



BRIEFING PAPER

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University Technical Colleges

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One page briefing

University Technical Colleges (UTCs) are technical schools for 14-19 year olds, working alongside employers and universities, introduced under the Coalition Government. They operate as a type of academy, with relevant freedoms such as not having to follow the national curriculum, or employ teachers with qualified teacher status. In keeping with other forms of academy school, they operate in England only.

- In January 2017 there were 48 UTCs open across all regions in England. The first opened in September 2011, three more followed in 2012, and 13 opened in both 2013 and 2014 and 11 in both 2015 and 2016.
- Two of the earlier UTCs closed at the end of the 2014/15 school year; Black Country UTC and Hackney UTC. Central Bedfordshire UTC closed at the end of 2015/16.
- According to the Baker Dearing Educational Trust a further five are due to open in September 2017 and two more are currently planned for in 2018. In mid-2016 the Department for Education listed 20 potential UTCs in 'pre-opening' stage.

Two of the first created UTCs closed in summer 2015. Hackney UTC and Black Country UTC had experienced disappointing pupil recruitment and received critical Ofsted reports. Further closures have followed through 2016 and 2017, owing to low pupil take-up of places in the affected UTCs.

More broadly, the small number of UTCs, and pupils attending them, make it difficult to draw firm conclusions on their impact at this stage. The concerns that have been raised around the operation of UTCs have focused on enrolment numbers, and the attendance rates of pupils enrolled. Concerns have also been raised about the proportion of female students enrolling at UTCs.

1. Background

1.1 Conception

During the later years of the last Labour Government, plans to form technical schools to develop vocational and technical education were proposed by Lord Baker, the former Conservative Education Secretary, alongside Ron Dearing. The plans received support from both the then Government¹ and the Conservative opposition.² The [Baker Dearing Educational Trust](#) now promotes and supports University Technical Colleges.

Subsequently, [the Coalition programme for government](#), published on 20 May 2010, proposed 'Technical Academies' as part of the new Government's plans to promote diversity in the school system and improve vocational education.³

The Education Secretary, Justine Greening, has been reported as telling the *TES* that UTCs represent a "good option" for young people interested in following a technical-based education path.⁴

1.2 What are UTCs?

University Technical Colleges (UTCs) are technical schools for 14-19 year olds, working alongside employers and universities. They operate as a type of academy.

The *Academies Act 2010* makes provision for academies, as well as 'additional schools', such as free schools, UTCs and studio schools. Like other types of academy, UTCs operate in accordance with the terms of their funding agreement with the Secretary of State for Education. The Department for Education (DfE) has produced a [model funding agreement](#) for UTCs.

The Department for Education provides information on [applying to open a UTC](#). The Department's document on [how to apply](#) to open a UTC defines the colleges as follows:

1.8 UTCs are all-ability and mixed sex state funded schools, independent of local authorities. They are not extensions of, or conversions from, existing provision, but new academies, typically with 500-800 pupils in Key stage 4 and Key stage 5. UTCs specialise in subjects that need modern, technical, industry-standard equipment, such as engineering and digital technologies, and teach these disciplines alongside business skills and a broad, general education.

1.9 Pupils integrate academic study with practical learning, studying core GCSEs alongside technical qualifications. The ethos and curriculum are designed with local and national employers

¹ Telegraph, [Labour plan to revive technical schools](#), 1 Sep 2009

² Guardian, [Conservatives plan 1950s-style technical schools](#), 5 Oct 2009; see also the letter from Lord Baker in the [UTC brochure](#) [accessed 18 June 2015]

³ Cabinet Office, [The Coalition: our programme for government](#), May 2010, section 26

⁴ TES, [Technical schools can offer pupils an alternative to grammars, says Justine Greening](#), 28 October 2016

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who also provide support and work experience for pupils. UTCs are sponsored by a university and employers, and work in partnership with other educational providers, including those with strengths in the UTC's specialist subject areas. UTCs should provide progression routes into higher education or further learning in work. This includes apprenticeships and higher apprenticeships; some UTCs may wish to consider offering apprenticeships themselves as they become established or may wish to work in partnership with apprenticeship providers. UTCs are funded on a comparable basis to other state funded schools.⁵

The [overview](#) of UTCs provided by the UTC website maintained by the Baker Dearing Educational Trust provides further details:

UTCs integrate technical, practical and academic learning and create an environment where students can thrive and develop the abilities that industry needs. To do this, a UTC:

- focuses on one or two technical specialisms
- works with employers and a local university to develop and deliver their curriculum
- provides essential academic education and relates this to the technical specialisms
- has the latest equipment and technology used by industry
- dedicates at least 40% of time to the technical specialism including design and building, working in teams and problem solving.

