leever said "We are pretty dependent on general science teachers to deliver separate science lessons but, bizarrely, there are actually too few of them left over to deliver the combined science lessons – only 79% of these are delivered by someone with a science background. Given that the majority of schools only offer combined science lessons this is really alarming."

When science teachers were broken down by their main subject specialism, rather than considering general science sufficient for all, quite a different picture emerges. The Government target is for 25% of science teachers to be physics specialists, this is currently 22%, but almost a third of physics teachers are over 50. The target is for 31% of teachers to be chemistry specialists (currently 22% but formerly, in 2005, estimated at 25%). In 2005, one in twenty science teachers "specialised" in general/combined and this has risen to one in six in 2007, with a drop in the number of biology specialists from 44% to 32%.

Hilary Leever concluded: "It is vitally important that the Government continues to introduce more measures to increase the number of specialist science and mathematics teachers. Unfortunately, the various initiatives currently running have not yet had the required level of impact."