Degree apprenticeships

Engineering Professors' Council Response to the Institute for Apprenticeships and Technical Education's proposed changes to degree apprenticeships

Change 1

The Institute to amend their mandatory qualifications policy to "recognise the currency of degrees", including where there are no specific subject discipline requirements for entry to an occupation. This means employers will be able to mandate degrees in apprenticeship standards at levels 6 and 7 where there is sufficient evidence that graduate status is a labour market requirement in the occupation. There will be no compulsion on employers to develop a degree apprenticeship if they do not want to (i.e. if they would prefer to develop an apprenticeship at level 6 or level 7 that does not lead to the award of a degree). This is different to the current approach, in which the Institute requires trailblazers to demonstrate that specific degrees in specific subjects are a prerequisite for occupational entry, prior to approving the creation of a new degree apprenticeship.

i. Do you agree or disagree with the proposal set out in 'Change 1'?

Agree.

ii. Do you agree or disagree with the proposed evidence base (as outlined in point 1 above) on which the Institute will evaluate whether an occupation is a graduate?

Neutral

We note that the process for finding graduate occupations and providing additional evidence will be further developed if the consultation feedback suggests this is an appropriate approach and look forward commenting when further information is available.

The EPC would welcome sight of the mapping of Standard Occupational Classification (SOC) two-digit occupations where there is a similar approved level 6 or level 7 standard in engineering.

iii. Is there any other evidence the Institute should consider in its evaluation of whether an occupation is a graduate occupation suitable for a degree apprenticeship? Please note if any suggestions made are specific to a sector or occupational route. [free text box]

Engineering UK has undertaken extensive work on mapping SOC codes to a sector-understood engineering footprint. This is part of the annual State of Engineering review. The Institute should familiarise itself and engage closely with this work in this regard. The EPC is happy to signpost further.

iv. Are there any reasons why you think this proposal will not achieve its intended objective?

Lost opportunities for parity of esteem

While we welcome the move to establish a clear brand and distinctive characteristics that employers, apprentices, their parents, and the rest of the education system can engage with and understand, we feel that the term 'degree apprenticeships' continues to have negative associations for some potential apprentices. We recommend that the Institute commissions research into attitudes to different terminology to support the Department for Education (DfE) to explore opportunities to introduce more aspirational terminology.

The currency of degree apprenticeship will only be truly realised if the measurement of the effectiveness of degree apprenticeships adopts an evidence-based approach. The Institute must clearly establish how it proposes to assess the quality of specific degree apprenticeship programmes, including the performance indicators and methodology that will be used. Apprentices should be treated no differently from other HE students, but metrics need to be presented in a way that recognises differences. Due consideration needs to be given to the potential impact on benchmarks for HEIs that provide a large number of apprenticeships. This includes apprentices participating in the National Student Survey (and future-TEF) in a way that does not penalise universities for students' assessment of their employee experience which is outside of our control.

Inadequate access, outreach and CIAG strategies

Degree apprenticeships are not currently explicitly considered as part of the OfS's strategy for wider access, participation and retention. Closer alignment of collaborative outreach strategies with the Government's Careers Strategy in terms of working with employers will deliver more effective outreach and working with schools will deliver outreach that encourages learners to find the pathways that suits them best.

Ways to ensure evidence-based, early-intervention outreach is well funded should be explored. The EPC believes that the appropriate promotion of apprenticeships is a reasonable component of the cost of providing them. Employers should be allowed to offset the cost of independent and impartial outreach work against a proportion of their Apprenticeship Levy in the same way as they can currently use 10% of the levy to employ subcontractors. In order to avoid this becoming a means to offset the employers' recruitment costs, only independent and impartial outreach should qualify.

Inadequate progression opportunities

All apprenticeships must support progression to be successful. Progression metrics that incentivise school management to support pathways into degree apprenticeships as equivalent to other forms of higher education are a crucial part of this.

Lack of funding for high-cost subjects.

If research demonstrates that the Standards fail to protect – and enhance – parity of esteem, then funding for high value (engineering) degree apprenticeships should be increased to avoid permanent damage to their reputation.

Change 2

Degrees within a degree apprenticeship should fully integrate with the on-the-job training and development that apprentices experience in the workplace. This objective will inform the ways in

which degree apprenticeships are developed by trailblazer groups, and we will also provide better guidance about how training providers, working with employers, are expected to integrate training delivered on- and off-the-job. This reflects good practice already delivered in many degree apprenticeships, and we would like to make this the norm.

v. Do you agree or disagree with the proposal set out in 'Change 2'?

