

The voice of engineering academics

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We hit the policy nail on the head again with our Recruitment and Admissions Forum series at the end of 2021, bringing members extremely timely and expert responses to recent policy headlines including an overhaul of fair access and the commitment to lifelong learning. With additional debate on entry requirements, personal statements, the impact of Brexit and COVID on international student recruitment, employability, collaboration between employers and educators, and the diversification of university assessment. Our online format reached more of our members than ever and we thank all the participants and audience members for their contributions to three important and thought-provoking discussions. More below...

As 2021 drew to a close, we were also delighted to announce the results of the EPC's annual Engineering Enrolments Survey, with thanks to all of those who returned their enrolment numbers. Providing you a first look at the health of undergraduate and postgraduate enrolments across HE engineering, our findings offer insights into the impact of Brexit on EU enrolments, strengths in home undergraduate recruitment, and concerns over international engineering enrolments and non-first degree undergraduate recruitment. More detailed insights below...

Looking onward at 2022 now, the new EPC Crucible Project is hotting up – a new initiative to build better collaboration between academia and industry by creating a toolkit of shared ideas and best practice. It's all kicking off with a one-day conference next month. More below...

EPC news

RECRUITMENT AND ADMISSIONS FORUM SERIES: Doing it differently

With great thanks to all our chairs, provocateurs, panellists and audience members for making our Recruitment and Admissions forum webinar series at the end of last year a great success, with the online webinars together attracting over 100 attendees.

In the first session our panel discussed "getting in" to engineering courses with our provocateur, Prof Georgina Harris (Arden University) taking aim at social advantage, contextual offers, entry requirements and personal statements. The panel hotly debated these topics offering up thoughts on rejecting the need for maths and physics as entry requirements, that losing personal statements would be detrimental to some students and that high level UCAS points for entry to engineering courses should be removed.

The second, "getting out there" opened with a presentation by Steph Harris (UUKi) providing an overview of what could be done differently to attract international – and postgraduate – students in the light of Brexit and COVID. The expert panellists raised points on the need to focus on international student employability, to learn lessons from the pandemic, individualised application processes, bursaries and the importance of diversity throughout all aspects of education.

Finally, the third webinar looked at "getting on" and the world of lifelong learning, Martin Eason (University of Wolverhampton) provided a provocation in which he suggested education tends to keep taking individuals up a slope and then dropping them off without further support, with their futures defined by early life choices. The panellist contributed points on T-Levels, the complexity of the qualifications system, importance of collaboration between employers and educators and diversifying assessment systems.

If you missed any of these webinars, summaries can be found on Twitter via the hashtag <u>#EPCRAForum</u> and the recordings are available on the <u>EPC website</u>. Be sure to watch this space for further events on Recruitment and Admissions in 2022.

ENGINEERING ENROLMENTS SURVEY: 2021-2022

The EPC engineering enrolment survey gives you some clarity around the state of engineering HE enrolments. The survey gives us an early annual temperature check of the health of HE undergraduate and postgraduate engineering enrolments long before any official data does so.

Overall volumes and first-degree distributions are holding up at pre-pandemic levels, with postgraduates up compared to previous years. Engineering has strong home enrolments; however, as expected in the current climate, the numbers of EU enrolments has plummeted. Despite the survey confirming strong international numbers within the Russell Group (think postgraduates), international enrolments are in decline overall, a worrying picture in a sector hinting at international growth. The sector divide is alive and well, with non-Russell Group universities dominating with particularly strong home undergraduate enrolments.

Engineering subjects within IT, systems sciences and computer software engineering are the star climbers, perhaps related to the AI phenomenon? On the other end of the spectrum, Electronic, electrical and computer engineering numbers are in decline, excepting a healthy representation within foundation degrees and degree apprenticeships. Nevertheless, overall other undergraduate programmes are down by 20% in our survey. While this may be related to uncertainty over these programmes pending the Augar review conclusions, UCAS data released so far shows more interest than ever in apprenticeships.

