

New research undertaken for the Science Council shows that science has become increasingly important across all sectors of the UK economy and society with 5.8 million people (1.2m primary science workers and 4.6m secondary science workers) who are employed in science-based roles, representing 20% of the UK workforce. This is projected to increase to 7.1 million people by 2030.

These results emphasise the fundamental importance of science in today's economy and the proliferation of secondary science workers who are dependent on science knowledge and skills as part of their role and who will not previously have been identified as part of the science workforce. Significant numbers of scientists were identified in employment sectors as diverse as health and social care, education, food and farming, communications, finance, retail and public sector services.

Primary science occupations make up the largest share of the workforce in Research and Development. Secondary science occupations make up the largest share of the workforce in the Education (46%), ICT (45%), Health (30%) and Consultancy (25%) sectors. The Health and Education sectors employ 60% of the science workforce and the remaining 40% of the science workforce is distributed across a range of sectors.

Secondary scientists use science in many different ways and the research explains why there is such a huge demand for people with science qualifications and the value of studying science, a message that underpins careers awareness work, and indicates how many more people we will need with these skills by 2030.

However, students are not receiving the practical science education necessary to produce the next generation of scientists. There is evidence that the pressures of managing a busy curriculum, challenges in finding time for specialist continuing professional development, or time to get out of the classroom, are all factors contributing to a decline in the quality of practical science. This is worrying. If the UK is to be confident of producing the next generation of scientists, then schools – encouraged by the Government – must overcome the perceived and real barriers to providing high quality practicals, fieldwork and fieldtrips. Health and safety concerns may be used as a convenient excuse for avoiding practicals and work outside the classroom, but there is no credible evidence to support this frequently cited explanation for a decline in practicals and trips. The Government is therefore urged to provide a detailed strategy on how it intends to achieve its ambition to increase participation in school science subjects.



Andrew Miller MP
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Committee

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The Journal of the Parliamentary and Scientific Committee.

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1. to inform the scientific and industrial communities of activities within Parliament of a scientific nature and of the progress of relevant legislation;
2. to keep Members of Parliament abreast of scientific affairs.

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