By working with a university and local employers, UTC students benefit from access to:

- the latest research, industry experts and specialist facilities
- real-life employer projects that stretch their technical skills and creative thinking
- teaching and mentoring from specialists who currently work in industry.

UTCs are smaller than traditional secondary schools. They are not academically selective and charge no fees.

UTCs do not have to follow the national curriculum; employ teachers with qualified teacher status; follow local authority term dates or standard school hours; or comply with the provisions in the School Teachers' Pay and Conditions Document. They are judged against the same accountability system as other schools.⁶

Funding provided to the Baker Dearing Educational Trust

In response to a Parliamentary Question in November 2015, the skills minister Nick Boles set out the funding provided by the Department for Education to the Baker Dearing Educational Trust in relation to UTCs over the previous four years:

Nick Boles: The Baker Dearing Educational Trust's annual accounts are published each year. They show that the Baker

⁵ Department for Education, [University Technical Colleges: How to apply](#), October 2015, page 6

⁶ DFE, *Ibid.*, p6

Dearing Educational Trust has received grant funding to provide pre-approval support to groups that wish to apply to the Department to open a University Technical College as set out in the table below:

Calendar Year	Funding Received
2011	£151,923
2012	£150,095
2013	£153,458
2014	£213,191

Between 1 January 2015 and 30 September 2015, the department paid the Baker Dearing Educational Trust grant funding of £116,912. The Baker Dearing Educational Trust's accounts for 2015 will be published in due course.

The first grant to the Baker Dearing Educational Trust in April 2011 was awarded directly to the trust. Subsequent grants have been awarded after a competitive tender process.⁷

⁷ [PQ 14304, 9 November 2015](#)

2. UTCs: current position and performance

2.1 Applying to open a UTC

The Government has published guidance for proposer groups on [opening a UTC](#), including a [pre-opening guide](#) for groups whose application has been successful. A [model funding agreement](#) is also available.

The process involved in establishing a UTC can be compared to that for opening a free school or studio school. The opening guidance sets out the criteria that are used when an application is considered:

To ensure that we establish high quality UTCs, we place a great emphasis on:

- the capacity and capability of the proposer group, including
- relevant education and financial expertise; and
- track record of those among the proposer group who run existing education provision.
- the quality of the provision when the UTC is open, including
- the academic rigour and aspiration of the education offer;
- strong governance structures and governing body; and
- the likelihood of being graded good or better by Ofsted in the first inspection.⁸

2.2 UTCs: key facts and figures

A full list of open and to-be-opened UTCs is available on the [UTC website](#), along with a map of their locations.

- In January 2017 there were 48 UTCs open across all regions in England. The first opened in September 2011, three more followed in 2012, and 13 opened in both 2013 and 2014 and 11 in both 2015 and 2016.⁹
- Two of the earlier ETCs closed at the end of the 2014/15 school year; Black Country UTC and Hackney UTC.
- Central Bedfordshire UTC closed at the end of 2015/16.
- According to the [Baker Dearing Educational Trust](#) a further five are planned for 2017 and (currently) two more for 2018. In mid-2016 the [Department for Education](#) listed 20 potential UTCs in 'pre-opening' stage.
- In January 2016 the 39 open UTCs taught 6,969 pupils, three-quarters of these pupils were boys and almost all were aged 14+ at the start of the school year.