Agree.

vi. Are there any reasons why you think this proposal will not achieve its intended objective?

Underestimating the role of the academic in the partnership

It is obvious that industrial work packages should represent consolidation of university work packages and vice versa. However, while this section discusses the importance of the HE provider in this context, the proposed change headline does not. If the Institute is acting as a regulator to ensure an optimal balance of needs is achieved, it has an obligation to adequately acknowledge the important and explicit role of HEIs in this process. There is a reason that the design of programmes in higher engineering skills has traditionally been the preserve of our universities; as academics, our expertise is in teaching and learning. In the honest desire to ensure the relevance of apprenticeships, we must not overlook what we have learnt about learning.

Underestimating the role of the learner in the partnership

The proposal's focus on employers appears to overlook the needs of the learner, which must bre recognised and prioritised. Learner centred approaches will support the right balance between employer needs and learner needs. If the employer / university partners don't look out of the learner s/he learner will look out for themselves. The EPC has seen evidence that learners complete the degree but not the EPA as a result of "finishing" the sponsored degree apprenticeship, seeking a new employer on the back of their degree attainment, and never completing the EPA, as it is not important to their new employer. This non-completion is not in the learners (or any of the other partners) best interests.

Employer dominated standards which train apprentices for a specific job, not a career in engineering

Degree apprenticeship Standards can be too narrow. This arises because the development of a Standard has been led by a small number of employers who base it on their experience of needs. Once a Standard has been established, competing Standards cannot be recognised. However, if the standard does not reflect the wider needs of employers and the apprentices' need for skills, knowledge and behaviours, then the standard blocks the space for a more widely appropriate standard. As a result, some Standards are likely to be underutilised even while the need for an apprenticeship in that area remains. The problem may be especially acute for SMEs, which account for at least 99% of the businesses in every main industry sector in the UK and 60% of all private sector employment in the UK. Their needs as employers – which differ significantly from those of large employers – may have been overlooked, as large employers have been dominant in Trailblazer groups. Ensuring that SME voices are heard in the development of degree apprenticeships is a real opportunity to ensure the sector will be inclined to engage in the delivery of apprenticeship.

vii. Are there any additional ways in which you think the objective to integrate on- and off the-job training can be achieved?

Structured collaboration

To ensure that the development of standards is a more open and ongoing evolution greater input from learning providers should be encouraged before and after the establishment of the standards. Employers and providers need to work together to design programmes around maximising opportunities for teaching contact.

Intrinsic to the relationship between employer and training provider should be a clear schedule of regular and frequent communication – beyond the written reports on apprentices' progress. The principles, channels and opportunities for communication between degree apprenticeship stakeholders should be mutually understood and integrated into guidelines and agreements. The Institute should extend the role of the relationship manager to developing best practice approaches to degree apprenticeships and creating support documentation.

There should be a continuing professional development plan for key staff in both the employer and the HEI to ensure they are suitably skilled to support the apprenticeship programme and they discover Group Training Associations and work with them.

The Institute should conduct systematic research to assess the take-up of existing support resources and whether there is a need to extend this to ensure there are clear and accessible guidelines and template agreements. This should take particular note of the needs of SMEs.

Learner-centred programmes with effective learner support

The learner should be front and central in the partnership. Best practice is the establishment of formal tripartite agreements which reflect learners' integral and valid role in the partnership.

Employers should ensure each apprentice has a mentor – other than their line manager – who can ensure the apprentice receives the academic support they need and is able to build up and record a portfolio of evidence useful to work towards CEng/IEng. In engineering, there is a longstanding and successful scheme for this, the Monitored Professional Development Scheme (MPDS), of which each major engineering PEI has its own. The MPDS already integrates education and workplace learning and the Institute should consider alignment with this model.

Employers need to consider representation of apprentices as a cohort in their organisation. For smaller employers and large employers employing small numbers of apprentices, it will be necessary to consider how to integrate apprentices into a community within their working environment and/or within their study environment.

Apprentices should be supported by employers and HEIs to develop reflection skills to monitor their own progress in terms of which skills they are developing and how. They should record their learning process and be able to present evidence of working towards achievement. recording evidence of professional development is also useful for an individual's professional review. A reflective portfolio, owned by apprentices, should be regular best practice – facilitating continuous assessment and feedback.

Review and continuous improvement

The Institute should conduct a review into the particular challenges for SMEs in the integrated delivery of degree apprenticeships – and ensure that SME voices are heard in their development and review.

