Science Council Submission to Advanced British Standard Consultation – March 2024

Q11. We propose several overarching aims and principles that should underpin the introduction and design of the Advanced British Standard. To what extent do you support these proposed aims and principles? If you have further views on this, please share below.

The Science Council cautiously welcomes the Department for Education plans to introduce the Advanced British Standard qualification framework and supports in principle, proposals to reform the existing English education system, as a step towards the baccalaureate model found in many other countries.

Many Science Council members and others in the sector have long advocated for a broader model for post-16 education, which combines academic and technical courses, providing young people with the range of skills they need to progress in their future careers.

The increasing importance placed on interdisciplinarity in higher education and the world of work, makes reform all the more necessary. To meet many skills challenges, STEM professionals need well-developed communication skills to support broad interdisciplinary collaboration and trustworthy innovation, while those progressing in humanities and social sciences need to understand statistics and quantitative data.

Q12 – What do you think is the most important thing that the Advanced British Standard could achieve?

The stated ambition of the proposed ABS is to provide a more level playing field, in terms of Post 18 destinations for young people. A Levels are recognised by employers, universities and training providers as the established academic route. Technical and vocational routes have seen significant change and rebranding over the same lifespan, but they are still not perceived as having the same value by the public. The ambition is that by replacing these with the ABS, both pathways will achieve better recognition and engagement, increasing access to more career opportunities. However, by creating two programmes, the standard ABS route and an 'occupational' programme, the ABS recreates the current division between academic and vocational pathways and undermines the potential to achieve parity between these routes. There is a risk that the occupational programme will be considered inferior in the same way as the existing vocational pathways sometimes are by students, parents, teachers, employers and universities. This weakens one of the main reasons for attempting this reform.

Q28 – If you have views on how we can encourage employers to offer industry placements and what further support education providers will require, please share below.

Through the experience of T Levels, industry placements, although rich in experience and applying knowledge for the learner, often also bring challenge in securing suitable placements. This risk can discourage education providers. We have direct evidence from Science T Level providers that a shortage of high-quality placements has a negative impact on student uptake and, already, several providers have withdrawn the provision of Science T Levels as a result.

Employers' understanding of how to offer safe and rewarding placements in science can be limited. Currently, the main barrier to expanding T Level Science is securing the engagement of local, accessible employers willing to take 16-year-olds into the workplace, which generates particular issues with liability insurance and safeguarding. Any development in the Education

system that places increased demands on the quantity and quality of industry placements, also needs to include significant investment in employer engagement and support. Industry needs to see the clear benefits of engaging with vocational pathways and providing suitable placements and understand how they can work with educational providers to deliver this. Local coordination of potential employers is needed, along with case studies of successful industry placements, demonstrating the benefits from the perspective of the employer and the learner. Employer involvement during the design of any new programme is imperative to maximise that engagement.

Q35. If you have further views on what students will study as part of the Advanced British Standard, or anything else covered in Chapter 2, please share below.

The Science Council has delivered the Technical Pathways project since 2020, with funding provided by the Gatsby Foundation. The overall purpose of the project is to raise the profile and prestige of science-based technical pathways, including apprenticeships and T Levels, and address the skills gap at technician level in UK scientific professions. The project does this by embedding professional registration requirements into technical education pathways, and supporting training providers, employers and professional bodies to deliver high quality technical education. The Science Council would welcome the opportunity to discuss with DfE the challenges facing technical education in Science, and the potential solutions that have emerged from our experience of working in this area.

Q43 – What strengths in the current approach to 16-19 education should we aim to preserve under the Advanced British Standard?

Through the existing T Level pathway, employer engagement continues to increase with providers and learners, and this is a key strength that needs to be maintained to meet the skills demands of industry. This needs to continue to be developed under the ABS Occupational route, as it has significant impacts on learner outcomes and the wider economy. However, the current growth in T levels could be vulnerable to reversal if people believe that the focus on the ABS proposals is lessening commitment to T levels. In science we have encountered stakeholders who have misunderstood the current consultation as a move away from T levels. It will be important to address this misunderstanding.

Q49 – If you have views on how students can be supported to make informed choices about their Advanced British Standard programme or apprenticeship – linking to their prior attainment, abilities, interests and future ambitions – please share below.

Young people often find the system today to be too complex to see their options clearly. For example it is difficult to understand the full range of pathways available, how these pathways compare and the opportunities for progression through and between them. The proposed ABS structure does not seem to be significantly less complex, with standard and occupational programmes, different possible major and minor options, and various transition programmes, all sitting alongside a diverse and growing apprenticeship landscape. It is good to see growth and increasing opportunity provided we help young people to navigate the options and make informed choices. The Science Council is strongly committed to equity, diversity and inclusion and we recognise that young people from disadvantaged backgrounds need more help and guidance but may be less likely to receive it. A focus should be given to improving the information, advice and guidance available to all young people, with an additional emphasis on reaching disadvantaged young people in effective ways.

Q52 – If you have views on how to ensure the Advanced British Standard provides effective pathways into post-18 education or study, please share below.

Currently, students who complete the Science T Level can't easily progress into apprenticeships. They are ineligible for the Level 3 Laboratory Technician on completion of their T Level, as the content is too near to the funded T Level provision. Employers are unwilling to employ those with just a Science T Level as a Level 5 Technician Scientist apprentice, as they value it less than a Level 3 Laboratory Technician apprenticeship, which incorporates 2 years of work experience. The ABS proposals do not address this feature of the vocational education landscape, which places T Level learners at a significant disadvantage. The ABS needs to develop a clearer link between Level 3 T Levels (or their ABS equivalent) and the apprenticeships route, with clear guidance for learners, providers and employers and funded programmes which provide effective transition between mostly classroom-based T Levels and mostly workplace-based apprenticeships, exploiting the benefits of both environments.

There will always be some people for whom part-time 16-19 education is essential: for example a proportion of young people living with disabilities. The current ABS proposals exclude part-time provision. The impact on some young people will be that they cannot participate in education effectively until they become old enough to participate in part-time provision at 18 or 19. It would be better to avoid two wasted years in the lives of young people who are already significantly disadvantaged.

Q58. If you have further views on anything else associated with the Advanced British Standard not covered in the questions throughout the consultation, please share below.

The Science Council is a membership organisation made up of over 30 professional bodies across a diverse range of science disciplines. As an umbrella organisation, the Science Council provides member bodies with a forum for collaboration and to amplify the collective voice of the science community.

The Science Council is developing its role as the collective voice of our diverse membership on issues of pan-scientific concern. By becoming a more visible, supportive, and influential presence across the sector, we serve as a conduit between the membership as a whole and policymakers. Using our convening power, we bring together Members to identify policy positions on which there is broad interest and consensus and communicate these to policymakers as a common view of the science community.

The Science Council is currently working with the Gatsby Charitable Foundation, science professional bodies across our member network, current and potential T level Science providers, and employers to generate better understanding, to help demonstrate how problems can be solved, to identify examples and good practice, and to promote peer support and innovation.

This submission has been informed by input from our member organisations and insights from the T level work. Some Science Council member organisations will be responding to the consultation or making representations on this topic and we would urge the Government to engage with them as the standard develops further.