

# THE ABS CONSULTATION

## Engineering UK Working Draft

### IMPORTANT THINGS TO NOTE:

- The document will be submitted through the DfE submission portal in plain text format.
- Please note that the word limit is 1,500 characters (not words!) per question. That's roughly 240 words.
- Unfortunately, we cannot attach this document to our consultation response. The system only allows us to respond to individual questions, which may be reviewed by various civil servants. In light of this, we have focused on the questions that are of most relevance and importance to the engineering sector, as discussed during the NEPC roundtable meeting.
- Regarding multiple-choice questions – such as agreeing with the principles (question mentioned below) – we will not answer those questions or if required to do so, respond don't know. We consulted a few of on this and there was agreement on this approach.

**58. 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.**

**Please limit your response to 1500 characters or less**

**1,492 characters**

The National Engineering Policy Centre (NEPC) provides impartial, expert engineering advice to inform UK policy. The NEPC is a partnership, led by the Royal Academy of Engineering, comprising 42 UK engineering organisations representing 450,000 engineers.

The NEPC welcomes the opportunity to respond to this consultation. Engineering and technology are vital for the UK's economic health and planned decarbonisation but face significant skills shortages, exacerbated by rising demand across sectors.

Our submission, compiled by EngineeringUK, draws on expertise from NEPC and the Engineering Professors' Council to address key consultation questions. It highlights priorities for Level 3 education system reforms in engineering and technology; our recommendations are data-driven and align with industry goals.

Our recommendations include:

- Prioritise enhancing existing A level and T Level pathways
- Conduct a thorough review of post-16 assessment
- Ensure that Level 3 education and training is structured and funded in a way that will address skills gaps and workforce shortages within a robust educational framework.
- Improve accessibility and encourage diversity within educational programmes to ensure equal opportunities for all students.
- Establish clear and straightforward pathways
- Expand curriculum requirements to include mathematics instruction up to the age of 18
- Emphasise the development of soft skills
- Incorporate real-world applications into the curriculum and contextualise with careers
- Enhance students' digital proficiency, including AI
- Promote sustainability and ethical practices
- Draw on international best practices
- Maintain BTECs and ensure alternative pathways remain available for students

## Chapter 1: The case for change

**Question 11. 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.**

1,486 characters

We cautiously welcome the proposed key aims and core principles in the consultation. The engineering sector needs more young people to join its workforce and for many more young people to leave education with the right knowledge and skills to progress to skilled employment, apprenticeships or further study in the areas of greatest workforce need.

Broadening the curriculum at Level 3 would be beneficial and ensure students are better equipped to adapt to the evolving needs of the engineering and technology sector. We are concerned that any form of mandatory maths to the age of 18 must be coupled with reforming the maths curriculum and the way the subject is taught, to ensure a diverse range of young people can meet the required standard. This reform is likely to be deliverable only with substantial investment in the education system and expansion of the maths teacher workforce.

We strongly advocate against changing the names of the qualifications offered at Level 3 and we support strengthening existing pathways. There is consensus among the Professional Engineering Institutions and engineering and technology companies on the importance of improving the current system and strengthening the A and T level routes rather than introducing a new qualification. Addressing teaching quality, curriculum relevance and breadth, as well as assessment and the ongoing teacher crisis is fundamental to future educational success. Yet constant changes in nomenclature can confuse employers, young people and parents, undermining recognition of the qualifications. Maintaining existing qualifications while focusing on substantive improvements ensures continuity and clear communication about the value and nature of these educational pathways.

**Question 12. What do you think is the most important thing that the Advanced British Standard could achieve?**

1,455 characters

Our approach to the proposed reforms is driven by the recognition of the critical role engineering and technology play in societal advancement, evident in the current and future workforce number within across the UK sector. With 6.2 million people employed in the sector and expected job growth in every region by 2030, demand is undeniable. A 55% increase in green engineering job adverts, emphasises the sector's pivotal role in tackling environmental challenges. Addressing the skills gap and improving diversity, particularly the notable underrepresentation of women (16.5%) in the workforce, is therefore vital and starts with engaging a greater diversity of young people throughout STEM education.

We would like educational reforms to make engineering and technology more inclusive, innovative, and aligned with global and UK strategic priorities. The focus is on diversifying entry paths into engineering, appealing to a broad range of talents, fostering continuous learning, and enhancing collaboration between academia, industry, and policymakers.

