

Written evidence from the Baker Dearing Educational Trust (“Baker Dearing”) on behalf of University Technical Colleges (“UTCs”) (CWSB155)

Children’s Wellbeing and Schools Bill (“Bill”)

Introduction

1. Baker Dearing is a UK charity established in 2009. While the charity’s initial focus was to originate and support the opening of new UTCs, over the past 5 years its remit has evolved to focus on improving quality across the UTC network; providing leadership, challenge, and support from the centre; fostering a community to enhance the capabilities and opportunities of like-minded UTC professionals and students; and working closely with employers, universities, and other stakeholders, such as the Department for Education, to ensure UTCs deliver industry-relevant skills and knowledge.
2. UTCs provide high-quality, employer-led, technical education combined with academic learning to prepare students for careers in engineering, health, technology, science, and other technical fields. Consequently, funding agreements for UTCs (all of which are academies) mandate that the curriculum has a provision for technical education with an emphasis on the particular specialism(s) offered at the UTC¹.
3. Judged in any way, over the past 5 years UTCs have seen significant improvement. Today, just under 21k students are enrolled at UTCs and 82% of UTCs (36/44) are judged Ofsted ‘Good’ or better for the quality of their education.
4. UTCs are agents of social mobility and students come from all backgrounds and all abilities, but their employability when leaving is significantly enhanced. UTC student leaver destinations, aged 18, demonstrate superior outcomes when compared with state-funded mainstream schools and colleges²: 5% of young people become NEET (not in education, employment, or training) – less than half the national average (13%); 20% of leavers start an apprenticeship – four times the national average (5.2%); and 60% of apprenticeship starts are at Levels 4 or higher – double the national average (31%).

Executive Summary

5. Baker Dearing’s response covers solely those amendments to the Bill which will impact UTCs disproportionately when compared with all other academies. Our focus is on three proposed amendments to Clauses 40, 41, and 45. The proposed changes to Clause 41 are potentially the most damaging for UTCs and these are prioritised below.
6. Baker Dearing fully agrees that *“a cutting-edge curriculum that drives high and rising schools’ standards and sets all young people up for life and work”*³ must be central to government’s vision for education. Indeed, by blending academic excellence with a

¹ Department for Education UTC Funding Agreement and Supplemental Funding Agreement December 2020

² Department for Education 16-18 destinations measures academic year 22/23 – Level 3 only for mainstream schools and colleges

³ Department for Education Curriculum and Assessment Review July 2024

relevant technical education, and through close collaboration with industry partners and higher education institutions, UTCs are already meeting this ambition.

7. UTCs can only achieve this ambition through the provision of a distinctive curriculum, which is expensive for them to deliver because funding uplifts are not provided for pre-16 technical education, despite the fact that they are available in post-16 study; because UTCs are purposely designed as smaller schools with limited economies of scale; and because UTCs have a disproportionate percentage of more expensive STEM teaching staff. Therefore, to meet the requirements of a balanced budget, UTCs offer a smaller number of other subjects (humanities, languages, etc.) when compared with most schools, whether they admit students at Year 9 (Key Stage 3) or Year 10 (Key Stage 4).
8. As set out in the Bill, if implemented without change to the existing national curriculum and without disapplication for UTCs, Clause 41 would render all UTCs with a Year 9 entry financially unviable. These 13 UTCs would be faced with two choices: either to close, or to change their year of entry back to Year 10. It is likely that the disruption associated with changing the age range for small schools would place them in a perilous financial position, so closure would ultimately be the most likely outcome.
9. Should Clause 41 be applied with a broader Key Stage 4 national curriculum than exists today and without disapplication for UTCs, almost all UTCs would become financially unviable, and most would be forced to close. Those surviving UTCs would see the current employability-focused curriculum be diluted, which would in turn lead to inferior student leaver destinations.
10. Secondary teacher recruitment shortages and retention challenges are well-documented and are system wide. However, with three quarters of UTCs offering engineering and all providing a higher percentage of curriculum time for digital and technical studies, teacher workforce challenges are more acutely felt across UTCs than elsewhere. Furthermore, to ensure the industry relevance of the specialist UTC curriculum, UTCs also recruit highly experienced practitioners from industry who may or may not have qualified teaching status.
11. To meet their specific teacher recruitment challenges, UTCs take advantage of academy freedoms in terms of pay, conditions, and teaching status. This has not compromised teaching quality (82% of UTCs are judged 'Good' or better for this measure by Ofsted – in line with national secondary school averages), budgets (cumulative UTC debts owed to the Department for Education are now close to one-tenth of the 2019 total⁴), or outcomes (see paragraph 4 above). Should Clauses 40 and 45 be applied without exceptions for UTCs, given the unique nature of their specialist curriculum, all would struggle to recruit high quality teaching staff, and this will have a detrimental impact on young people's outcomes.

