Institute of Physics submission to the Department for Education consultation on the implementation of T level programmes

8 February 2018

1. Do you agree that the principles outlined above are the right ones on which to base a review of which level 3 qualifications we should continue to fund in the new system, alongside T levels and A levels?
   Yes/No. If no, what other principles do you think we should consider?

   Yes.

   The principles as listed are sound.

   The intentions behind principles two and three, that qualifications should be of “good quality” and support “progression to good outcomes” are difficult to disagree with. The assessment of both however will be where the challenges may lie. The definition of “progression to good outcomes” must take account of both the specific aims of the courses, and the local and regional opportunities available to students and not presuppose a preferred route through either academic or technical education or even a specific employment route.

   Principle one, that qualifications have a “distinct purpose” and are “truly necessary”, is open to wide and subjective interpretation and we would recommend further clarification of this.

   While the aim of the T levels reform is to provide a simplified and accessible structure to qualifications, they exist in a complex educational, training and employment environment, and whether or not a qualification is “truly necessary” will have a strong dependence on any number of these factors.

2. Do you agree that we should review qualifications at level 2 and below based on the principles that these qualifications should support progression into employment or higher level study and have a value in their own right alongside T levels?
   Yes/No. If no, what other principles do you think we should consider.

   Yes.

   The introduction of T levels will require a review of the role of level 2 qualifications. They should remain a viable route for those students that are not able to engage with T levels.

   The review should ensure that level 2 qualifications are, as much as they can be, compatible with students moving to T level and apprenticeship routes.

   This review should only apply at post-16 level; all students should have a common route through the sciences up to and including GCSE level.

3. Do you agree with the proposed approach to assessing technical qualifications?
   Yes/No. – Please give reasons for your response.

   No.
It is incongruous to imply that the rigour of a technical qualification is dependent on an externally verified written exam. While the assessment of the core content of T level is clearly an essential part of the qualification, it is not clear why this must be done through an exam and cannot instead be done through practical means. We would welcome further information on the approach taken.

Given the stated requirements for T level achievement to include level 2 qualifications in maths and English, it is not clear how re-assessing these core employability skills adds value to the qualification and may instead create barriers for provision owing to increased teaching load and excessive burden for the student. A solution should be found to avoid this double assessment.

It is sensible to refer to the Occupational Standards being developed for apprenticeships within the assessment of T levels; there should be as much common ground as is appropriate between T levels and apprenticeships. This should also form part of the review of level 2 qualifications.

4. Question 4. Do you agree with the approach to grading technical qualification components?
Yes/No – Please give reasons for your response.

Yes.

While the grading system will be new to employers, this should not distract from the value of grades or pass/fail mark applied to individual competencies. The more granular the grading, the better the understanding of an employer of the specific practical and technical skills of the student.

Technical competencies should be assessed as pass/fail – as the student will either have or not have the competencies – while keeping a consistent grading structure for other elements.

The roll out of T levels should be accompanied by a comprehensive communications campaign aimed at employers. This should aim to ensure that they are fully aware of the meanings of the qualifications and how they can tailor their own hiring practices and develop their training programmes and apprenticeship options for recruits that have come through the T level routes.

6. Do you agree that prior attainment of the core could count if students switch to another T level within the same route?
Yes/No – Please give reasons for your response.

Yes.

It is sensible to provide a route for students who have achieved in one subject to another without the need for a repeated assessment on similar content both for core content and non-core content, if the content can indeed be shown to be similar.

It is clear that there will be more overlap between some streams than in others, and it may be that there will need to be a framework or badging for different concepts and achievements within each route to allow students and assessors to understand whether or not students have demonstrated achievements on similar content on different pathways.

Consideration should also be given to opportunities to move between relevant A-level courses and T levels, particularly on whether achievements in core content can be understood in terms of A-level curricula.
11. How can we support students to access work placements relevant to their course in areas where there are no employers to offer work placements nearby?

Employers within the science and engineering sectors in the UK are not evenly distributed geographically, often clustering around universities or transport links. And they do not map well onto large population centres. While providers of relevant T levels will likely be found in clusters around such employers, they will not all be (and perhaps should not all be), and so there will be a number of students required to travel to access placements. Additionally, it may be that for reasons of capacity there will not be local placement opportunities even for those students at providers who are clustered around relevant employers. As such, overall there will likely be a large number of students that will need to travel significant distances, some requiring overnight accommodation to attend work placements.

There must be an additional source of financial support available to students to attend work placements if it can be demonstrated that unreasonable cost will be incurred; there cannot be a system which requires students suffer financially for a compulsory element of their qualification.

Students requiring overnight accommodation for work placements should also be able to access logistical and pastoral support. A significant proportion will likely be under 18 years old and so will require further support.

The aim should be to reduce the requirement to travel for placements to a minimum. Placement provision should be monitored, and a programme to engage local employers and to incentivise placement opportunities in low-take up areas should also be considered.

12. Do you agree with our suggested approach to providing students with financial support whilst on a work placement?

No.

The rationale for not paying students a wage to undertake work when those undertaking apprenticeships are paid is not clear, and may present a barrier to take up of the qualification.

22. How can T levels be designed in a way that enables students to progress onto apprenticeships?

The creation of T levels provides an opportunity to build a qualification that, by design, allows students to move onto apprenticeships with the minimum of disruptions. A central aspect of this will be the understanding of prior achievement – in some ways similar to the needs of moving from one core to an other – and how T level achievements can be interpolated into an apprenticeship, taking into account the probable differences in student experiences eg in time spent in the workplace.

Both FE providers and employers on the ‘trailblazer’ programme should be fully engaged in the development and implementation of T levels to support the transition between T levels and apprenticeships. This should also form a part of the review of level 2 qualifications.

23. How can T levels be built to provide a solid grounding for, and access to, higher levels of technical education?

For T levels to achieve their aims and to function properly in the existing technical education system, their design and implementation should accommodate the needs of those who recruit the students once they have achieved their qualification.
To accomplish this, the requirements of high technical education providers should be considered in the same way in which the requirements of employers have been incorporated into the design of T levels.

**About the Institute of Physics**

The Institute of Physics is a leading scientific membership society working to advance physics for the benefit of all. We have a worldwide membership ranging from those early in their career or in academic or technical training to those at the top of their fields in academia, business, education and government. Our purpose is to gather, inspire, guide, represent and celebrate all who share a passion for physics. And, in our role as a charity, we aim to ensure that physics delivers on its exceptional potential to benefit society. Alongside professional support for our members, we engage with policymakers and the public to increase awareness and understanding of the value that physics holds for all of us. Our subsidiary company, IOP Publishing, is a world leader in scientific communications, publishing journals, eBooks, magazines and websites globally.

**For more information, contact**

Alex Connor, head of policy (alex.connor@iop.org).