Level 3 reforms must focus on creating a system that:

- Addresses the skills gap and workforce shortages
- Enhances access and diversity
- Creates clear pathways to further and higher education
- Expands curriculum breadth
- Develops soft skills
- Integrates real-world application
- Enhances digital proficiency
- Focuses on sustainability and ethics
- Leverages international best practices
- Emphasises a holistic assessment approach

By emphasising these critical areas, reforms can significantly address the challenges facing engineering and technology, building a robust, innovative, and diverse workforce ready to tackle future demands.

## **Chapter 2: Design and structure**

**Section 1: Section 1 focuses on the Advanced British Standard programmes that students will study and what these will look like.**

**Question 14. We propose two main programmes at Level 3: Advanced British Standard and Advanced British Standard (occupational). Each will contain a range of separate components to support students. To what extent do you support the proposed design for the Level 3 Advanced British Standard programmes? If you have further views on this, please share below.**

1,341 characters

We acknowledge that the intent behind the proposed structure of the ABS is to create parity of esteem between academic and technical routes. However, we think that the proposed design of the Level 3 ABS program will not resolve this and instead continue the academic-technical dichotomy it aims to rectify. We suggest that efforts could be more effectively directed towards enhancing the existing educational structures, ensuring that both A Level and T Level pathways open up routes into further as well as higher education and provide young people with access to a broader curriculum including maths and English to 18. Our recommendation emphasises the need to focus on substantive improvements within the current system to truly foster a comprehensive and inclusive educational environment, which will in return lead to greater parity of esteem of the respective qualifications.

The emphasis on rebranding as part of the reform is also likely to lead to confusion among students, educators, and employers alike, potentially complicating the landscape rather than simplifying it. Engineering employers have told us that the proposal of a new qualification that will replace A Levels and the newly established T Levels makes them unlikely to invest in supporting T levels and wonder whether the work that they have started to put into providing industry placements for T Level students might be in vain. The sector also has concerns that the reforms could create a group of young people whose qualifications (T Levels) will become obsolete almost before they have been properly established.

**Question 15. We propose two main programmes at Level 2: transition and occupational. Each will contain a range of separate components to support students. To what extent do you support the proposed design for the Level 2 programmes? If you have further views on this, please share below.**

**Fully support Somewhat support Neither support nor oppose Somewhat oppose Fully oppose Don't know**  
**Please limit your response to 1500 characters or less**

***There is a limit of 1500 characters***

1,466 characters

We recognise that the introduction of transition and occupational pathways at Level 2 presents an opportunity to support students' learning journeys, ensuring they are equipped with both the foundational knowledge and the practical skills necessary for success in their chosen fields.

However, in maintaining a robust educational framework, the preservation of BTECs and apprenticeship routes is paramount. These pathways have historically played a significant role in providing accessible, practical, and industry-relevant education, crucial for fostering a skilled and adaptable workforce. They offer valuable alternatives to traditional academic routes, enabling learners to engage with real-world applications of their studies early in their educational careers. Such pathways are not only vital for student engagement and retention but also for meeting the specific skill needs of industries like engineering, where practical experience and technical competencies are as important as theoretical knowledge.

Furthermore, the inclusion of maths that is appropriate to the pathways within these Level 2 programmes is essential. Tailoring maths education to align with the specific demands of each pathway ensures that learners are proficient in mathematical concepts but also understand their application in practical, industry-specific contexts. This approach enhances the relevance of maths education, making it more engaging and accessible for students as well as more directly applicable to their future careers. It addresses the engineering sector's need for graduates who

are mathematically literate and capable of applying these skills in innovative ways to solve complex engineering problems.

**Section 2 focuses on the design of the component parts of the Advanced British Standard: majors; minors; employability, enrichment and pastoral (EEP) activities; and industry placements.**

**Question 21. Once rolled out, we anticipate that the Advanced British Standard qualification framework will supersede the varied Level 3 qualification landscape for 16–19 year-olds (including A levels and T Levels etc.). If you have further views on this, please share below.**

1,475 characters

We are concerned about the clarity of this new structure for students and employers, and the impact this reform will have on the delivery and buy-in from industry, parents and young people of the newly established T Levels over the coming years. The frequent changes in qualification names and structures risk further complicating the educational landscape, rather than simplifying it.