⁴ National Audit Office Investigation into University Technical Colleges (2.9) October 2019

Recommendations

12. UTC staff recruitment and retention will be severely impacted by the amendments to Clauses 40 and 45. Should these amendments come into law under the Bill, UTCs must be exempted from the academies in scope defined in the regulations.
13. Clause 41 will be particularly damaging to UTCs with an admission intake at Year 9. Should these amendments come into law under the Bill, UTCs must be exempted from the academies in scope defined in the regulations.
14. Clause 41 will be damaging to all UTCs should the scope of the Key Stage 4 national curriculum broaden. Should these amendments come into law under the Bill and the Key Stage 4 national curriculum broaden, UTCs must be exempted from the academies in scope defined in the regulations.

Evidence for Clause 41

15. UTCs exist because employers across a variety of industries (from digital to health, from engineering to creative media) recognise that the widening technical skills gaps in their businesses are not being met by the current education system. In addition to the sponsorship offered by these employers, each UTC is also sponsored by a university to provide a clear pathway for students into higher education.
16. Launched primarily over the past 11 years, UTCs are government-funded schools for students mainly aged between 14 and 18, which offer a distinctively different educational choice in the following ways:



- i. **A blended academic and technical curriculum is delivered.** Unlike most secondary schools, which offer predominately academic subjects, UTC students spend roughly 40-60% of their time, depending on age, gaining appropriate technical qualifications such as engineering and product design. The rest of the curriculum time is allocated to obtaining a strong grounding in core academic subjects, particularly English, Maths and Science (through GCSEs and A Levels). UTCs also benefit from having industry-standard equipment (e.g. lathes, laser cutters, milling machines) so students' technical skills are aligned with those of the employer partners.
- ii. **Learning is stretched and deepened through the contribution of employer partners.** Employer and university 'sponsors' are vital to making the curriculum relevant, and to linking subject content to the world of work which stimulates interest and curiosity in pupils. As well as comprising the

majority of the UTC's governing body, employers provide 'real life' project-based learning, work experience, mentoring, masterclasses, site visits, etc.

- iii. **Pupils leave 'work ready', professional, and with well-developed employability skills.** High standards of appearance, conduct, work, and responsibility are expected at UTCs, as they are in the workplace. Developing essential employability skills such as oracy, listening, problem-solving, communication, teamwork and leadership are amongst the UTC's objectives for its students.
- iv. **Pupils secure progression to ambitious destinations.** UTCs are often described as providing 'an educational journey with a destination in mind'. Whilst examination outcomes are important, leaver destinations are the highest priority.

17. The UTC design is evidence-based. In addition to superior student leaver destinations, a UTC curriculum helps to signpost post-16 study, to prevent disengagement in education, and to improve academic outcomes.

- i. **Enrolment takes place mainly at the age of 13 or 14 to ensure informed career choices.** Evidence points to the fact that at around the age of 13 to 14, students in many education systems make subject choices that align with potential career interests. Research from The Organisation for Economic Cooperation and Development and others⁵ is clear that early exposure to technical and vocational education helps students understand the relevance of education to the labour market. Introducing vocational elements at lower secondary level can spark interest in technical and vocational education, which is more likely to be pursued in upper secondary.

This is confirmed by the 2024 Baker Dearing UTC student survey (10,000 responses), in which 72% of students in Year 11 agreed or strongly agreed that studying technical and creative subjects at Key Stage 4 has helped them to decide that they wish to study these subjects at Key Stage 5. In particular, the introduction of T Levels, which are very large technical courses leading to apprenticeships in specific technical areas, has reinforced the importance of enabling young people to 'try before they buy' technical education during Key Stages 3 & 4.

- ii. **Student disengagement is prevented.** The Brookings Institution⁶ and others have reported that students disengage from education when they fail to see its relevance to their lives and futures. Starting a career-focused education at the age of 14 offers students a sense of purpose and practical goals. Indeed, two-thirds of Year 9 and Year 10 UTC students cite that their attendance has improved compared with that at their previous school⁷, and the same survey found that 88% highlighted the relevant mix of technical and academic learning as a reason for this improvement.

