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The **Skills Research Digest** monitors recently published skills and labour market research relevant to the work of the Department for the Economy and to the strategic and policy issues that we face in Northern Ireland.

In each case, we provide a short summary of the key points and web links to the full article or report*. A full list of sources can be found at the end of the publication.

Highlights this quarter include:

- Higher education is very much in the research spotlight as policy and society's expectations drive major reform.
 - There is continuing analysis around the impact of tuition fees in England, including on applicant choice and the student experience.
 - There are a number of studies on the practice and implications of widening participation.
 - There is growing interest in the needs of students entering higher education with qualifications other than A levels.
- The impact of automation continues to exercise policymakers, as does the need to support both generalist and specialist digital skills so that everyone can benefit from the economic advantages of technological development.

* Links are correct at the time of publication, however it is likely that some will break over time. The list of sources has more general links, which should help the reader to track down the original report.

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16–19 EDUCATION

The Centre for Vocational Education Research published [*Entry Through the Narrow Door: The Costs of Just Failing High Stakes Exams*](#), looking at the impact of narrowly failing to achieve a grade C in English Language GCSE.

- Students of the same ability have significantly different educational trajectories depending on whether or not they just pass or fail this exam.
 - Just failing narrows the range of immediate opportunities in terms of the courses, institutions and quality of institution they can attend, and many marginal students do not recover from this.
- Students who just fail are 9 percentage points (ppt) less likely to have enrolled on a higher-level qualification by age 19; there is a similarly large effect on the probability of achieving a higher academic or vocational qualification.
- They are less likely to enter higher education (HE) by 19, are 4ppt more likely to drop out of education by age 18, and 2ppt more likely to be not in education, employment or training (NEET).

SCIENCE, TECHNOLOGY, ENGINEERING & MATHS (STEM)

The Institute of Labor Economics (IZA) published [*Marathon, Hurdling or Sprint? The Effects of Exam Scheduling on Academic Performance*](#), examining secondary school end-of-course exams in STEM and non-STEM subjects.

- Three channels are identified through which the scheduling of exams may affect performance:
 - The number of days between exams
 - The number of days since the first exam
 - The order of exams – how many have been taken before sitting an additional exam.
- There are substantially different scheduling effects between STEM and non-STEM subjects.
 - The later in the schedule a STEM exam is taken the higher the average performance, referred to as 'exam warm-up'; however a 'fatigue effect' impacts subsequent STEM exam performance.
 - For non-STEM subjects, an additional day between exams is associated with lower performance in subsequent exams.
 - Students of lower prior performance have lower fatigue effects and higher warm-up effects in STEM subjects compared to students of higher prior performance.
- Exam productivity in STEM courses increases with exam order, suggesting there is a positive learning effect associated with taking an additional exam.
 - Exam productivity in STEM increases faster for boys than for girls as they take additional exams.
- Low-cost changes in the exam schedule may have noticeable effects on student performance gaps.
 - Administrators aiming to improve student achievement should consider delaying important exams.
 - A movement of one place in the order of exams, particularly in STEM, has the equivalent benefit to raising teacher quality by roughly 10% of a standard deviation.
 - Manipulating the exam schedule may affect the gender gap in STEM-related performance.

EMPLOYABILITY & CAREERS

The UK Department for Work & Pensions (DWP) published [*Evaluation of the Jobcentre Plus Support for Schools programme*](#) (JCP Sfs), following its national rollout in England.

- Jobcentre Plus advisers provide careers advice to help schools engage 12–18 year-olds identified as being at risk of becoming NEET or who face potential disadvantage in the labour market (for example, due to their ethnicity or to a health/disability issue).
 - Provision is available at the request of schools, linked to local labour markets and designed to complement existing provision.
- Overall, the programme has been well received by schools and other stakeholders.

- It has engaged students from a wide range of schools and taken a flexible, school-led approach to provision that has allowed them to fill gaps relating to post-school pathways.
- Support for those at risk of becoming NEET was seen as particularly helpful, and not available elsewhere.
- Demand for the programme has been driven by: its flexibility; the perceived expertise and credibility of the advisers; the focus on non-academic pathways; the fact that it was free of charge.
 - There are questions regarding how it will continue to meet demand as awareness grows.
- Support covered activities including: skills workshops; local labour market information; employer visits; work experience placements; links to apprenticeship or traineeship opportunities.
 - More general support for larger groups of students of varying abilities helped meet schools' needs, but wasn't as effective for students; more targeted support over several sessions was limited in reach but perceived to have a greater effect.
- Stakeholders typically saw the overall landscape for careers provision to schools as a crowded space.
 - Different models of partnership working emerged, from the collaborative to the antagonistic.
 - They were more effective where one organisation took responsibility for coordinating provision, there was a clear differentiation between providers, and resources were actively combined.
- Employer involvement depended on the extent to which advisers had pre-existing business links.
 - The most common employer activities were school visits and limited work placements.
 - Occasionally, advisers were able to offer work placements that were better integrated with courses, or direct links to apprenticeship or traineeship opportunities, which were seen to be more effective interventions.