Moreover, the decision to phase out BTECs without providing a clearly enhanced alternative raises concerns about limiting accessible pathways into engineering and technical careers. BTECs have a successful history of enabling young people from a diverse range of backgrounds to access apprenticeships as well as other educational pathways. The Institute of Physics warn that the removal of funding from BTECs will exacerbate STEM skills shortages, raising concerns about the potential reduction in the coverage of physics at Level 3, disproportionately impacting those from under-represented groups.

In addition to these concerns, a soft progression approach to the ABS reforms could significantly enhance the impact of these changes, starting with prioritising the development of diverse mathematics and English programmes tailored to the needs of different learners. Drawing on learnings from AS levels, introducing major and minor A levels would also diversify subject choices, enabling students to explore interdisciplinary fields more broadly.

The emphasis of the reform efforts should, therefore, be on substantive improvements to the current educational structures and system – evolution not revolution - ensuring it is robustly aligned with the skills and competencies demanded by the engineering sector and broader technical fields.

**Question 22. To what extent do you support the proposal for how subjects will be selected to be included in the Level 3 Advanced British Standard programmes?**

1,488 characters

We propose that subjects within the Level 3 ABS programmes be organised into broader educational categories than current proposals. This strategy promotes a more integrated and comprehensive learning experience. Such categorisation not only mirrors the interdisciplinary nature of the modern workforce but also enhances students' adaptability and prepares them for a range of careers. This approach ensures ABS programmes can deliver a curriculum that is competitive, globally aligned, and capable of enriching students' educational experiences while preparing them for both local and international opportunities.

The recommendation for broader categorisation stems from insights gathered from various reports, including the "Engineering skills needs – now and into the future" and the "Net Zero Workforce" reports. These reports emphasise the importance of interdisciplinary skills and a diverse workforce in meeting future engineering challenges and achieving the UK's strategic and environmental objectives. Broad categories encourage a holistic understanding of subjects, fostering a culture of innovation and critical thinking essential for tackling complex global issues.

Furthermore, organising subjects into broader categories would facilitate a more inclusive approach to curriculum development, attracting a wider demographic of students and potentially addressing the notable underrepresentation in certain areas of the workforce. This method promotes diversity and inclusion, key drivers of innovation and creativity in the engineering sector. It also aligns with international educational standards, ensuring that students are well-equipped for the challenges and opportunities of a globalised job market.

**Question 26. If you have views on the appropriate size of subjects, including whether we should standardise associated hours, please share them below. We particularly welcome any evidence of guided learning hours delivered currently.**

1,483 characters

It's essential to consider a balanced approach that allows for both specialisation and broad-based learning. Engaging with relevant stakeholders, including educators, industry experts, and academia, to define curriculum content and size will ensure that programmes meet diverse needs effectively. This process should aim to establish a curriculum flexible enough to adapt to individual interests and career aspirations while maintaining a consistent framework for guided learning hours (GLH) to guarantee equitable access to educational resources. The integration of Majors and Minors, with clearly defined GLH, could provide a structured yet flexible framework, ensuring all students receive consistent and comprehensive instruction. This approach would support depth in specialised areas alongside breadth in general knowledge, preparing students for a range of future pathways.

But the size of the qualification is notably larger than what most students are currently able to handle, leading to questions about alternative options for those who find the comprehensive scope overwhelming. It appears that students who struggle with the extensive requirements might have to opt for Level 2 qualifications, despite having potential to excel at Level 3 if they had the opportunity to engage with a smaller selection of subjects. This scenario indicates a possible misunderstanding or lack of information about the flexibility within the qualification structure, including the feasibility of not completing the entire ABS. Moreover, the need for more teaching time is a concern, especially given current teacher shortages in key subjects, making it difficult to see how this requirement can be met with the number of teachers available.

**Question 27. If you have views or evidence on how time for employability, enrichment and pastoral (EEP) can best be used, please share below. We particularly welcome views and evidence about how to support students with additional challenges, e.g. lower prior attainment or the most disadvantaged.**

1,499 characters

We support the integration of EEP activities into the educational framework and see clear benefits in doing so. This time should be used to support those facing additional challenges such as lower prior attainment or coming from disadvantaged backgrounds, as well as to offer careers support and guidance to students. We propose a multi-faceted strategy prioritising career guidance, mentorship, real-world engagement, soft skills development, personalised career planning and environmental education.