⁸ Ibid., p4

⁹ *Edubase*, DfE

- The largest UTC in January 2016 had just over 570, the smallest fewer than 50. The majority had between 100 and 250 pupils.¹⁰
- School capacity of the open UTCs in May 2015 varied from 400 to more than 900 pupils, most were in the 600-700 range.¹¹
- Data for 30 UTCs is included in the 2014-15 school absence data when 7.2% of sessions were missed in total; 2.0% for unauthorised absence. The equivalent headline rate for all state funded secondary schools were 5.3 and 1.3% respectively.¹² However, these figures exclude pupils in school sixth forms. There is a general tendency for higher absence rates in older year groups so the age-range of UTCs means we would expect somewhat above average absence rates. It is difficult to draw firm conclusions from the data on the relatively small number of schools included.
- 28 UTCs (with around 1,900 pupils at the end of Key Stage 4) were included in the provisional GCSE results for 2015/16. 51% of these pupils achieved grades A*-C including English and maths. This was well below the national average for state schools of 64%. Pupils at these schools performed below average on the other main GCSE indicators, including the new Attainment 8¹³ and Progress 8¹⁴ measures, although the gaps varied and were somewhat lower for progress measures when analysed by prior attainment levels. It is important to realise that many of these pupils would have spent the majority of their secondary years in schools that were not UTCs and hence only very limited conclusions can be drawn so far on the impact of UTCs on performance.¹⁵

2.3 Spending information

In March 2016, the Department for Education published data on:

- [Capital funding for UTCs](#)
- [Revenue spending on UTCs](#)

2.4 Ofsted reports

The [Academies Annual Report 2014/15](#) (published November 2016), noted that:

Four of the seven UTCs inspected in the 2014/15 academic year were rated good or better. By the end of the 2014/15 academic year, Ofsted had inspected 11 UTCs in total, of which six were rated good or better.¹⁶

¹⁰ [Schools, pupils and their characteristics: January 2016](#), DfE

¹¹ [School capacity: academic year 2014 to 2015](#), DfE

¹² [Pupil absence in schools in England: 2014 to 2015](#), DfE

¹³ More than half a grade lower per subject

¹⁴ Again more than half a grade lower, here looking at the progress made during secondary school compared to pupils with a similar starting point

¹⁵ [Revised GCSE and equivalent results in England: 2015 to 2016](#), DfE

¹⁶ Department for Education, [Academies Annual Report 2014/15](#), November 2016, p36

2.5 Press comment

A Guardian article in September 2015 discussed UTC performance:

- Guardian, [University technical colleges: five years on, the jury's still out](#), 22 September 2015

An article published in May 2016 set out support for UTCs and for technical streams of education from age 14:

- Guardian, [The government seems poised to get it wrong on technical education again](#), 31 May 2016

In February 2017, the former Education Secretary Michael Gove [published](#) an article in the *Times*, which argued that the time had come to accept that UTCs had not worked as an experiment, despite some successes. He attributed the failure of the policy to several factors:

The first is the principle that admission should be at the age of 14. The originator of the UTC idea, Kenneth Baker, has argued that all students should be divided at 14 and given the option of either a technical, or artistic and creative, or academic education. He saw UTCs as the vanguard of this revolution. But other schools have seen them as destinations for underperforming children. Students whose poor academic prospects might hamper league table performance have been directed towards UTCs and higher-performing contemporaries have been warned off. On top of that, many parents and students themselves have felt that 14 is too young to opt for a narrowly specialist path.¹⁷

Lord Baker [responded](#) in the *Telegraph* in support of UTCs, and addressed in particular the recruitment issue:

Justine Greening has decided to help UTCs recruit at age 14 – something that has always been difficult for us – by changing the law to require all local authorities to write to parents of 13-year-old children about UTCs that might be attractive to their children. She is also going to change the law to allow principals of UTCs to visit local schools and tell students about some of the opportunities available at their colleges. This is a big step forward in improving careers advice.

UTCs take in some youngsters who are totally disengaged – some with personal difficulties, who have largely written off their education.¹⁸

¹⁷ Times, [Dividing our children at 14 has not worked](#), 10 February 2017

¹⁸ Telegraph, [Michael Gove is talking rubbish about my technical colleges – they are working brilliantly](#), 17 February 2017

3. The future of UTCs: support and concerns

3.1 Government view

The [Conservative Party Manifesto](#) for the 2015 General Election indicated that the party intended to continue the expansion of UTCs, to “ensure there is a University Technical College within reach of every city.”¹⁹

During the debate on the Queen’s Speech in May 2015, the Prime Minister spoke strongly in support of UTCs:

The university technical colleges are a great success—indeed, we launched our election campaign in one in Swindon. They help to complete our education system by providing what was missing: a high-quality technical education for children who would benefit from it.²⁰

However, during an adjournment debate on the closure of the Black Country UTC in June 2015, the skills Minister Nick Boles indicated that the Government may review the operation of the UTC programme before proceeding further.²¹ Revised information on applying to open a UTC was published in October 2015 (see section 3.3 for more detail).

