

DESIGNED AND MADE IN BRITAIN...?

Design and Technology
in schools is critical to
the UK's future success.

Act Now!

With the introduction of the National Curriculum in 1989 England and Wales were the first countries in the world to establish D&T as a statutory entitlement for all pupils. It is ironic that whilst our achievements in D&T education are seen as world-leading and worthy of replication in other parts of the world, they come under repeated question in the UK.

What are the issues?

Critical shortage of qualified D&T teachers

- Uncertainty about D&T teaching career prospects and status caused by successive curriculum changes.
- Recruitment into D&T Initial Teacher Training (ITT) 50% below target for the last 2 years.
- At least 1,200 fewer secondary D&T teachers in the system than needed from September 2015 – 1 in 3 schools will be a teacher short.
- Many primary trainee teachers receive less than 6 hours training for D&T.

Need for a modern D&T curriculum and workforce

- Insufficient use of 21st century digital technologies in some secondary schools reduces curriculum relevance for pupils and employers.
- Difficulties for secondary teachers to access Continuing Professional Development (CPD) to keep up-to-date with rapid changes in design and manufacturing processes and material technologies.
- Lack of primary D&T subject expertise, particularly in more technical aspects.
- Most primary teachers have received little or no D&T CPD in recent years.
- Often inadequate funding for resources, equipment and consumable materials in many schools.

Effect of school accountability measures and league tables

- Current Government policy acts against a broad and balanced curriculum to meet all pupils' needs, interests and aptitudes.
- Pupils in Academies or Free schools have no entitlement to D&T education – currently this includes 61% of secondary schools and 15% of primary schools.
- Primary schools judged on pupils' performance in English and mathematics, which take over 50% of teaching time – compared with 5% or less for D&T.
- Secondary schools are judged on pupils' GCSE grades in English Baccalaureate (EBacc) subjects (English, mathematics, history or geography, science and a language) – reduced incentive for subjects like D&T.
- No secondary school can be considered 'Outstanding' by Ofsted from September 2015 unless all pupils do well in EBacc subjects – a further disincentive for subjects like D&T.
- D&T increasingly marginalised, and in some schools being cut, with additional impacts on related areas of learning including: computing; coding; cooking and nutrition; health and well-being education.

Serious decline in GCSE numbers

- The loss of statutory status and current accountability measures have caused a 50% fall in D&T GCSE entries from 2003 to 2014 (D&T was a compulsory GCSE until 2004).
- Craft-related GCSE entries fell 25% from 2007 to 2013.

Latest estimates are that the UK will need:

1.82 million new engineers in the decade up to 2022 (Engineering UK, 2015)

1 million people to fill new creative jobs by 2030 (Nesta, 2015)

Every child is entitled to the unique contribution that D&T makes to their educational experience. If we are to preserve the subject, and our world lead, for the benefit of future generations of young people immediate and co-ordinated action is required by Government, employers in design and technology-related industries and the D&T community itself.

What must happen?

Government should:

- Make a creative and/or technical subject compulsory for all pupils at Key Stage 4.
- Address D&T teacher shortages through increased bursary incentives to attract the best entrants into secondary ITT and require all primary trainees to have sufficient D&T training.
- Ensure new D&T GCSE and GCE qualifications have credibility and status with universities.
- Promote wider understanding of D&T, its contribution to STEM and to career paths in engineering and the creative industries.
- Require Ofsted to acknowledge D&T's contribution to all young people's learning.

Awarding Organisations and Ofqual should:

- Develop GCSE and GCE qualifications that support modernisation of the subject and reward innovation, risk taking and entrepreneurship.

D&T-related employers should:

- Highlight D&T's value to Government departments through their companies, professional institutions and organisations.
- Collaborate with teachers in the development of real-life and relevant D&T activities and resources.
- Help teachers to provide opportunities for learners to engage with professional practice through study visits and work experience.

