BUILDING BRITISH SKILLS · PAPER 02

Paper II: Routes and Institutions

Universities of Technology, the British Master qualification and routes with no dead ends.

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Funding every route equally is necessary but not sufficient. A young person choosing between a degree and a technical career is assessing more than just cost, but also where each route leads, what it pays, whether employers respect it and whether it closes off other options later. In Britain the technical routes too often lead nowhere that is recognised, carry little prestige and end in a qualification employers do not value. Until that changes, a free choice will continue to favour the degree.

Germany shows that it can be different. There, a large share of each generation takes a technical route by choice, many after completing the Abitur, because the route leads to a respected qualification, a good wage and, through the Meister, the possibility of running a business and training the next generation. Its universities of applied sciences offer practice-based degrees taught with industry. Its applied research institutes connect discovery with the firms that use it.

This paper sets out the routes and institutions that the National Skills Account will fund. It proposes research universities and Universities of Technology with distinct missions and equal standing, technical colleges as the home of dual training and stronger links between Universities of Technology and the Catapult centres that carry out applied research for industry. It proposes standards owned by employers, a British Master qualification for advanced technical skill, apprenticeships protected from misuse, a guarantee that no route is a dead end, freedom for universities to offer shorter degrees and better information and guidance for young people from 14.

1 Why the other routes fail

Britain once had a binary system of universities and polytechnics. It was abolished in 1992, when the polytechnics became universities, and in the years since many have drifted towards the academic model rather than developing the applied, practice-based mission that made them distinctive. The technical route lost its principal destination.

The polytechnics were widely regarded as second best, and any institution given that name today would inherit the reputation. The Colleges of Advanced Technology created in 1956 had a different outcome. Loughborough, Bath, Surrey, Brunel and Aston are all now highly regarded institutions. Abroad, the

technical universities of the Netherlands and Germany are among the most respected institutions in Europe. The applied institutions proposed here will therefore be Universities of Technology, universities in every sense, distinguished from research universities by their mission rather than their rank.

Technical qualifications have multiplied while their value has fallen. Employers have too little say over what they contain or how they are assessed, so many carry little weight in the labour market. Where technical awards have been offered as steps towards a degree, as the Higher National Diploma and the foundation degree were, they have come to be seen as incomplete degrees rather than qualifications in their own right. Apprenticeships have too often been used to fund training that employers would have provided anyway, including management courses for existing senior staff. The government has itself recognised the problem by withdrawing funding for most master's-level apprenticeships for those over 21 from January 2026.

Young people choose with poor information. Careers guidance is patchy and contact with employers before 16 is limited, while the prestige of the degree is constantly reinforced. A route that appears to close off university, and leads to no title that others recognise, will always look like the second-best choice.

2 Principles

Equal standing for different missions. Research universities, Universities of Technology and technical colleges do different things and should be funded and judged according to what they do, not ranked against a single academic standard.

Standards owned by employers. A technical qualification is worth what employers will pay for it. Employers in each sector should set its content and examine those who take it.

No dead ends. Every route should lead somewhere, and choosing a technical route at 16 or 18 should never close off a degree later. Movement between routes should run in both directions, so that no route is treated as a step on the way to another.

Prestige that is earned. Titles and recognition should reflect real mastery, not be handed out to make a route look attractive.

3 Institutions

S11 Establish research universities and Universities of Technology

Create two designations for higher education institutions: research universities and Universities of Technology. Research universities will combine teaching with research of international standing. Universities of Technology will offer practice-based degrees and diplomas taught in partnership with employers, with placements built into their courses and applied research focused on the needs of industry. Both will hold degree-awarding powers, both may award degrees at every level and both will carry the title of university. The title of Royal University of Technology may be conferred, with the approval of the Sovereign, on those that achieve the highest standing, on the model of Sweden's Royal Institute of Technology.

Each institution will choose its designation in a transition period, against published criteria covering the balance of its teaching and research, its links with employers and the outcomes of its graduates. Designation will be reviewed every ten years and an institution may change its designation at review. Funding will follow mission. Research funding will be concentrated in research universities, while Universities of Technology will receive funding for applied research and for teaching linked to employers. The Institutes of Technology, a network of 21 partnerships between colleges, universities and employers already focused on higher technical education, and the strongest further education colleges will be eligible to form or join Universities of Technology.

S12 Make technical colleges the home of dual training

Establish further education colleges as the principal providers of technical education below degree level and of the college-based element of apprenticeships, working alongside employers who provide training in the workplace. Colleges will be funded through the National Skills Account and the employer contributions set out in the third paper, and will be judged on the completion, skills and employment of their learners.

S13 Link Universities of Technology to the Catapult centres

Build on the Catapult centres, Britain's existing network of applied research centres established on the model of Germany's Fraunhofer institutes, by linking each to one or more Universities of Technology. Catapults will carry out research commissioned and largely funded by industry, and students at Universities of Technology will take part in that work as part of their courses. Additional public sites and investment will depend on results, measured by industry funding secured, technologies adopted and firms supported, and will be located within existing place-based programmes rather than through a further scheme.