If you wish to dive deeper into this year's outcomes, you can view the presentation recording from the third Recruitment and Admission forum webinar here or read a blog post about the findings on our website.

THE CRUCIBLE PROJECT

The Crucible Project is the EPC's new initiative to build stronger collaborations between engineering academia and industry. We are delighted to announce that we received nearly 50 applications to present case studies exploring one or more of the Crucible Projects five main areas in which collaboration takes place:

- Universities' and businesses' shared role in regional development
- Collaborating with industry for teaching and learning
- Knowledge exchange
- Research
- Graduate employability and recruitment

These case studies will form the basis of the Crucible Project toolkit. Some will also be presented at the EPC's online event on 16th February 2022 (see the upcoming events section below). We wish to thank everyone who took the time and effort to submit a case study and we are currently contacting all applicants about the next steps.

CONSULTATION RESPONSES: quality reviews in Wales

The Higher Education Funding Council for Wales (HEFCW) consulted on aligning external quality review cycles for higher education with requirements in Scotland and Northern Ireland. The EPC has submitted a representative response through the Engineering Education, Employability and Skills Committee, following an opinion-gathering exercise with Welsh members who are broadly supportive of the proposals.

CONSULTATION RESPONSES: campaign to retain BTECs

The EPC responded to the All Party Parliamentary Group for Youth Employment call for evidence highlighting that BTECs are a widely respected and vital pathway into the engineering profession and that the removal of these qualifications will reduce both the number and diversity of those entering the engineering profession. In particular, the removal of engineering BTEC and vocational qualifications at level 3 would disproportionately affect students from lower socioeconomic backgrounds. Students who have vocational and technical qualifications, and progress on to higher education are more likely than their peers to have come from lower socioeconomic backgrounds.

We also expressed concerns over the speed and scale of technical education reforms and the practical implications surrounding the delivery of the T-Level programme. Chief among these concerns is the viability of the 45-day work placement, the regional availability of engineering and manufacturing T-Levels and the disappearance of applied general qualifications.

CONSULTATION RESPONSES: OfS strategy 2022-25

The EPC responded to the OfS call for views on its proposed strategy that will guide its activities as a regulator over the next three years. In our response, the EPC expressed serious concern that the strategy does not pay due regard to sector feedback. Highlighting that the OfS's measures of quality based on employment outcomes disregards that this factor is highly influenced by region, socioeconomic conditions and imbalances in recruitment practices based on gender, socioeconomic background etc. We reiterated that the OfS should use its power to encourage innovation in education rather than to incentivise homogenous approaches designed to deliver metric-satisfying outcomes. In particular, suggesting that this may encourage HE institutions to avoid selecting students that have circumstances which might hamper their employment outcomes.

The EPC recommended that the approach would benefit from a regional appraisal and nuance to prevent local brain drains and enforced geographic mobility as the OfS has not evidenced a sufficient grasp of how student factors, including widening participation and protected characteristics, influence and are influenced by different institutions, disciplines and regions.

Upcoming events

EPC ONLINE EVENT: Stackable credentials, February 2022 (date TBC)

The EPC will be holding a live webinar exploring an issue that is likely to dominate discussions for some time: the world of microcredentials, short courses and sub-degree courses. How will this affect engineering education and are universities ready to embrace the changes that the Lifelong Learning Entitlement will bring? We will have a panel of leading experts who are already at the forefront of delivery to help you understand what you need to know. Further details on this event and how to book will be circulated soon.

EPC ONLINE EVENT: The Crucible Project Online Event, 16th February 2022

Given the latest risk assessments, the EPC has decided to hold the Crucible Project's Industry-Academia one-day conference online. It will feature a diverse range of case studies of innovative and engaging collaborations between academics and industry. This conference will feed into a toolkit where members can access all these case studies via the EPC website and add their own. This will provide a living and growing resource to help you find research funding, place graduates in employment, create work-based learning and many other collaborations. Further details will be circulated shortly.