Key components:

**Mentorship programmes and industry exposure**, bridging the gap between theoretical knowledge and practical application, ensuring the curriculum's relevance and student work-readiness.

**Soft skills and personalised support**, the backbone of a well-rounded educational experience.

**Ethics and environmental sustainability**, preparing students for the challenges of climate change and the burgeoning green economy through sustainability education and project-based learning focused on environmental solutions. This approach emphasises project-based learning centred on environmental solutions and inclusion.

We ask that consideration be given to incorporating aspects of the EEP concept into the curriculum. The inclusion of work readiness is vital for preparing students effectively for future careers and reducing their chances of becoming NEET. Enhancing resilience, adaptability, and technical skills prepares students to navigate job market uncertainties. Integrating EEP activities aims to make these initiatives more impactful, particularly those facing additional challenges, with a holistic education. This strategy supports individual growth and contributes to developing a skilled/adaptable workforce.

**Question 28. 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. Please limit your response to 1500 characters or less**

1,246 characters

Increasing the number of industry placements for those seeking to take T Levels, and potentially the occupational route of the proposed ABS in the future, will be vital. A report published in 2022 estimated that by the academic year 2024/25 we will need up to 43,500 industry placements for **engineering, design and digital T levels** alone. Addressing this shortage requires engaging a significant number of employers, including SMEs, to appreciate the value of these placements to their business and to the wider community, as a strategic approach to bridging skills gaps.

We recommend that government:

1. increases the number of hours that a placement can take place in a **simulated work environment**
2. explores how to **replicate/expand the digital apprenticeship service** to cover T Level placements
3. **addresses the transport barriers** for young people wanting to access industry placements
4. works with relevant partners in the engineering, manufacturing and technology to **make the most of existing T Level resources and develop templates that can be used across the sector**
5. develops **clear progression maps** for T Level students and employers
6. establishes a **high-level cross-departmental taskforce** chaired by DfE
7. promotes T Levels at every opportunity, highlighting the strategic role they have in addressing companies' critical skills shortages
8. **Financial incentives:** Reintroduce a £1,000 financial incentive for SMEs offering placements
9. **Awareness campaign**

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### Section 3 - Supporting students to develop maths and English knowledge and skills

**Question 30. To what extent do you support using the proposed knowledge and skills identified for maths and English to inform these components of the Advanced British Standard? If you have further views on this, please share below.**

**Fully support Somewhat support Neither support nor oppose Somewhat oppose Fully oppose Don't know**  
**Please limit your response to 1500 characters or less**

1,467 characters

To effectively develop students who have secured lower Level 2 passes in English and (in particular) maths at 16, it is crucial to adopt a strategy that promotes continuous learning and application. Our response to the Royal Society's consultation on the future of maths education highlights the importance of viewing maths as a continuous practice rather than a finite academic milestone. This perspective is essential for enabling more young people to be confident in maths, which is a fundamental component of engineering and technical disciplines.

The proposed integration of knowledge and skills for maths and English into the ABS should prioritise the development of practical, functional, and applied competencies in maths.

First, incorporating elements into the curriculum that encourage students to engage in continual maths practice is vital. This includes the introduction of well-designed maths games and access to established refresher resources, making maths more engaging and relevant to real-life situations. Such approaches help build confidence and competence in maths, particularly for students who may not have achieved high grades at GCSE level but are capable of progressing to Level 3 studies with the right support.

Additionally, creating tailored support programmes for students at this crucial juncture can bridge the gap between Level 2 and Level 3 study. This could involve targeted tutoring, peer mentoring, and the use of digital tools that adapt to individual learning needs. By making maths education more applicable to the engineering and technology sectors, we can better prepare students for the demands of these fields, ultimately supporting the UK's competitiveness in the global market.

Written by EPC

### Chapter 3: Discussion questions on assessment, awarding and grading

**Question 36. To what extent do you support these assessment principles? If you have further views on this, please share below.**

**Fully support Somewhat support Neither support nor oppose Somewhat oppose Fully oppose Don't know**  
**Please limit your response to 1500 characters or less**

1,404 characters

In evaluating the proposed assessment principles for the Advanced British Standard (ABS), we support a holistic approach that ensures the ABS's integrity, relevance, and effectiveness. This comprehensive perspective is crucial for the ABS to achieve its educational and professional objectives.