The D&T community should:

- Modernise and develop the curriculum to make it fit for the 21st century.
- Provide CPD that improves and extends teachers' subject knowledge – especially in digital and more technical aspects in both primary and secondary phases.
- Encourage collaboration across schools, colleges and universities to support progression of experience and learning – from Early Years to Postgraduate.
- Take every opportunity to publicise D&T, and related careers, to parents, school management, governors and employers.

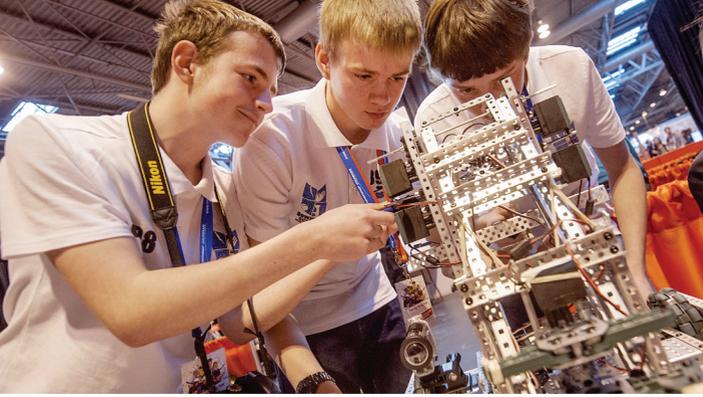
The D&T Association will:

- Lobby Government to implement the required actions without delay.
- Work to increase understanding of D&T at policy level and encourage MPs to visit schools to see D&T in action.
- Support and advise Awarding Organisations in the development of new qualifications.
- Draw on design and manufacturing industries' expertise to ensure practice in schools supports employers' needs.
- Actively challenge and support schools to improve the quality of D&T on offer.
- Provide resources to support high quality D&T training, teaching and learning.



“Design and Technology is a phenomenally important subject. Logical, creative and practical, it’s the only opportunity students have to apply what they learn in Maths and Science – directly preparing them for a career in engineering. Policy-makers must recognise D&T’s significance and strive not just to preserve it, but to make sure it appeals to the brightest of young minds.”

Sir James Dyson, Founder and Chairman of Dyson and Patron to the D&T Association



"D&T is not just about future engineers. By teaching D&T we are ensuring that all children are not just passive bystanders in our increasingly technology driven world but are informed citizens who understand how design impacts on their quality of life and how technology can be used for the benefit of mankind."

Dr Rhys Morgan, Director of Education, Royal Academy of Engineering

"It is clear to me that D&T offers an unrivalled opportunity to inspire more young people towards a career in engineering and technology. Given the very significant projected talent shortfall in these areas it seems to me bewildering that we are steering students away from this hugely valuable subject."

Paul Greening, Director, UCL Centre for Engineering Education

"The EBacc changes are decimating creative subjects (like D&T) which have, until now, fed a steady stream of talent into our world-class creative industries."

Dick Powell, Co-founder Seymourpowell Design

"Science and maths alone cannot provide the creative thinking and hands-on expertise that is essential to producing world-class designers and engineers. An understanding of D&T ensures that students are equipped with the tools to thrive in an increasingly fast-paced, innovation-hungry marketplace."

John Mathers, Chief Executive, Design Council

"Thinking about my civil engineering career over the past 5 years, the A level choice that provided the most useful skill set was definitely design and technology – it taught me much more than just how to design and make things."

Claire Gott MBE, Civil Engineer

Act now!

Read more at: www.data.org.uk/campaign
See Facebook: [D&T Designed and Made in Britain...?](#)
Follow on Twitter: [@DTassoc](#), [#DTcampaign](#)
Email: campaign@data.org.uk

The Design and Technology Association is the only professional organisation representing over 10,000 members and working on behalf of all those involved in D&T teaching and learning.

We believe passionately in the value of D&T education for all young people and will work tirelessly to ensure that our world lead, gained over the last 26 years, is not lost.

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