Engineering Professors COUNCIL

The voice of engineering academics

EXPERIENCE ENHANCED

Improving engineering degree apprenticeships

Engineering Professors' Council (EPC)

- Represents UK academic engineers
  - 83 university engineering faculties as members
  - Over 7,000 academic staff
  - All branches of engineering

- Primary purpose
  - To provide an influential voice and authoritative conduit through which engineering departments' interests can be represented
  - Key audiences include funders, influencers, employers, professional bodies and Government.
  - Board led, supported by small Executive

Degree apprenticeships

- Created to widen access to the professions and develop the higher level technical skills needed by industry and businesses
- Offer an option intended to provide a different way of learning, combining:
  - The academic learning normally associated with higher education, with
  - The experiential learning of the workplace
- In 2016-17, there were 1,745 degree apprenticeship starts
  - 1,655 in England (96%)
  - 840 in STEM subjects (48%)
  - 230 in Engineering (13%)

Experience enhanced

- Landmark policy report
- Focus on improving engineering degree apprenticeships
- Outcome of two-year project assessing policy and practice around degree apprenticeships including:
  - Development of green paper discussion document
  - Academics and influencers discussion events
  - Launch of EPC apprenticeships toolkit

Essence of report

- Degree apprenticeships = potential game changer
- Calls for changes to deliver this potential
- Promotes a new breed of 'supergrads'
- Highlights over 50 recommendations

Four areas covered

- Ensuring best possible learning experience and outcomes for apprentices

- The need for closer collaboration between employers and learning providers

- The importance of building recognition as a professional engineer into the pathways of apprenticeships

- The financial sustainability of degree apprenticeships

RECOMMENDATIONS INCLUDE

Addressing messaging

- Complexity of system is "a barrier"
- Appear far too complicated for most people to get their head around easily
  - Learners
  - Influencers
  - Employers (particularly SMEs)
- Government must urgently address complexity of messaging

Improving branding

- Term 'degree apprenticeships' may have negative associations
  - linked in perception to something less than traditional degrees, rather than an enhanced experience

- DfE explores opportunities to introduce more aspirational terminology

- IfA commissions urgent research into attitudes to different terminology

Employer-led, not employer-dominated

- Government has been keen to ensure degree apprenticeships are employer-led

- Intention to ensure they meet employers' needs

- However, can become employer-dominated – failing to meet apprentices' wider goals

- Needs of SMEs may have been overlooked

- IfA must ensure that development of Standards is more open and an ongoing evolution, allowing greater input from learning providers

Resourcing from Levy

- Resources needed:
  - To develop high quality apprenticeships
  - To promote them
  - To improve careers advice
- Estimated £1.28bn unspent funds
- Government relax rules around Apprenticeship Levy to facilitate spend on
  - Developing high-quality apprenticeships,
  - Promoting them
  - Improving careers advice

Modular approach

- Fully hop-on-hop-off approach precluded by current framework for funding and apprentice standards

- A modular approach to study would:
  - Help attract more mid-career apprentices
  - Ensure non-completion (for reasons other than failure) is not a dead-end

- IfA review its policies to explore ways to introduce greater flexibility

Engagement and belonging

- Evidence suggests educational gain is optimised through engagement
- Degree apprenticeships must provide the apprentice with a positive learning experience and outcomes
- The sector must rise to the challenge of developing a sense among apprentices that they 'belong' to a community:
  - Their employer
  - Their academic institution
  - Their fellow apprentices
- Degree apprenticeships explicitly considered as part of OfS strategy for wider access, participation and retention

Realising the opportunity

- Degree apprenticeships are the one level of apprenticeship where the numbers are rising not falling

- As engineers, we work most effectively when we work together to design effective solutions

- We hope this paper starts a process of discussion and action

Key recommendation for employers

- The fact that degree apprenticeships are employer led must not create an incentive to train apprentices simply for a specific job, but rather for a career

Employers should

- Consider representation of apprentices in their organisation

- Ensure each apprentice has a mentor

- Be allowed to offset the cost of independent and impartial outreach work against a proportion of their Levy

- Look for opportunities for degree apprentices to act as ambassadors or mentors

- Recruit on the basis of a demonstrable potential to succeed in the academic environment as well as the workplace and

- Work closely with learning providers to understand how such potential may be assessed

Learning providers should

- Provide opportunities for additional support in areas, such as maths and study skills, without which some apprentices will struggle.

- Be able to include their apprentices in the National Student Survey

Both should

- Develop industrial work packages which represent consolidation of university work packages and vice versa.

- Promote degree apprenticeships as not simply equal to a degree, but providing more than a degree, combining knowledge and understanding with workplace knowledge and competences.

- Design programmes around maximising opportunities for teaching contact

Both should

- Mutually understand and integrate into guidelines and agreements the principles, channels and opportunities for communication between degree apprenticeship stakeholders

- Share a clear schedule of regular and frequent communication – beyond the written reports on apprentices' progress.

- Consider adopting a modular approach.

Both should

- Share 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 the apprentices themselves.

- Support apprentices to develop reflection skills to monitor their own progress in terms of which skills they are developing and how.

- Support a reflective portfolio, owned by apprentices, as well as continuous assessment and feedback.

Report influence and reach so far

- High profile launch at Royal Academy of Engineering
- Responses from
  - Dr Hayaatun Sillem (Chief Executive, Royal Academy of Engineering)
  - Sir Gerry Berragan (Chief Executive, Institute for Apprenticeships)
  - Keith Smith (Apprenticeships Director, Education and Skills Funding Agency)
- Twitter debate
- Media coverage in the Times and FE Weekly
- Follow up meetings ongoing
- Further work with RA Engineering underway

Thank you

- Experience enhanced
  - http://epc.ac.uk/experience-enhanced/
  - http://epc.ac.uk/wp-content/uploads/2018/09/Experience-enhanced.pdf
  - http://epc.ac.uk/creating-a-new-breed-of-supergrads/

- Stella Fowler s.fowler@epc.ac.uk
  - EPC Executive
  - Policy and Research lead
  - Co-author of report

- Questions?

Discussion and feedback points

- Do you think the new levy system is having a negative impact on the delivery of engineering apprenticeships? How so?

- What do you think are the effects of the new apprenticeships standards on the delivery and structure of apprenticeships?

- How have QA measures and End Point Assessments influenced the quality and readiness of apprentices?

- What are the impacts on apprenticeships to the devolved nations, if any?

- Do you think there are other challenges facing engineering apprenticeships?