Key considerations

**Holistic assessment approach:** A holistic strategy is essential, aligning with the broader objective of nurturing continuous improvement and adaptability in education, **promote teaching and learning in ways that are of value to ongoing education and the workplace, rather than teaching to test.**

**Reducing assessment burden** is the key priority. However, it's crucial to balance this reduction with the need to maintain comprehensive evaluations of student learning.

**Beyond Exams:** A shift towards varied assessment methods is essential for a genuine reflection of skills and knowledge. This approach should include teacher assessment of practical skills.

**Diverse assessment models:** It is critical to support a wide range of assessment methods to better prepare students for higher education and their future careers.

**Teacher assessment of practical skills:** Revitalising teacher assessments of practical skills is crucial, especially due to their motivational benefits and the notable decrease in hands-on activities. It's essential to implement authentic, skill-focused evaluations that move away from rote learning and actively reward the development of practical skills.

**Evidence-based reform:** It is paramount that any reforms, including assessment changes, are built on a foundation of solid research and best practices.

**37. We have proposed principles to underpin the new grading system. To what extent do you support these grading principles? If you have further views on this, please share below.**

**Fully support Somewhat support Neither support nor oppose Somewhat oppose Fully oppose Don't know**  
**Please limit your response to 1500 characters or less**

1,362 characters

It is crucial to ensure the ABS grading system is both effective and equitable, as well as adaptive, innovative, and reflective of the diverse needs of learners.

Key considerations should include:

#### 1. National and international recognition and understanding

The paramount importance of ensuring that the ABS brand, along with the skills, knowledge, and application at each major and minor component, and at each grade level, is well understood both nationally and internationally cannot be overstated. This encompasses:

- Recognition across all four UK administrations
- Global recognition

#### 2. Addressing technical routes and policy imbalances



There's a significant gap in understanding technical education among stakeholders. The uneven implementation of reforms has disadvantaged quick-to-adapt institutions, especially those serving non-traditional learners, due to unfair funding and success metrics.

### 3. Scope of assessment

It is critical to define the appropriate scope of ABS assessments accurately. Specifically, it is advised that ABS assessments should not include level 2 work, as doing so would be both inappropriate and misleading. This delineation ensures that assessments remain relevant and accurately reflect the intended level of competency and knowledge.

By focusing on these three areas—recognition and understanding, addressing technical routes and policy imbalances, and accurately defining the scope of assessment—the ABS, or in effect any reformed Level 3 qualifications, could enhance its effectiveness and relevance in both national and international contexts.

**Question 39. Do you agree that students should receive some type of overall Advanced British Standard award? If yes, what value could an 'ABS award' add on top of individual component grades, particularly for higher education providers and/or employers?**

**Yes No Don't know**

**Please limit your response to 1500 characters or less**

1,360 characters

We advocate for the implementation of an overall ABS award in addition to individual subject grades. It's crucial to ensure that this award reflects the accumulation of smaller grades obtained in ABS minors and majors. Reflecting on its size and breadth, adopting a flexible approach to the ABS by not requiring completion of all components could enable students to showcase their achievements more effectively without being overwhelmed.

However, it's crucial to ensure that the ABS, while a commendable recognition of achievement, does not inadvertently become a de facto standard for higher education entry but also opens up vocational and technical pathways. Key considerations for the ABS award should include:

**Interpretable grading system** that is easily understood by higher education institutions, employers, and apprenticeship providers is essential.

**Module-based scoring and assessment methods** which will enable students with diverse strengths to showcase their specialities, particularly when lower overall scores might not reflect their proficiency in specific areas.

**Clarity and consistency in grading**

**Global perspectives** and international grading models offer valuable insights into effective assessment practices.

**Consistent policy frameworks** for ABS need to ensure that decisions on compulsory minors' passes and subject grading consistency are deliberated thoroughly.

**Alignment with educational goals** The ABS grading system must **align with broader educational objectives**, fostering student growth and preparing them for future academic and professional endeavours.

**Question 42. If you have further views on how students will be assessed and graded under these reforms, or anything else covered in Chapter 3, please share below.**

**Please limit your response to 1500 characters or less**

1,448 characters

With regards to HE specifically, it is essential to engage with universities and higher education (HE) institutions. This collaboration is vital to align the new grading system with the educational and vocational goals of students, ensuring a smooth transition from secondary education to higher education pathways. It addresses the broad spectrum of



student needs, emphasising the need to integrate HE insights into the ABS to facilitate clearer, more inclusive educational and career pathways. When considering assessment, it's necessary to consider:

**University involvement** in the development of ABS is crucial for ensuring the system meets HE entry requirements and supports student progression.

