

Engineering the future on shoulders of giants



Should we have been surprised that the inaugural Queen Elizabeth Prize for Engineering went to the founders of the world-wide web? Yes, their innovations rank right up there among the giants, changing the lives of billions globally... But engineering?

Well, yes. Such a glittering prize going for such high-profile achievements serves admirably to demonstrate both the power and the breadth of engineering. Robert Kahn, Vint Cerf and Louis Pouzin (central to the Internet itself), Sir Tim Berners-Lee (inventor of the world-wide web) and Marc Andreessen (who wrote the Mosaic browser) are great champions of engineering.

As Berners-Lee put it, after receiving his trophy from Her Majesty the Queen at Buckingham Palace: "It is ... wonderful that we are celebrating engineering today. While science and maths are exciting too, engineering is about building things, and making things work."

Just so. And Prime Minister David Cameron, speaking at the event, amplified the award's significance. "This is a fantastic week for innovation, which is absolutely vital to jobs and growth in our economy... Yesterday, I met the face of engineering's future in Downing Street, as we launched a drive for 100,000 new engineering apprentices [by 2018]. And today we have the inaugural Queen Elizabeth Prize for Engineering."

Slipping that in was, of course, no accident. The PM had indeed just announced his government's multi-million pound technicians'

programme (page 3) and no doubt thought, where's the harm in maximising a publicity opportunity, with the world's media at his feet?

With good cause. Current estimates suggest that the UK needs to double its pipeline of new technicians by 2020, if we're to avoid a skills shortage so severe it will stunt the country's fledgling recovery. So Crew Cameron needs to be seen to be doing the right thing. And, if we're to believe what we're told, they do get it, and are moving beyond words into actions.

It's not all new money: some of the coalition's initiative includes existing apprentice schemes. Nevertheless, the government rightly has the blessing of engineering institutions, including the Institution of Mechanical Engineers, Institution of Engineering and Technology and the Society of Operations Engineers. Even more so, given its plans to raise recognition for vocational qualifications in England, affording 'Tech Level' courses the same status as A Levels and linking these with school performance league tables.

That matters. As Sarah Sillars, chief executive of Semta, the sector skills council for advanced manufacturing and engineering, says: "This is a very positive development that will really drive recognition... [It] will help young people, and their parents and teachers, see the value employers place on the best vocational qualifications."

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