The Prince's Trust and the Macquarie Group published the ninth [Youth Index report](#), based on a survey of 2,194 UK 16–25 year-olds.

- The overall wellbeing index – which last year dropped to its lowest level since the first study in 2009 – has fallen again, from 70 to 69.
 - Scores for all areas are at their lowest to date, and no area saw an increase.
- 28% feel trapped in a cycle of jobs they don't want; 29% say they have to take whatever job they can, rather than focus on developing their career.
 - 73% think they could get a better job, but 59% feel they need opportunities to develop their skills first; 54% feel held back by lack of self-confidence.
 - 67% think they could do more with their career, but 29% think the biggest challenge is getting the right work experience.
- 44% feel there will be fewer job opportunities for their generation in the next three years; 59% are anxious about the unpredictable political climate; 39% don't feel in control of their lives (up 11ppt).
- Young women are more likely than young men to think: they put too much pressure on themselves (50% vs 34%); a lack of self-confidence holds them back (62% vs 46%); they aren't good enough in general (57% vs 41%).

Pearson published [Demand-Driven Education: Merging Work and Learning to Develop the Human Skills that Matter](#), building on its research into [The Future of Skills](#).

- We are on the cusp of a new wave of post-secondary education reform:
 - The first wave focused on access to HE, the second on improving academic success.
 - The third is 'demand-driven education', focused on ensuring graduates are job-ready, hireable, and have access to rewarding careers over their lifetimes.
- Demand-driven education:
 - adapts to learners' and employers' needs and responds to signals from society to ensure alignment between courses, qualifications and training
 - represents the convergence of the worlds of education and work, creating new intersections, pathways and routes for advancement
 - takes account of the emerging global economy – technology-infused, gig-oriented, industry-driven – and aims to ensure that new graduates and lifelong learners have the skills required to flourish.

- Moving from a traditional, linear route to employment, to a more dynamic network of pathways, will require individuals, industry and education systems to take a more active, collaborative role.
- Five recommendations for education systems:
 - Develop and measure the specific skills that will be most in demand, especially interpersonal skills and complex thinking.
 - Utilise dynamic and work-based pedagogy to grow learners' competencies, while preparing educators to embrace new forms of teaching and learning.
 - Respond to the needs of the labour market to ensure continuous alignment.
 - Create flexible and adaptive pathways for learners to rapidly convert learning to earning.
 - Support changes that make the education landscape function better, enabling traditional and alternative providers to participate in creating the future of education alongside industry.
- Five recommendations for industry:
 - Use digital solutions to map the skills of employees and prospective employees.
 - Support the expansion of work-based learning.
 - Collaborate with educators to share insight on skill gaps and validate education strategies.
 - Provide opportunities for employees to enhance their skills.
 - Commit to building equity, ensuring equal access to opportunities for job and skill seekers.
- Five recommendations for individuals include: understanding the skills and occupations most in demand to build a flexible, long-term career plan; thinking beyond degree programmes to build and demonstrate competency; and exploring new ways to finance lifelong learning.

The International Labour Organization (ILO) published [Guide on Measuring Decent Jobs for Youth: Monitoring, evaluation and learning in labour market programmes](#).

- The guide offers a comprehensive and accessible introduction to measuring results and assessing impact, practical applications in the youth employment field, and how evidence created via measurement strategies can lead to improved programming.
- It is in seven parts:
 - [Note 1](#): Diagnosing, planning and designing youth employment interventions
 - [Note 2](#): Concepts and definitions of employment indicators relevant for young people
 - [Note 3](#): Establishing a monitoring system
 - [Note 4](#): Enhancing youth programme learning through evaluation
 - [Note 5](#): Impact evaluation methods for youth employment interventions
 - [Note 6](#): A step-by-step guide to impact evaluation
 - [Note 7](#): Evidence uptake in policy formulation.

The Institutional Landscape

THE FURTHER EDUCATION & SKILLS SECTOR

Cedefop (European Centre for the Development of Vocational Training) updated its vocational education and training (VET) [statistical overviews](#) – a tool to help policymakers better understand and assess VET developments.

- 36 indicators have been selected to quantify key aspects of VET and lifelong learning.

[Country reports](#) are also available, providing an overview of all the indicators for the country in question; the UK report can be found [here](#).

HIGHER EDUCATION: APPLICANTS & STUDENTS

The University & College Union (UCU) published [Post-Qualifications Admissions \[PQA\]: How it works across the world](#).