In December 2015, the Government confirmed in a [response](#) to a Parliamentary Question that student applications for UTCs were being encouraged:

Nick Boles: Like all academies, each university technical college (UTC) is responsible for publicising their school and encouraging applications. Officials from the Department for Education and the Baker Dearing Educational Trust provide UTCs with advice to support pupil recruitment, drawing on the best practice from UTCs and other new schools. Statutory guidance to schools on careers guidance is clear that they should allow UTCs to engage with their pupils on their premises. This guidance can be found at GOV.UK: <https://www.gov.uk/government/publications/careers-guidance-provision-for-young-people-in-schools>. This careers guidance should ensure pupils have information about their full range of education and training options.²²

3.2 Closures

There have been a series of UTC closures, or conversions to other type of educational institution, often centred around pupil recruitment levels and associated financial viability.

¹⁹ [The Conservative Party Manifesto 2015](#), p34-35

²⁰ [HC Deb 27 May 2015 c49](#)

²¹ Schools Week, [Ministers to review University Technical Colleges in wake of Black Country closure](#), 10 June 2015

²² [PQ 18899, 14 December 2015](#)

Hackney UTC

In February 2014 Hackney UTC received an [Ofsted report](#) rating the college as 'requires improvement'. A monitoring inspection, published in June 2014, had noted the UTC was making improvements.²³

A TES [article](#) in July 2014 discussed the subsequent decision to close the college:

Hackney UTC in east London has said it will be close just two years after it first opened after receiving only 29 applications for September out of a target of 75. It follows a critical Ofsted report in February which said the college was underperforming in a number of areas.

[...]

A spokesman for the Department for Education told *TES* the closure had "no bearing" on the UTC programme as a whole, and said many other colleges were "thriving".

"We are seeing many UTCs go from strength to strength and some are now oversubscribed. We are confident that as they become known in their areas more young people will choose to make the move," he said.

[...]

Hackney UTC, which is situated in the heart of London's "Tech City", was the first to open in the capital.

Its curriculum has a digital media production focus, and all students learn programming and benefit from its "extensive involvement" with professional partners, including BT and Cisco.²⁴

Black Country UTC

The Black Country UTC's website (discontinued since the closure of the UTC) provided reasons behind the decision to close the UTC:

Since opening, the Black Country University Technical College (BCUTC) has experienced low levels of student numbers.

This outcome has been reached following a recent disappointing inspection, a thorough assessment of actual and projected student numbers, financial challenges, staffing capacity and the impact these will have on standards of teaching and learning.

Following this review, the Board of Governors at the BCUTC has concluded that it is no longer a viable or sustainable organisation and as a result, it will close on August 31 2015.²⁵

The decision followed an Ofsted inspection in March 2015, which was published in May 2015. The [report](#) rated the Black Country UTC as inadequate and in need of special measures. It criticised the UTC for low standards and expectations, poor attendance levels, as well as

²³ There are 4 grades of Ofsted report: Outstanding; Good; Requires Improvement; and Inadequate. The Hackney UTC report and monitoring letter are published on the [Ofsted website](#) [accessed 6 July 2015]

²⁴ TES, [Flagship University Technical College to close due to falling pupil numbers](#), 11 July 2014

²⁵ Black Country UTC, Planned Closure of the Black Country UTC [accessed 11 June 2015; no longer available since the college's closure]

several other factors, including that students did not feel safe because of poor behaviour.²⁶

An article in *Schools Week* on the findings of the Ofsted report highlighted Ofsted's concerns that the UTC's sixth form was failing to promote vocational options, despite the vocational purpose of the UTC programme.²⁷

The following further press articles discussed the closure:

- TES, [Second UTC to close due to 'financial challenges'](#), 14 April 2015
- Schools Week, [Black Country UTC to shut as student numbers fail to increase and Ofsted sees lack of improvement](#), 14 April 2015
- Walsall Advertiser, [Students left in limbo as Black Country UTC in Walsall announces closure](#), 16 April 2015

Central Bedfordshire UTC

It was announced on 29 February 2016 that Central Bedfordshire UTC, which opened in September 2012 and specialises in engineering and design, will close in August 2016.

