Review of Post-18 Education and Funding: Call for Evidence

1. This review will look at how Government can ensure that the post-18 education system is joined up and supported by a funding system that works for students and taxpayers. The panel would like to understand your priorities. What, if any, are your principal concerns with the current post-18 education and funding system?

The market model driven by fees hasn’t had the intended effect and the universities’ rush to maximum fees is entirely understandable. The general public holds a university education in higher regard than a degree apprenticeship. This promotes higher applications than you would normally expect from a broad cohort and they can charge maximum fees because there is demand which outstrips supply. “High-value jobs” require higher levels of investment and come at a higher than average cost. It puts courses like Engineering at a poor cost/benefit point to the universities’ bottom lines. Our primary concern is that there is a lack of incentive for people to try and attain a degree which will lead to a high-value job and the system penalises the university by not recognising the costs of providing such courses.

2. How do people make choices about what to study after 18? What information do they use and how do they choose one route over another, for instance between academic, technical and vocational routes?

Full-time university study has become the default. We have pre-conditioned most students to value academic routes over others, and the choice from here becomes the institution with the highest status that they are able to get into. For many this rules out other options, such as apprenticeships. We need to ensure that these technical and vocational routes are held in equal value to allow students to make an informed choice.

3. How do people make choices later in life about what further study to undertake?

Choice depends significantly on career / life stage reached post-18. These people find that too much guidance and provision is heavily biased towards school leavers at age 18. There is far too little advice or provision offered and shaped around later career stages, considering personal circumstances, previous career experiences etc. Choice is most often driven by employment needs and funding sources for the further study.

4. In recent years we have seen continued growth in three-year degrees for 18-year-olds. Does the system offer a comprehensive range of high-quality alternative routes for young people who wish to pursue a different path at this age? How can Government encourage provision across a wider range of high-quality pathways to advanced academic, technical and vocational qualifications?

The three-year degree allows the university to satisfy demand for a degree in a shorter time, which enables them to “process” more graduates on their fixed resources. This distorts the playing field against vocational and technical paths. More work has to be done on creating an image of technical and vocational training being an attractive and valued alternative to a degree. Degrees are not the best path to a career for everyone.
There is still language and image around the ‘apprenticeship’ terminology which is not positive. This is particularly true within the independent education settings. A societal change will only come from a sustained, positive message about alternative pathways into work.

Whilst the services aimed at supporting young people in finding apprenticeships have improved, they still remain at a much lower level than those aimed at standard 3-year degrees. Compared to UCAS, the “find an apprenticeship” service is still relatively weak. The careers guidance in schools on apprenticeships still needs further improvement. The assessment of apprenticeships, which is managed by the IfA, still needs to take on board the advice of industry professionals, who are best placed to guide them on what is required in their industries.

Fiscal levers around fees have not had the desired effect. Despite university graduates leaving with over £30,000 of debt, and vocational routes leading to far less if any at all, the majority still choose university.

There is a lack of strategic thinking and planning in the degree routes made available, and the ones which are needed to ensure the viable future of the UK. For example, some universities no longer offer courses in physics and electronics. At the same time, some institutions have increased the provision for courses where there is a small job market. The courses should be designed with the aim of producing students with required skills to take up the jobs.

7. How can Government further encourage high-quality further education and higher education provision that is more flexible, for example part-time, distance learning and commuter study options?

By their nature, flexible study options appeal more to people who are already in employment, paid or otherwise and cannot commit to a full-time course. There can be many reasons for this but the most significant are cost for the learner, time for the employer and caring responsibilities. The government levers are: lower the cost of provision for the student, incentivise employers for upskilling, improve the communications infrastructure for remote students and provide in-community caring resources.

The quality of any study provision will require investment in teaching, course structure and equipment.

10. How should students and learners from disadvantaged backgrounds best receive maintenance support, both from Government and from universities and colleges?

We need to encourage employers to help enhance the learning of disadvantaged students, for example taking on apprentices with less than the normal qualifications.

There are also institutions outside of governments and universities that offer support to engineering students who need it. For example, the IET launched a new initiative in March 2016 aimed at apprentices and students. This bursary has been set up to help people who have taken a vocational route into engineering and who may require financial assistance. The scheme pays £1,000 a year up to four years dependent on the course. Find out more at www.theiet.org/horizons. Similarly, IET Connect supports engineering students facing financial difficulties during their studies: https://www.ietconnect.org/employment-education/education-support/
11. What challenges do post-18 education and training providers face in understanding and responding to the skills needs of the economy at national, regional and local levels? Which skills, in your view, are in shortest supply across the economy? And which, if any, are in oversupply?

The challenges include a lack of engagement between business and education and the accelerating pace of change in skill requirements. The engagement problem between business and education goes both ways. For business there is a lack of detailed information at local, regional and national level as to the skills we have, the skills we need and the gap between the two. For post-18 education the lack of clarity drives provision of historical requirements, producing a graduate requiring significant training and investment prior to being productive. There needs to be a greater focus on the skills sets we are equipping graduates with, rather than just the knowledge to pass technical exams, for example digital literacy or the ability to work across disciplines. In addition to this, for innovative and high growth markets, the pace of change in knowledge cannot be supported by post-18 education as presently structured. It would be far better therefore to emphasise core skills of complex problem solving than to try and predict specific matched knowledge.

Business needs to look out to a 5-to-10-year horizon and try to predict skills demand, not knowledge. Engagement for the short term with post-18 education is often too late and education therefore cannot react in sensible timescales for business innovation.

These problems are best tackled at a local level with regional oversight. At a national level a consistent, well-thought-out strategic plan is essential, not only to be developed, but to be sustained over a long period of time.

Skills in shortest supply are education professionals in STEM areas, problem solvers, engineers and technicians. This shortage is especially pronounced in women and people from socially disadvantaged groups, who are very underrepresented in engineering and STEM more broadly.

12. How far does the post-18 education system deliver the advanced technical skills the economy needs? How can Government ensure there is world-class provision of technical education across the country?

At this time, the post-18 education system does not deliver the advanced technical skills that the economy needs in the quantity or quality that is required. Our present graduate pool requires a secondary large investment to make them work-ready. The model of engagement of sponsoring employers, where employers take on undergraduates and expose them to work throughout their course overcomes most of this and gives the undergraduate skills and experience that a traditional engagement by the student with post-18 education does not.

It is not entirely the fault of post-18 education however, as the system needs the right quality and quantity of raw material. The problem starts in primary education. There are many societial factors in the number of students undertaking STEM programmes and the number of girls being retained in STEM following GCSEs. The Government has to help develop solutions to several problems, and these include: the image of engineering careers; parental support for an engineering career; the number, quality and experience of teaching professionals at all levels; the provision of information to business; a heat map and gap analysis of skills nationally, regionally and locally; the expense of a four-year technical degree; the pathways between universities and employment within industry, and incentivising the retention of skills within the country.
We also need to incentivise a culture of lifelong learning among engineers. With the current pace of change in industry, it will not be enough to only teach this in universities; engineers must commit to continuing their professional developments and keeping up with the advanced technical skills required by the economy.