The Institute should also conduct a continuous process of reviewing under-utilised Standards or those used by only a small number of employers. Where necessary, steps should be taken to ensure that, unless they serve a niche role, Standards have broad applicability to multiple employers. Apprenticeships should promote flexible employability skills and skills across different and ever-changing areas of engineering.

The Institute should give greater consideration to the quality assurance process for the non-HE part of the integration.

Available evidence of best practice

The Institute should develop a strategy for sharing best practice with all stakeholders.

Change 3

In support of change 2 the Institute will require that the learning outcomes of any degree mandated in an apprenticeship standard will reflect the requirements of the occupation through alignment with the knowledge, skills and behaviours in the employer-specified occupational standard. As with change 2, this is already good practice in some degree apprenticeships. This will require HEIs to develop and validate degrees specifically aligned to the apprenticeship standard, noting that this may already be the case for some regulated occupations.

KSB = knowledge, skills and behaviours.

viii. Do you agree or disagree with the proposal set out in 'Change 3'?

Agree.

ix. Are there any reasons why you think this proposal will not achieve its intended objective?

Mis-alignment with professional standards

This is welcome in principle. But, for this to be credible in engineering, Professional recognition should be built in to engineering degree apprenticeship Standards in so far as the employer-specified definition of competence in the occupation approved by the Institute in engineering MUST be based on and match the Engineering Council is UK-SPEC learning outcomes. The Engineering Council has also created standards using the same learning outcomes as AHEP, which specifically supports recognition of higher apprenticeships, the Approval and Accreditation of Qualifications and Apprenticeships (AAQA). The key differences from AHEP are that AAQA permits approval (desk-based recognition of programmes delivered by more than one provider with a single awarding organisation and that AAQA enables explicit recognition of programmes delivering competence as well as knowledge and understanding.

The Institute is in a position to ensure Standards always align with pathways towards professional recognition but has not yet delivered on this.

Inadequate resource for high-cost subjects, including engineering

From the perspective of higher education institutions, the levy-funded fee for an engineering degree apprenticeship is capped at £27,000 (which also has to cover the cost of the end point assessment), whereas the maximum fee level for a traditional engineering degree is currently £37,000 (assuming a four-year course), sometimes with a supplementary teaching grant (particularly for Chemical and

Materials Engineering). Commonly, the cost of teaching engineering degrees exceeds the direct funding available and the cost is cross-subsidised from other courses, higher fees from international students or research and other income.

This discrepancy means degree apprenticeships have to be delivered at a considerable cost saving compared to traditional degrees. It may be argued that savings should be possible because the workplace learning could potentially mean lower teaching intensity and assignments. However, degree apprenticeships also carry a high burden of communication and liaison and may require different teaching and learning approaches for students with different academic needs. Employers are also concerned that the levy-funded fee is not sufficient to train a degree apprentice, with the EEF estimating an engineering apprenticeship (not necessarily an engineering degree apprenticeship) costs £80-90,000 to offer and deliver.

Additional costs not absorbed by the employer

We note that HEIs will not be funded to deliver degrees as part of an apprenticeship that do not align to the apprenticeship standard, though an employer may choose to fund additional content at their own expense, if they choose to do so. *HEIs cannot afford to pay to "uplift" from Institute standards to AHEP standards. Accredited degrees.*

x. Are there any additional ways in which you think the objective to align the learning outcomes of the apprenticeship and degree can be secured?

Alignment with professional recognition

The Institute should ensure standards always align with pathways towards professional recognition.

It is not always clear if all stakeholders understand the difference between IFATE approval of an apprenticeship standard and PEI recognition (approval or accreditation) on behalf of the Engineering Council to allow a programme to be listed out our recognised course search database. Closer Institute collaboration with the Engineering Council would help to address this.

Adequate resource for high-cost subjects

To ensure HEIs have no incentive to deliver engineering degree apprenticeships 'on the cheap' by lowering standards and undermining parity of esteem, they must be adequately resourced. Short term catalyst funding, per capita levy funding increases, or employer subsidies are all ways to ensure engineering degree apprenticeships see a continued period of expansion.

Robust, accessible evidence base

The EPC has previously called for a body of research into the effectiveness of – and best practice for – degree apprenticeships to be developed centrally and we welcome the Institute's establishment of an evidence base on what works well, including what best practice looks like. However, we believe that for this proposal to achieve its intended objective, best practice should be more systematically evaluated and shared with HEIs and others involved in apprenticeship design and delivery.

In particular, independent research is needed to examine whether degree apprentices receive a learning experience comparable to traditional students, highlighting best practice in terms of achieving cost savings and identifying ineffective approaches as part of a growing body of evidence.