The [announcement](#) of the closure stated that the UTC had “not been able to attract sufficient pupils to provide a financially viable high-quality experience after 2015-16.”²⁸

The announcement further stated that the UTC was making alternative arrangements to ensure all students were able to complete their programmes in full with the same staff at the same site, with the funding and staff transferring to the sponsor Bedford College.

An [article](#) on the closure in *FE Week* stated that the college was operating at 16.8 per cent of its capacity, with 101 learners on roll and 600 spaces available.²⁹

Burton and South Derbyshire UTC

It was confirmed in September 2016 that Burton and South Derbyshire UTC, which was intended to specialise in biomedical science and engineering, would not open due to low recruitment numbers. An [article in FE Week](#) stated:

Approval for the Burton and South Derbyshire UTC was withdrawn “following low pupil recruitment numbers” a spokesperson for the department [for Education] said, adding that the institution would have been “financially unviable for the taxpayer”.

The latest set of accounts for the year ended August 31, 2015 show that that UTC was given over £8m of funding by

²⁶ Ofsted, [Black Country UTC, inspection 10-11 March 2015](#), published 22 May 2015

²⁷ Schools Week, [Doomed Black Country UTC failed to promote vocational options, inspectors find](#), 22 May 2015

²⁸ Central Bedfordshire UTC, [UTC Announcement](#), 29 February 2016

²⁹ FE Week, [Struggling Central Bedfordshire UTC to close despite FE college's intervention](#), 10 March 2016

the Education Funding Agency, all of which was subsequently spent.

Built in Burton on Trent, it included a range of new equipment for learners and was set to specialise in biomedical science and engineering.³⁰

Further closures

In October 2016 it was announced that Royal Greenwich UTC, opened in 2013 and specialising in construction and engineering, would become an 11-19 secondary school. It was [reported](#) that the UTC had suffered a fall in pupil numbers and was struggling financially.³¹

Daventry UTC, which specialises in art and design technology and also in electrical and mechanical engineering, announced in December 2016 that it would [close at the end of the academic year](#), owing to low pupil numbers.³²

Greater Manchester UTC, based in Oldham and specialising in sustainable engineering, announced in February 2017 that [it also would close](#) at the end of the academic year, citing insufficient pupil recruitment for financial sustainability.³³

Adjournment debate and pause in UTC policy

On 9 June 2015, the local MP for the Black Country UTC, David Winnick, raised the closure in an [adjournment debate](#). The skills Minister, Nick Boles, said that he was considering how best to take forward the UTC programme ahead of further expansion:

We want to ensure that the university technical college programme, to which the Government are firmly committed and which has great support from the main Opposition party, flourishes and creates institutions that are educationally and financially successful, so that they can recruit sufficient numbers of young people and give them a great education. [...] I am looking at all the questions about how a UTC works; who it recruits and when it recruits them; what specialisms are involved; what its partnership and sponsorship arrangements are; and how it involves universities and employers, and which ones are getting involved. I am determined to ensure that the programme ends up producing fantastic institutions that offer great opportunities for young people to receive a technical education.

[...]

On the hon. Gentleman's suggestion of a pause, there is a natural pause in a sense, because there are certain times at which we solicit bids for new university technical colleges. We are currently considering what the appropriate time will be to open up a bidding round, and I can assure him that there will be a number of months before that when we can consider all the lessons from this and other experiences.³⁴

³⁰ FE Week, [UTC will not open despite DfE spending over £8m](#), 7 September 2016

³¹ Schools Week, [UTC will switch to become secondary school at cost of £13m](#), 10 October 2016

³² Daventry UTC, [Daventry UTC to close in 2017](#), 7 December 2016

³³ Greater Manchester UTC, [The GM UTC to close in August 2017](#), 7 February 2017

³⁴ [HC Deb 9 Jun 2015 c1167](#)

The Department for Education subsequently reopened UTC applications in October 2015.

3.3 Other issues

Enrolment and attendance

Concerns have been raised about enrolment and attendance levels at UTCs. (See section 2.2 of this note for relevant DfE figures, and also information on UTC closures in section 3.3.)