4 Routes and qualifications

S14 Give employers ownership of technical standards

Establish an employer-led skills body for each sector, beginning with the sectors of the industrial strategy, responsible for setting the content of technical qualifications and apprenticeship standards and for examining those who take them. Sector skills bodies will work within a national framework maintained by Skills England, so that qualifications remain nationally recognised and portable between employers.

The sector skills bodies will also publish the skills their sectors will need over the coming decade. Those assessments will guide the additional units available through the National Skills Account and the designation of strategic subjects.

S15 Create a British Master qualification

Create a British Master qualification for advanced technical skill, with the title of Master protected in law for each recognised trade and technical occupation, such as Master Electrician or Master Engineering Technician. The title draws on an English tradition older than the German Meister: the guilds and livery

companies of the City of London made craftsmen masters of their trades for centuries. A Master qualification will certify mastery of the occupation, competence in managing and running a business and the ability to train apprentices. It will be set and examined by the relevant sector skills body.

The qualification will confer status, not a monopoly. It will not be required in order to practise a trade, so that it does not become a barrier to competition. Holders will be recognised as qualified to supervise and train apprentices and, having completed the business element, may use the enterprise route of the National Skills Account to establish their own firms. Award ceremonies, to which the livery companies will be invited to contribute, will mark the achievement in the same way as university graduation.

S16 Make apprenticeships a mainstream route and protect them from misuse

Make apprenticeships a mainstream route at 16 and 18, combining paid employment with training in the workplace and at college. An apprenticeship will be funded only where it trains a person for a new occupation or a substantially higher level of skill, so that funding is not used to relabel training employers would provide anyway or to fund general management courses for existing senior staff. Every apprenticeship will include a minimum amount of training away from the job and will end in an assessment set by the sector skills body.

S17 Guarantee that no route is a dead end

Create a national credit framework under which credit moves in both directions. Technical qualifications, diplomas from Universities of Technology and Master qualifications will carry credit towards degrees, and degrees will carry credit towards technical diplomas and Master qualifications. A University of Technology diploma is a full qualification at degree level. It will sit at the same level as a bachelor's degree in the national qualifications framework, as will the British Master qualification, in the same way that the German framework places the Meister alongside the bachelor's degree. Holders can move on to further technical or academic study, just as graduates can. Institutions receiving funding through the National Skills Account will be required to recognise credit within the framework. Public bodies will treat qualifications at this level as equivalent to a degree in recruitment and pay, and the government will work with the professional bodies so that they meet the academic requirement for professional registration, such as chartered and incorporated engineer status.

S18 Free universities to offer shorter and more flexible degrees

Remove the barriers that prevent universities from offering degrees in two years or in other flexible forms. Funding will be set by course rather than by year of study, so that a university is not paid less for teaching the same content in less time, and regulation will be amended so that institutions can teach throughout the year and set the length and structure of their courses. Combined with an entitlement that covers around two years of tuition, this will make shorter degrees the natural choice for many students and many courses.

5 Choosing well

S19 Guarantee guidance and contact with employers from 14

Give every pupil independent careers guidance from 14 and at least two weeks of experience with employers before 16, including in technical and practical occupations. The National Skills Account will open at 16 and show each young person the routes available to them and the outcomes those routes lead to, including completion, progression and earnings.

Technical courses at 16, including T Levels and the planned V Levels, will be linked to clear destinations in apprenticeships, technical colleges, Universities of Technology and Master qualifications, so that a young person choosing a technical route knows where it leads.

S20 Give technical achievement public recognition

Recognise technical achievement publicly and consistently. National ceremonies will mark the award of Master qualifications. National skills competitions will be expanded and celebrated. The honours system will recognise excellence in technical occupations and in training the next generation as readily as it recognises academic and professional distinction. Major public infrastructure contracts will require contractors to train apprentices in proportion to the size of the contract.

6 Territorial application

Education and skills are devolved, and the measures in this paper apply in England. The devolved administrations will be invited to adopt the British Master qualification and the national credit framework so that qualifications are recognised across the United Kingdom.

FIELD	APPLICATION
Institutional designations and funding	England
Sector skills bodies and technical standards	England, with the devolved administrations invited to participate
British Master qualification and credit framework	England, with the devolved administrations invited to adopt them
Public contract training requirements	Contracts let by UK government bodies

7 Legislation and delivery

The measures will be delivered through a Skills and Higher Education Bill, together with changes to regulation and funding made by the Department for Education, Skills England and the Office for Students.

INSTRUMENT	MEASURES	CONTENT
Skills and Higher Education Bill	S11, S14, S15, S17 and S18	Institutional designations, sector skills bodies, the British Master qualification and protected title, the credit framework and flexible degrees
Funding and regulatory changes	S12, S13 and S16	Funding of technical colleges, links with the Catapult centres and the conditions for apprenticeship funding
Guidance and procurement policy	S19 and S20	Careers guidance and employer experience, recognition of technical achievement and training requirements in public contracts

Young people will choose technical careers when those careers lead somewhere they and others respect. The task is to build the routes as well as to fund them.