Apprentices should be supported by employers and HEIs to develop reflection skills to monitor their own progress in terms of which skills they are developing and how. They should record their learning

process and be able to present evidence of working towards achievement. recording evidence of professional development is also useful for an individual's professional review. A reflective portfolio, owned by apprentices, should be regular best practice – facilitating continuous assessment and feedback.

Modular approach

The Institute should consult with employers and training providers on how best to ensure degree apprenticeships adopt a modular approach. The Institute should consider whether a link between credits and training programme milestones should be included in all degree apprenticeship Standards, ensuring that the timelines of the two activities are aligned.

A modular approach to study would help attract more mid-career apprentices yet a fully 'hop-on-hop-off' approach is effectively precluded by the current framework for funding and by apprenticeship Standards. The Institute should review its policies to explore ways to introduce greater flexibility. The Institute should review its policies to explore ways to introduce greater flexibility and to enable the banking of units and AHEP learning outcomes and UK-SPEC competences.

Change 4

Changes 2 and 3 will ensure that achievement of a degree fully aligns with and supports the requirements of the apprenticeship standard to achieve occupational competence. As a result the Institute will approve degree apprenticeships only where the end-point assessment (EPA) of occupational competence in a degree apprenticeship will integrate with the final assessment of the degree. The objective is to ensure that neither the degree nor the apprenticeship are awarded in isolation from the other, with the EPA acting as a capstone for both.

xi. Do you agree or disagree with the proposal set out in 'Change 4'?

Agree.

xii. Are there any reasons why you think this proposal will not achieve its intended objective?

As currently conceived, an engineering degree apprenticeship has four discrete outputs:

- A degree, awarded by the HEI, which is usually accredited by one of the professional engineering institutions;
- An end-point assessment (EPA), assessed by a registered EPA organisation;
- Continuing employment, decided by the employer; and
- Evidence towards professional registration (with registration subject to individual candidates being assessed by a professional engineering institution professional review processes, which may in some instances be incorporated into the EPA and in other cases be completed at a later stage after completion of the apprenticeship).

These are all independent of each other, although interdependent, and it would be possible for an apprentice to pass or achieve some but not all of these outputs. This diversity of outputs, each subject to their own assessment criteria and process is confusing even to experts and baffling to most employers and apprentices, let alone parents, teachers, careers advisors across all ages and HR departments. The idea of promoting a broad appreciation of the benefits of a degree apprenticeship operating under such a framework is, at best, a challenge and, at worst, unworkable.

The EPC warmly welcomes plans to reduce this complexity, and to address the risks inherent with separating the EPA from the main scheme. However, we believe this needs to be coupled with:

Assured progression towards professional recognition

The consultation highlights that the EPA plan will need to be developed with the full participation of HEIs to design an assessment plan that meets the requirements of an apprenticeship and also the requirements of a degree award.

For an engineering degree apprenticeship it is inadequate to say that employers and HEIs may also wish to work with relevant professional bodies to achieve alignment between these and the assessments leading to professional recognition.

Assured progression towards professional recognition should be Standards requirement for all engineering degree apprenticeships. This is critically important, and achievable in engineering given alignment of Standards to UK-SPEC competences and the Engineering Council's higher apprenticeship recognition processes and standards. Approval and Accreditation of Qualifications and Apprenticeships (AAQA) fully supports recognition of higher apprenticeships (with or without degrees; at degree level this uses the same learning outcomes as AHEP.

HEI funding certainty

Unlike traditional degrees, which are funded upfront, degree apprenticeships carry a greater financial risk and uncertainty for HEIs, in part because 20% of funding can be held back if an apprentice does not complete their End Point Assessment.

Within this model, an EPA plan must be devised in a way which it will not be possible to pass either the degree or the apprenticeship in isolation from one another. However, the EPA component may be in addition to credits built up during the course of the degree. We are unclear how this would work and if this might be an additional financial burden on HEIs in an already well under-funded arena.

Employee protection

There should be obligations on employers to treat apprentices in the same way as any other employee on completion of their apprenticeship in terms of their rights to continued employment, subject to continuation of the need for the role (rather than regarding them as low-cost labour and replacing them when the apprenticeship is complete).

The Institute should consider how to ensure non-completion (for reasons other than failure) is not a dead-end for apprenticeships offer the apprentice. Credit transfer and modularity would be helpful, alongside a funding resource that apprentices can access in case of premature cancellation of an apprenticeship programme. Consideration should be given to what support might be needed by apprentices when their employer makes them redundant.

xiii. Are there any additional ways in which you think the objective to integrate the assessment of degree apprenticeships can be secured?