In September 2014 it was [reported](#) by *FE Week*, following an FOI request, that some UTCs were operating at 10 per cent capacity, with overall enrolment at 30 per cent.³⁵ In June 2015, it was reported that eight spaces in the list of 50 worst for absence among providers which recruit pupils aged five to 15 were occupied by UTCs.³⁶

A Local Schools Network [article](#) in April 2015 on the closure of Black Country UTC, raised concerns about the wider UTC programme (emphasis in original), focused on the recruitment of pupils:

It appears UTCs are not recruiting as many pupils as needed in order to be viable. Even the JCB Academy, Staffordshire, which began in 2010 has not reached its full capacity of 728. It has just 433 students*.

UTCs take students from Year 10 to Year 13. Those opened in 2013 should, therefore, be half full by now having recruited students in 2013 and 2014. But many are not. Buckinghamshire UTC and Daventry UTC both have room for 600 pupils but have only 92* and 96* respectively. Visions Learning Trust UTC, Burnley, has just 73* students in a college with capacity for 800. Another UTC with room for 800 students, Liverpool Life Sciences, is doing better – after two intakes it has 181* students.

The idea behind UTCs might appear to be offering an alternative but the concept is flawed. Removing pupils from secondary schools at age 14 disrupts their education and steers them towards a particular career too early. And the promised focus on employment in particular jobs might not be adequate. One Black Country UTC student told [ITV](#) he had ‘received no practical training’ in engineering – his chosen career. And Ofsted found sixth-form students at the Central Bedfordshire UTC were ‘not following a sufficiently rounded curriculum to support their future choices’ although the ‘excellent resources’ and ‘high quality technical equipment’ enabled students to gain good practical skills.³⁷

IPPR research on UTC intakes

In September 2016, the Institute for Public Policy Research published the findings of [research on the intakes of 14-19 institutions in England](#), including UTCs and also studio schools and 14-19 free schools, drawing on data about institutions that opened in 2013 or 2014.

³⁵ FE Week, [UTCs running at 10 per cent full as enrolment plummets](#), 19 September 2014

³⁶ FE Week, [UTCs take eight spaces in list of 50 worst for absence](#), 1 June 2015

³⁷ Local Schools Network, [As a second UTC announces closure, are UTCs expensive white elephants?](#), 15 April 2015. Asterisk denotes citation of figures from the DfE’s [Edubase](#)

The research included the following key findings:

- A majority of pupils enrolling at 14-19 institutions are male (68%)
- Based on their attainment at Key Stage 2, those enrolling are predicted to achieve GCSE grades below the national average. This is particularly true of pupils in studio schools, compared to those in UTCs (who are more likely to recruit 'middle attainers').
- UTCs have slightly lower (13%) than average (15%) numbers of pupils on free school meals
- UTCs recruit equally from the most and least deprived neighbourhoods
- The schools that 14-19 institutions recruit from are more likely to be schools rated as 'inadequate' or 'requires improvement' by Ofsted as opposed to those rated as 'good' or 'outstanding'
- The pupils most likely to attend UTCs are boys with high attainment in maths and low attainment in English, who come from more affluent neighbourhoods and who join from a school with an adverse Ofsted rating ('requires improvement' or 'inadequate')
- Many 14-19 institutions are failing to recruit sufficient numbers of pupils, and are operating significantly under capacity.³⁸

Further [key findings](#) are available from the IPPR, as well as a [full report](#).

Sir Michael Wilshaw speech

In July 2016, HM Chief Inspector of Schools Sir Michael Wilshaw gave a [speech at the Baker Dearing UTC conference](#), where he set out his belief that UTCs "have a pivotal role to play in raising both the status and the quality of technical education in this country."

However, Sir Michael described current UTC performance as "patchy" and that their performance needed to be "significantly better" to be politically sustainable.

Sir Michael stated that Ofsted inspectors had found some common weaknesses in weaker UTCs:

- an often indistinctive and poorly thought-through curriculum
- low expectations of what pupils can achieve
- weak and inconsistent teaching, including of literacy and numeracy skills
- under-developed careers guidance and a failure to make best use of links with local employers.