EPC EVENT: Congress 2022: A Better World, 7th to 9th June 2022, UWE Bristol

At last, our flagship event of the year – the EPC Annual Congress – will be returning as a face-to-face event in 2022.

Our two-year theme is A Better World, in which Congress will pick up on our webinar series in 2021, with a focus on ethics, sustainability and recovery. It will be held at UWE, Bristol, from 7th to 9th June 2022. It is not to be missed.

The line-up of speakers is yet to be announced, but it will include high-profile speakers and leading experts. As a teaser, however, we can reveal that they will include Dame Ottoline Leyser, CEO of UKRI, and Prof Steve West, President of Universities UK, and our Congress dinner will be served aboard that icon of engineering Brunel's SS Great Britain.

Simon Fanshawe OBE will be speaking about his book *The Power of Difference in which,* through personal stories, interviews and the latest research, he explores how greater diversity and inclusion achieves better results. More information on this book is available on the <u>Kogan Page Publishers</u> <u>website.</u>

Bookings via the <u>UWE store</u> are now open so be sure to secure your place soon.

In the news

COMPENSATION AND CONDONEMENT: no change in regulations

EPC has been lobbying the Engineering Council on their incoming changes to compensation and condonement rules, which have been subject to sustained criticism from some pockets of the EPC community. As a result, a small number of additions have been made to the guidance, primarily to give more clarification on why the policy has been introduced.

The updated documents, plus a new document summarising decisions from the review, and a new Q&A document have now been published <u>online</u>.

We recognise that not all our concerns have yet been addressed. The EPC Engineering Education, Employability and Skills Committee will review the impact once the outcomes are known and feed back to the Engineering Council in due course as necessary.

HORIZON FUNDING: Plan B

You may have noticed that the UK has now left the EU. As such, in order to join Horizon Europe, we must do so as an associated country (previously, the UK's access to Horizon 2020 came as part of the package of EU benefits). Due to the well-publicised delays in this process, the UK government has announced a financial safety net to ensure applicants receive their funding regardless of the outcome of the UK's attempts to associate; part of Plan B focuses on "short-term stability" for researchers.

The other priority of the Government's Plan B is a clear focus on supporting further international partnerships with partners in North America and the Indo-Pacific. But where does not buying into Horizon Europe leave the UK government's returns on its investment? The UK did rather well out of Horizon 2020; our funding outstripped investment, even before you take into account the "multiplier effect" that has previously accompanied UK research exports (see the earlier EPC blog on research funding).

While the opportunities to develop new partnerships with countries outside the European Union are desirable and welcome, the EPC is concerned at this turn of events, not least as these opportunities were not precluded by full Horizon membership. Our research (in partnership with with UCL's Centre or Engineering Education) on the experiences and perceptions of European (EU) engineering students and academic staff in UK universities shone a spotlight on the importance of the long history of collaboration and shared purpose with the UK's direct geographical neighbours to advancing excellence in engineering and engineering research. The research demonstrated that the readiest and most promising opportunities are in preserving and strengthening existing relationships, exploiting geographical proximity, to further research collaborations. We recommended that it would be inadvisable to develop new partnerships with countries outside the European Union at the expense of well-established relationships within closer reach of the UK.

You can find more information for UK Horizon applicants on the **UKRI** website.

ARIA FUNDING: blue sky research is go

The sun may be setting over Horizon, but we can hear the overtures of ARIA. The legislation to create the UK's new blue sky research funding agency has just past its final hurdles in Parliament. Now the new organisation needs to find a Chair, a Chief Executive, and a way to hand out £50 million in research funding in the next two months. This is the first phase of £800 million that the new agency is supposed to have spent by the end of this tax year. Time to brush off those oven-ready bids and prepare to click 'send'.