⁵ OECD Transitions through education and into the labour market 2025

⁶ "[The Disengaged Teen: Helping Kids Learn Better, Feel Better, and Live Better](#)," The Brookings Institution 2025

⁷ Baker Dearing Student Survey (10k responses) November 2024

- iii. **A blended academic and technical curriculum offers material benefits.** These have been cited in many Ofsted evaluations of UTCs. For example, UTC South Durham's Ofsted report (April 2024) states,

"Pupils thrive at this school, including those who have disengaged with education elsewhere. Parents and carers appreciate the transformative experience the UTC has been for their children. This is evident in the regular attendance and positive behaviour of pupils. Many pupils have had difficult experiences in education, including extended periods of absence, prior to joining the UTC. These pupils enter with low academic starting points. Most make effective progress. Leaders are focused on ensuring the academic experiences of pupils match the quality of the UTC's technical provision."

18. However, the UTC design is expensive to deliver because of limited economies of scale and the lack of the available funding uplifts for pre-16 technical education that are provided for post-16 study.

- i. **Smaller schools permit fewer economies of scale.** Because of their specialist nature, the age range of students, and the desire to emulate a work-based environment, UTCs are typically smaller than most secondary schools. The average UTC has capacity for about 500 to 600 students, and currently the average number on roll across all 44 UTCs is 472⁸. Furthermore, the delivery of a specialist curriculum, often involving the use of specialist equipment such as lathes which can be hazardous, requires smaller class sizes for health and safety reasons. Typically, class sizes for technical subjects are capped at 25 pupils.
- ii. **Technical weighting is not offered at Key Stage 4.** UTCs receive the same funding per pupil at Key Stages 3 and 4 as do all other state funded schools, despite delivering technical subjects which is acknowledged to be more costly. At Key Stage 5, the Department for Education recognises that subjects with practical content (e.g. engineering) are more expensive to offer than subjects with which are solely theory-based; this is demonstrated through its programme cost weightings, which offer a multiplier to standard per student funding for such practical courses.⁹

19. The need for tight financial management is clearly recognised. Baker Dearing has worked closely with the Department for Education to ensure that UTCs deliver their distinctive curriculum in a cost-effective manner. Aggregate cumulative UTC debts owed to the Department for Education are now close to one-tenth of the figure cited in the 2019 National Audit Office Investigation¹⁰.

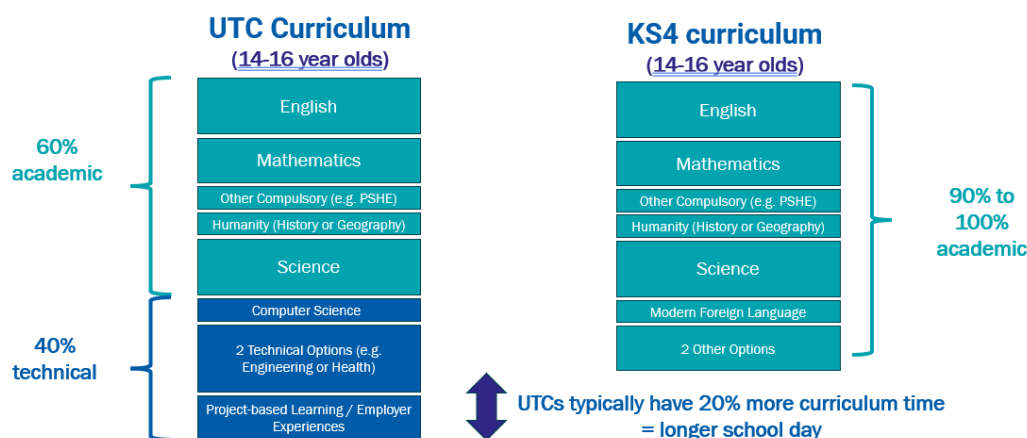
20. To deliver the essential characteristics of a UTC curriculum within tight funding constraints, UTCs must make efficient curriculum choices, when compared with other secondary schools, as set out below. At present, nearly all UTCs offer the national curriculum subjects at Key Stage 4, namely: Maths, English, Science, Physical

⁸ Baker Dearing Student Enrolment Data September 2024

⁹ <https://www.gov.uk/government/publications/fe-funding-for-high-cost-and-high-value-provision>

¹⁰ National Audit Office Investigation into University Technical Colleges (2.9) October 2019

Education, Computing and Citizenship Education as set out in the research briefing for the Bill¹¹.