Sir Michael also set out some common characteristics of UTCs that had been found to be good or outstanding:

- business-like ethos and culture of high aspirations and expectations for both staff and students
- carefully designed and specialised curriculum, with a strong focus on equipping students with the technical knowledge to meet local skills shortages

³⁸ IPPR, [Transitions at 14: Analysing the intake of 14–19 education institutions](#), September 2016

- robust tracking and assessment systems
 - impressive destination data showing students have achieved the relevant qualifications to enable them to progress to the next stage of their education or into a job
 - excellent links forged with local and national employers that offer students real world experience through well-planned work placements
 - exemplary careers guidance;
 - well-equipped laboratories and workshops
 - strong literacy and numeracy development that underpins good progress in the technical aspects of the curriculum;
- strong feedback from business partners on the progress of students.³⁹

Schools for boys?

In March 2014 the Royal Academy of Engineering launched a report, supported by the [Women's Engineering Society](#) (WES) and [Women into Engineering and Technology](#) (WiSET) at Sheffield Hallam University, aimed at encouraging UTCs to create strategies and practices to encourage and enable girls to participate in equal numbers to boys.⁴⁰

In May 2014, the Baker Dearing Educational Trust [published](#) survey results stating that higher numbers of girls at UTCs than in mainstream schools believed they had the same chance as boys of finding employment in engineering and other technical subjects.⁴¹

An October 2014 [article](#) in Schools Week stated that a little more than one in five students at a UTC is female, although there was wide variation between individual UTCs.⁴²

Department for Education figures from January 2015 stated that 21% of UTC pupils are female.⁴³

Low numbers of women entering STEM careers, and taking STEM subjects in further and higher education has been a long-standing concern. The Women's Engineering Society provides some [statistics](#) on the current numbers of women in STEM careers and education, including that:

- 9% of the engineering workforce is female (the lowest percentage of female engineering professionals in Europe)
- 15.8% of engineering and technology undergraduates in the UK are female
- Around 20% of A Level physics students are girls and this has not changed in 25 years⁴⁴

³⁹ Ofsted, [Sir Michael Wilshaw's speech at the Baker Dearing UTC conference](#), 21 July 2016

⁴⁰ Royal Academy of Engineering, [University Technical Colleges: Opening up new opportunities for girls](#), 1 March 2014

⁴¹ Baker Dearing Educational Trust, [Only 3% of girls in mainstream schools would consider a career in engineering](#), 13 May 2014

⁴² Schools Week, [Jobs for the Boys at UTCs](#), 10 October 2014

⁴³ Department for Education, [Schools, Pupils and their Characteristics](#), January 2015

⁴⁴ Women's Engineering Society, [Useful statistics](#), January 2016

The [IPPR research](#) previously referred to, published in September 2016, found that 68% of those enrolled in 14-19 institutions (UTCs and also studio schools and 14–19 free schools) are male.⁴⁵

Impact of a strengthened EBacc

The Conservative manifesto for the 2015 General Election proposed that the English Baccalaureate (EBacc) be made a requirement for English schools.⁴⁶

The EBacc measures the achievement of pupils who have gained Key Stage 4 (GCSE level) qualifications in the following subjects:

- English
- mathematics
- history or geography
- the sciences; and
- a language

In November 2015 the Government published a [consultation](#) setting out the aim that at least 90% of pupils in mainstream secondary schools should be entered for the EBacc, and seeking views on implementation. Pupils beginning Year 7 in September 2015 will study the EBacc at GCSE level, meaning they would take their GCSEs in those subjects in 2020.

The consultation highlights the particular status of UTCs as technical schools:

UTCs and studio schools provide a specialist technical and professional education. Pupils attending UTCs and studio schools choose to specialise in a technical or professional area at age 14. Although many pupils in UTCs and studio schools already enter the EBacc, some will study a smaller academic curriculum to make time for specialisms and enter fewer EBacc GCSEs as a consequence.⁴⁷

The consultation asks how the strengthened EBacc policy should apply to UTCs, with their more vocational focus. It closed on 29 January 2016.

More information on the EBacc is available in the Library briefing, [English Baccalaureate](#), CBP06045.

⁴⁵ IPPR, [Transitions at 14: Analysing the intake of 14–19 education institutions](#), September 2016

⁴⁶ [Conservative Party Manifesto 2015](#), p34

⁴⁷ Department for Education, [Consultation on Implementing the English Baccalaureate](#), November 2015, p25

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