**HE pathways clarity:** Clarifying the pathways to HE within ABS is essential for guiding student choices and planning. By explicitly outlining how the ABS accommodates both occupational and theoretical aspirations, students can make informed decisions about their futures.

**Lessons from T Levels:** The design and implementation of T levels offer valuable lessons for ABS, particularly in ensuring HE progression pathways are built into the system from the start.

**Maths in T Levels:** The initiative to clarify the maths content within T levels for HE admissions exemplifies the type of detailed communication necessary between secondary and higher education sectors.

**Foundation years:** Recognising the potential mismatch between secondary education achievements and university expectations, foundation years play a pivotal role in bridging these gaps.

**Challenges in specialist subject offers:** HEIs might have to give very precise offers to progress in specialist subjects that might be hard to manage.

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Written by IMechE

#### Chapter 4: The implications of the Advanced British Standard for 16-19 education providers and workforce

##### Question 43 - What strengths in the current approach to 16-19 education should we aim to preserve under the Advanced British Standard?

1,449 characters

It's essential to focus on the proven benefits of BTECs. These qualifications have been instrumental in offering a reliable pathway to employment, significantly aiding many learners. Highlighted by the Engineering Professors' Council, BTECs serve as a vital mechanism for social mobility within the education landscape.

However, as the ABS aims to consolidate Level 3 qualifications, concerns arise regarding the clarity of this new structure for students, employers, and its potential impact on industry engagement and the acceptance of the newly established T Levels. Frequent changes in qualification names and structures risk complicating the educational landscape, challenging the intended simplification efforts. The phase-out of BTECs, without a clear and enhanced alternative, may restrict access to engineering and technical careers, potentially exacerbating the STEM skills shortages as warned by the Institute of Physics. This could particularly affect the coverage of subjects like physics at Level 3, impacting students from underrepresented groups disproportionately.

BTECs and apprenticeships have been cornerstone pathways, providing accessible, practical, and industry-relevant education. These alternatives to traditional academic routes are essential for sectors requiring a blend of practical experience and technical knowledge, like engineering. Their preservation is vital for maintaining a skilled, adaptable workforce. Educational reforms under the ABS should focus on maintaining robust pathways, like BTECs, that are aligned with industry needs and accessible to a wide range of learners and maintain the link between T level and occupational standards.

##### Question 44 - What opportunities and challenges do you see for the recruitment, retention and deployment of staff as a result of implementing the Advanced British Standard?

1,499 characters

The ABS brings opportunities and challenges in the education sector, in teacher recruitment, retention and deployment. Overcoming teacher shortages by focusing on immediate teacher shortage issues and establishing long-term strategies for teacher attraction and retention is key to the successful rollout of ABS. Integrating teacher feedback into the planning and execution of ABS strategies is crucial to enhance their effectiveness and mitigate unintended consequences.

## Opportunities

### 1. Enhancing teacher attraction and retention

- Increased bursaries for ITT make teaching more financially appealing
- Highlighting career development opportunities make teaching more attractive
- Provide STEM CPD it increases the odds of STEM teachers staying in the profession the following year by 160%

### 2. Strategic recruitment initiatives

- Forming partnerships with universities/ industries can help address the STEM teacher shortage.
- Utilising technology and redefining professional standards in teaching can offer new solutions.

## Challenges

- Teacher shortages in STEM subjects - only 54% of all STEM subject recruitment targets were met
- A comprehensive strategy that goes beyond financial incentives is needed to address deeper issues deterring individuals from entering teaching

### 2. Capacity for change

- A fully staffed and capable teaching workforce is essential for managing the transition to ABS.
- A flexible implementation schedule with clear progress markers is critical

## Mitigation Strategies

### 1. Reducing non-teaching pressures

- Hiring for non-teaching roles could significantly ease the workload on teachers

### 2. Engaging students effectively

- Developing methods to engage students in mandatory subjects can help manage classroom dynamics

## Question 45 - What staff training do you think may be required to implement the Advanced British Standard successfully?