FAIR ACCESS AND PARTICIPATION: new guidance and consultation

Universities have been ordered back to the drawing board on access and participation with a rhetoric which rejects 'dumbing down' to get disadvantaged students through the door in favour of driving up education standards in schools and colleges through activities such as tutoring, summer schools and supporting curriculum development. Meanwhile, John Blake will be Chris Millward's successor as Director for Fair Access and Participation at the Office for Students (OfS). Blake is

"especially keen to see further development of partnerships between higher education providers and groups of schools".

We are promised a new consultation on access and participation plans after the new director gets established in his position, leaving plenty of time for OfS to consider details on Lifelong Learning entitlement and other Augar-related policies about which we are (still) awaiting further clarification.

ENGINEERING AND MANUFACTURING ROUTE REVIEW REPORT

The Institute for Apprenticeships & Technical Education has unveiled a new report outlining updates and improvements planned for over 50 engineering and manufacturing apprenticeships, based on employer-focused consultations. (You may recall EPC's concerns articulated through Experience Enhanced, that apprenticeships were at risk of becoming employer dominated, not just employer led.) The review recommends how to prepare for apprenticeships to be brought up to date and recommended 8 to be decommissioned. The updated route map is available here.

The following engineering jobs were identified as high priority for developing new apprenticeships, wider technical education and employer-designed occupation standards: chemical engineer, mechanical engineer, simulation & modelling engineer, safety engineer and engineering compliance manager.

The Institute also reports how employers are now able to partner with their new Green Apprenticeships Advisory Panel to explore how apprenticeships can help drive net zero carbon emissions and tackle climate change.

The full report can be accessed on IfATE's website.

FOUNDATION YEARS: a student writes

Oliver Price, who was until the beginning of the month, an intern with the EPC has written a touching, insightful and powerful blog post for the Higher Education Policy Institute on his experience as a Foundation Year student at the University of Manchester. This opportunity helped him get his life back on track after bereavement had interrupted his studies. The Augar Review proposed the defunding of Foundation Years, but Ollie's story shows that this unique provision helped him in a way that no alternative could have.

We are delighted to say Ollie gained a first in Chemical Engineering and has now found a full-time role in an engineering firm and, thanks to his Foundation Year, he is helping to stem the shortage of graduate engineers.

LIFELONG LEARNING: snack or stack?

EPC Chief Executive Johnny Rich has written <u>an opinion piece this week for Times Higher Education</u> about some of the problems that the new Lifelong Loan Entitlement may bring to coherent higher education. Learners may want to 'snack' on short courses in the hope of stacking them into a degree, but to recognise the integrity of such piecemeal qualifications will necessitate a new and sophisticated mechanism of credit transfer. Johnny proposes some solutions.

Consultations

EDUCATION SELECT COMMITTEE: the future of post-16 qualifications

The Education Select Committee has just closed their <u>call for evidence</u> regarding their inquiry into the effectiveness of post-16 qualifications such as BTECs and T-Levels in preparing young people for the world of work. This comes as the government plans a significant change to the post-16 landscape, with a focus on A levels and the new T Levels.

This provided an opportunity for the EPC to outline the challenges the Government's proposed changes to level 3 qualifications would bring, particularly in relation to BTEC qualifications. The inquiry appears to also have the benefits and disadvantages of a post-qualifications admission system in its sights. You can read the EPC's response here.

OFFICE FOR STUDENTS: student outcomes and teaching excellence

The Office for Students OfS has issued three consultations with detailed proposals on their approach to regulating quality and standards in higher education. They are described as a "crackdown on poor quality courses".

The consultations cover:

- a new approach to regulating student outcomes
- the Teaching Excellence Framework (TEF)
- an approach to constructing student outcomes and experience indicators.

You can <u>find out more about the consultations</u> and respond on <u>their website</u>. The deadline is March 17th. The EPC will be compiling a response on behalf of all our members and will be seeking your views, but suffice to say, we have profound concerns about the unintended consequences of these far-reaching proposals.





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