21. In academic year 2018/19, four UTCs introduced a Year 9 entry for the first time (Cambridge Academy for Technology and Science, JCB Academy, UTC Sheffield City Centre, and UTC Sheffield Olympic Legacy Park). Today, a total of 13 UTCs offer a Year 9 entry. The rationale for adding a slightly earlier age of entry is to provide young people with a foundation year to acclimatise at a new school with new friends, teachers, policies, etc. before commencing the high pressure 'GCSE years'.
22. Evidence from Baker Dearing¹² found that examination outcomes are higher for those UTCs with a Year 9 entry (8%) and the 2024 summer leaver destinations for UTCs with a Year 9 entry showed half the NEET rate (1.3%) compared with UTCs starting at Year 10.¹³
23. However, by starting at Year 9, UTCs are exempted from the Key Stage 3 national curriculum. Ofsted inspections have validated this point on the grounds that parents and students make an informed decision regarding the UTC's distinctive curriculum when joining in Year 9.

¹¹ House of Commons Library January 2025 Children's Wellbeing and Schools Bill 2024-25 page 122.

¹² Baker Dearing Year 9 Cohort Examination Outcomes Data 2023

¹³ Baker Dearing Year 11 Leaver Destinations Data 2024

	KS3 National Curriculum Subjects	Typical Year 9 UTC Curriculum
Math	✓	✓
English	✓	✓
Science	✓	✓
History	✓	Typically one but not both.
Geography	✓	
Art & Design	✓	✓
Physical Education	✓	✓
Music	✓	✗
(Modern) foreign languages	✓	✗
Computing	✓	✓
Design & Technology	✓	Rarely - technical specialism offered instead.
Citizenship Education	✓	✓
Technical specialism and employer activities	✗	✓

Evidence for Clauses 40 & 45

The evidence for these two clause amendments is provided together as they are interlinked.

24. Secondary teacher recruitment shortages and retention challenges are well-documented and are system wide. However, with three quarters of UTCs offering engineering and all providing a higher percentage of curriculum time for digital and technical studies, teacher workforce difficulties are more acutely felt across UTCs than elsewhere.
25. Typically, teacher recruitment to deliver engineering subjects at UTCs comes from a variety of sources, but often teachers who have taken initial teacher training in either physics or design and technology are brought on-board. The latest industry-wide postgraduate initial teacher training recruitment figures for physics show that only 30% of the target numbers are being met; design and technology achieves only 40% of the target; and computing realises only 37% of the target. These subjects are significantly worse at recruiting teachers than are all subjects in total, for which the national secondary target stands at 62%.¹⁴
26. In addition to the challenges posed by an insufficient quantity of teachers with the requisite subject knowledge and/or industry experience, UTCs are obliged to run a longer school day, often as much as 20% longer as highlighted in the curriculum comparison above, to meet the needs of their distinctive curriculum.
27. As UTCs are small schools (many have an enrolment of about half that of typical secondary schools), fewer teachers are employed overall and therefore any surplus capacity, for example to accommodate staff absence, is limited.
28. In this context, UTCs have needed to take advantage of academy freedoms in terms of pay, conditions, and teacher status, to ensure that they maintain a full complement of staff to meet the needs of young people. This has not compromised teaching

¹⁴ Initial Teacher Training Census Academic Year 2024/25 December 2024

quality (82% of UTCs are judged 'Good' or better for this measure by Ofsted, which is in line with national secondary school averages), budgets (cumulative UTC debts owed to the Department for Education are now close to one-tenth of the 2019 total¹⁵), or outcomes (see paragraph 4 above).

29. To ensure the industry relevance of the specialist UTC curriculum, UTCs also recruit as teachers highly experienced practitioners from industry who may not have Qualified Teaching Status.
30. UTC staff are often supported to gain Qualified Teaching Status, which can be expensive and time-consuming. Furthermore, as a starting point teachers must have a salient degree in order to achieve this status. Sometimes, UTC staff with industry backgrounds have professional qualifications and years of experience, but not a suitable degree.
31. UTCs have also been innovative in structuring the terms of recruitment for specialised, industry-experienced staff. For example, UTC Portsmouth staff can take a week off during term time, and Aylesbury UTC and Liverpool Life Sciences UTC offer staff the option of working from home one day per week. This flexibility not only helps these UTCs to compete with industry employers, but also enables them to recruit people with caring responsibilities, as well as those who run their own companies. By taking this approach, Aylesbury UTC, for example, now has a full complement of teaching staff, compared with significant gaps witnessed prior to introducing this measure.

January 2025

¹⁵ NAO – Investigation into University Technical Colleges October 2019 (2.9).