1,425 characters

To ensure the ABS is implemented effectively, significant emphasis must be placed on staff training, particularly for those involved in technical education pathways. This requires comprehensive CPD tailored to meet the specific demands of the ABS curriculum, ensuring educators are not only adept in their subject areas but also proficient in the pedagogical strategies suited to technical education.

Drawing on findings from the Ofsted T-level report, it becomes evident that educators across different regions of the UK face varied challenges in delivering technical education, pointing to a need for a more unified and consistent training framework. These challenges underscore the importance of equipping teachers with the skills and knowledge to navigate the complexities of technical subjects and to adapt to the evolving educational landscape.

The government should consider initiatives for retraining educators to teach the 'applied' maths components within the ABS and on new assessment methodologies. Such an initiative would be particularly beneficial if it focuses on the practical application of mathematical concepts rather than on the concepts themselves.

Moreover, shifting the educational focus from purely transmitting knowledge to fostering lifelong learning skills could significantly benefit teachers and students alike. By adopting this approach, teaching would evolve into a role that emphasizes facilitating learning, encouraging a more interactive and engaging educational experience. This paradigm shift could not only enrich the learning environment but also mitigate some of the pressures currently faced by the teaching workforce.

**Question 46 - We are interested in the changes that may need to be made to deliver the Advanced British Standard for all students, regardless of where they live. What changes do you think may be required in the following areas:**

#### **Travel**

Insights from a recent report on T Levels by Engineering UK and Make UK emphasise the need for strategic adjustments in the provider landscape. Leveraging lessons from the rollout of T-levels, it's imperative to ensure all young people can access ABS subjects within a reasonable travel distance.

#### **Provider**

The emphasis must shift towards supporting the teaching workforce and school infrastructure to enable a uniform distribution of ABS courses. This requires a concerted effort to equip educators with the necessary tools and training to deliver high-quality, standardised instruction across all regions. Addressing teacher shortages, particularly in specialised subjects integral to the ABS curriculum, and providing ongoing professional development will be critical.

#### **Technology**

The strategic enhancement of infrastructure and the adoption of technology for remote learning, ensuring no student is left behind due to their location is also key.

**Question 47 - If you have further views on how the Advanced British Standard could impact 16-19 providers, or anything else covered in Chapter 4, please share below.**

1,410 characters

The implementation of the ABS is likely to significantly impact 16-19 education providers, especially in engineering and construction education. Insights from EngineeringUK's reports, including "Engineering skills needs – now and into the future" report and "Net Zero Workforce", highlight key areas of consideration:

1. **Curriculum relevance and update:** There's a critical need for curriculum reform to address the current and future skills demands of the workforce. The ABS reforms should ensure that the curriculum is aligned with industry needs, particularly emphasising green skills and sustainability across all subjects to prepare students for the evolving job market
2. **Access to quality education and training:** The reports emphasise the importance of equitable access to quality apprenticeships and technical education. Disparities in subject availability, especially in engineering and construction, must be addressed to ensure all students, regardless of regional location, have equal opportunities to progress.
3. **Support for Fundamental Skills:** The significance of English and maths in apprenticeships and technical education success is underscored. Tailored support structures are recommended to assist students in meeting these essential requirements, thereby enhancing their overall educational and vocational outcomes.
4. **Timetabling complexity:** in accommodating all majors and minors

By incorporating these insights, the ABS reforms can be more effectively tailored to meet the challenges faced by 16-19 providers, ensuring that students are well-prepared for their future careers in a rapidly changing global economy.

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**Chapter 5: Discussion on the implications of Advanced British Standard reforms for students and wider groups**

**Question 48. What changes to pre-16 education do you think will be needed to create effective pathways into the Advanced British Standard?**

**Please limit your response to 1500 characters or less**

1,235 characters

Aligning pre-16 education with the demands of the ABS requires a comprehensive transformation of the existing curriculum and educational strategies. To construct effective pathways into the ABS, a holistic approach that not only enhances STEM education but also fosters a broad and balanced curriculum is essential. Our suggested changes to pre-16 education include:

It is imperative for the government to undertake a comprehensive revision of the current educational accountability frameworks. This includes replacing the English Baccalaureate (EBacc) and Progress 8 measures to improve technical/ vocational subjects in school accountability measures.