We have member evidence that up to 20% of degree apprentices leave their apprenticeship on completion of their degree; instead of sticking around for their EPA, they leave their sponsored employer for promotion. Empirically, this is common in civil engineering and surveying. This is costly to HE providers, as 20% of the funding is currently withheld until completion of the EPA.

Although this move would ensure that HEIs are paid (albeit adequately) for their degree provision, we note that some standards prohibit HEIs from conducting the EPA in house. Paying an external (in addition to the academics already employed) is a high cost and not desirable for some providers. For others, being required to become approved End Point Assessment organisations may be a disincentive to offering degree apprenticeships.

Alignment with professional recognition

In devising and reviewing standards, HEIs and employers should be mandated to work with relevant professional bodies to achieve alignment between these and the assessments leading to professional recognition.

Regulatory and professional bodies should give consideration to where in the sector additional professional registration assessors will come from and opportunities to streamline the process for degree apprentices who achieve their degrees and pass their End Point Assessments.

Raising awareness and supporting understanding

We hope that this change will partly address the complexity of messaging around degree apprenticeships but this must still be supported by a centralised approach to raising awareness among prospective apprentices, providing information about options, brokerage and establishing shared application platforms.

Change 5

The Instutite will require the integrated EPA of all degree apprenticeships to include assessment by trained individuals with appropriate occupational and industry expertise. All assessment panels for degree apprenticeships will be required to have at least one independent individual with appropriate industry and occupational expertise to ensure EPA is fair and robust. In line with existing good practice in many HEIs, this will assist with securing the occupational specificity of assessment by addressing the conflicts inherent in integrated degree apprenticeship assessment and drawing in an occupational perspective.

xiv. Do you agree or disagree with the proposal set out in 'Change 5'?

Agree

xv. Are there any reasons why you think this proposal will not achieve its intended objective?

Quality assurance

Who assesses the assessor? Who is checking the EPA? The employer should not be the arbitrator of own standards of assessment.

The EPC endorses the possibility of OfSTED assessing HEIs as part of the existing accreditation process.

Lack of resource

The technically competent person marking the EPA will need assessor training, who will be responsible for this?

The Institute must ensure that there is significant expert input from professional engineering institutions in the setting of Standards. Regulatory and professional bodies should give consideration to where in the sector additional professional registration assessors will come from.

HEI led EPA may be unworkable as academics would need to be an expert in each standard.

xvi. Are there any requirements that the Institute should lay out for the appointment of independent assessors with occupational expertise?

The EPA setter cannot also be the assurance group, parties should be permitted to do one or the other.

There should also be significant expert input from professional engineering institutions in the setting of Standards.

In engineering, they should also be qualified Chartered engineers.

xvii. Do you have any concerns or foresee any problems with the timeline as set out?

We are concerned and unclear about when these changes will be applied to existing degree apprenticeship standards.

We note that the Institute is also undertaking a review of the other, non-degree, qualifications used in apprenticeships, and expects to engage with stakeholders on the mandatory qualifications policy review later this year. The EPC would urge the Institute, in its work with the DfE to review its approach to the use of other qualifications in apprenticeships, to align lower-level qualifications in engineering, ensuring they are suitable for progression purposes.

xviii. Do you believe the proposed arrangements (any or all) would have a positive impact on particular groups of apprentices?

Yes

xix. If you have answered 'yes' to question 1 above, please explain your reasoning.

Engineering and Manufacturing has by far the most non-integrated degrees. This means that the degree is achieved prior to the end point assessment being undertaken by the apprentice, introducing the significant risk of duplicating assessment. A reduction in diminishing apprentices' incentive to complete their end-point assessment of occupational competence should have a positive impact on the engineering pipeline as take-up of degree apprenticeships accelerates, and a positive financial implication for HEIs (who risk 20% of the fees if the EPA is not completed).

xx. Do you believe the proposed arrangements (any or all) would have a negative impact on particular groups of apprentices?

Yes

xxi. If you have answered 'yes' to question 3 above, please explain your reasoning.

There is a risk that existing (or completed) level 6 and 7 apprentices may be placed at a disadvantage compared to their labour market peers if they are left without the parity of esteem and labour market currency that the degree holds.

Engineering and Manufacturing has double the number of non-regulated degree apprenticeships than any other sector / discipline meaning that the policy change will affect Engineering more than other subjects.

We note that access to degree apprenticeships is correlated to socio-economic status and social capital (in engineering, degree apprenticeships are likely to have a family background in engineering).

We would urge the Institute to conduct research into the non-completion trends of degree apprentices with particular reference to the demographics of apprentices.

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