Amplifying STEM education to include more practical applications and project-based learning is critical. This approach not only engages students with real-world challenges but also fosters a deeper understanding of STEM subjects.

Early and insightful careers advice plays a vital role in guiding students towards fulfilling educational and career trajectories.

Expanding access to educational offerings, such as triple science, ensures students have a robust foundation regardless of their future paths.

The success of educational reforms hinges on continuous assessment and adaptation.

Ensure young people understand and can access the post-16 qualifications that lead to further education, apprenticeships, or direct employment, facilitating a smooth transition into the ABS

**Question 49. If you have views on how students can be supported to make informed choices for their Advanced British Standard programme or apprenticeship – linking to their prior attainment, abilities, interests and future ambitions – please share below.**

**Please limit your response to 1500 characters or less**

1,209 characters

Students choosing Advanced British Standard (ABS) programmes or apprenticeships should be supported by a focused careers strategy. It is important that their choices are guided by their achievements, skills and interests as well as their goals. To ensure that they can make informed choices, they need to be equipped with the latest labour market insights and market needs to ensure their future employability and meet UK workforce needs. This is best achieved through a comprehensive careers guidance programme that:

**Understands individual needs:** a deep understanding of each student's motivations, challenges, prior attainment, abilities, interests, and future ambitions is essential.

**Integrates curriculum with real-world application** which can make learning more relevant and engaging.

**Provides comprehensive career guidance** helping students navigate their options.

Fosters a collaborative environment between educational institutions, industry partners, and local career hubs providing students with a broader, more holistic perspective on their future opportunities.

**Conclusion**

Implementing these strategies requires a concerted effort from educators, careers and industry professionals to provide a supportive framework that empowers students to make informed choices about their ABS programme or apprenticeship, aligning their education with their aspirations and the needs of the workforce.

**Question 51. If you have views or evidence on the additional support that may be needed to enable other groups of students to access the ABS. Please limit your response to 1500 characters or less**

1,179 characters

Key strategies for additional support include:

The ABS reforms must maintain diverse pathways, preserving the integrity and availability of qualifications like BTECs.

It's essential to appreciate different learners and experiences within the ABS framework.

Discussions have raised concerns about the potential scrapping of qualifications in favour ABS. A gradual, pilot-based approach to integrating ABS, considering its impact on reskilling, upskilling, and bridging the academic-occupational divide, is essential.

The ABS reforms should explicitly address the needs of special education students and other wider groups, ensuring they receive adequate support during transitions.

ABS programmes should be designed to cater to diverse interests, acknowledging gender differences in STEM subject preferences to promote inclusivity, considering how different groups of young people learn.

As we implement the ABS reforms, it's crucial to balance innovation with the preservation of educational diversity, acknowledging that ABS reforms are a part of a broader educational ecosystem. A careful, gradual approach, valuing diverse educational pathways and tailoring experiences to various learning styles, is essential to ensure the reforms are inclusive, accessible, and adaptable, ultimately fostering a fair and resilient educational system for future generations.

**Question 56. If you have views on the impacts (positive or negative) of the Advanced British Standard reforms on the environment, please share below.**

**Please limit your response to 1500 characters or less**

1,453 characters

Aligned to the DfE's climate change strategy, it is critical that any proposed educational reforms aim to enhance environmental stewardship by embedding sustainability and awareness across the curriculum, preparing students to address sustainability challenges.

Teach the Future's research reveals a notable lack of climate and ecological education in school curricula, underscoring the need to embed these topics as central elements across all subjects.

Sustainability must be integrated across all subjects in the ABS curriculum, enhancing environmental awareness through diverse educational content.

A unified approach to including sustainability across the curriculum is essential, not simply through a dedicated module on climate change and biodiversity loss.

Training and professional development for teachers must include sustainability topics, ensuring they are prepared to teach these crucial subjects.

Educational strategies that discuss solutions to climate change could help reduce eco-anxiety among students by empowering them with knowledge and action.

Linking sustainability education to careers, especially in engineering solutions of great need like wind farms, electric vehicles, and the great grid upgrade, aligns with Gatsby Benchmark no.4 and enhances career-oriented learning.

The reforms should aim to weave sustainability into education, enhancing curricula, educator support and student empowerment for environmental action. Crucially, the curriculum should not only educate students on the causes

of climate change but also actively equip them for pivotal future careers in engineering and technology through which they may develop solutions to address it.