- The report compares the organisation of the system in England, Wales and Northern Ireland to that in 29 countries.
 - It examines in depth four countries that are attempting to reform their admissions systems (France, Singapore, Australia and Austria), and it looks at admission reform in a number of other countries, including Japan, China, Finland and the Netherlands.
- PQA is the norm including in systems with over 1m students: of 29 countries surveyed, 21 apply to HE before final upper secondary exams, and eight after, but none relies on predicted grades.
 - Nine of the best-performing HE systems have PQA; four out of five are presently undertaking/considering HE admissions reform, for example to address issues caused by high pressure entrance exams.
- There is no evidence that PQA hampers equitable access.
- PQA makes admissions processes more transparent, helping to deal with complex multiple challenges, such as growing numbers of applications, more diverse backgrounds and an increasingly competitive graduate labour market.
- A new PQA system for England, Wales and Northern Ireland could be developed around a three-stage process:
 - Stage 1: a formalised and enhanced approach to choice making via a National HE Choice Week in July of Year 12.
 - Stage 2: earlier exams followed by an HE preparation week in June/July of Year 13, focusing on study skills, financial education and independent learning techniques.
 - Stage 3: repurposing the clearing phase as an advice phase to help students make decisions after they receive their results.

In Scotland students are usually aware of their Higher grades when they apply.

England's Department for Education published [TEF \[Teaching Excellence & Student Outcomes Framework\] and informing student choice: Subject-level classifications, and teaching quality and student outcome factors.](#)

- Apart from providing evidence to refine the design of the subject-level TEF, it also tested with applicants and students 20 factors relating to teaching quality and student outcomes, in order to determine their relative importance.
 - Applicants were asked to consider their importance when deciding where to study; students were asked to consider their importance in influencing the overall quality of their undergraduate experience.
- The two most important factors for both applicants and students were the likelihood of securing a graduate job, and potential exposure to employers, industry and workplaces.
 - 'Inspiring and engaging staff' was the third most important factor for applicants and the fourth for students; the latter considered that the qualification received at the end of the course was slightly more important.
 - The importance of earning potential was considerably higher for students than applicants.

Universities UK (UUK) published [Growth and Choice in University Admissions](#), exploring trends in student recruitment since 2010 – a period that saw the introduction of £9,000 tuition fees and the removal of student number controls in England.

- With the number of 18 year-olds in the population declining, universities are making more offers to a wider range of students.
 - Despite significant swings in acceptances at individual institutions, only a small number – notably in London, where competition for students is higher – have seen year-on-year decreases in their acceptances.
- Despite the increase in competition, students entering university are on average more qualified than in the past, while the range of average entry tariffs across the sector has narrowed slightly.
 - There has been a diversification in the range of qualifications accepted by universities, with increasing numbers of applicants accepted with vocational qualifications at all types of universities.
- Applicants now have more power to choose between institutions, and are increasingly using the full length of the admissions cycle, as well as using Clearing to change their choices.

- In response, universities are offering more places on courses later in the cycle, including in Clearing.
- The number of 18 year-olds will rise sharply in 2022, potentially leading to considerable increases in the number of undergraduates.

The data only relate to institutions in England.

England's new Office for Students (OfS) published [Richer data tells us more about students in higher education](#), analysis of the differences between students entering HE with A levels and BTECs. [NB webpage only]

- Of young, UK-domiciled entrants in 2016/17: 72% had three A levels; 19% three BTECs; 8% a combination of A levels and BTECs; 1% International Baccalaureates.
 - The largest group of A-level students was those entering with grades BBB while the largest group for BTECs had three Distinction*s (D*D*D*).
- 98% of students with A level A*A*A* are going to high tariff institutions, whereas only 21% of students with BTEC D*D*D* are going to the same institutions.
- Physical sciences (16%) and medicine and dentistry (15%) are the most popular subjects for students with A*A*A* at A level.
 - The most popular subjects for those with BTECs of any grade are biological sciences, business and administrative studies, and creative arts and design.
 - Subjects within social studies are the most popular for students with International Baccalaureates.
- At the end of the first year, only 1% of students with A*A*A* have dropped out, increasing to 6% for students with three A levels below CCD.
 - Students with D*D*D* at BTEC have a higher non-continuation rate than all groups with three A levels, with 10% of students no longer in HE after year one, increasing to 21% of students with MMM and below.
- 95% of students with A*A*A* gain a first or upper second class degree, compared with 71% of students with BTEC D*D*D*.
- The reasons behind these gaps are likely to be complex and multifaceted, and consideration needs to be given to how BTEC students' experiences pre-HE can be enhanced to better prepare them for higher-level study.
 - HE providers also need to ensure provision and support are inclusive and enable students from all backgrounds and with varied entry qualifications to achieve successful outcomes.

The University of Sheffield published [Finding Potential](#), which considers how a selective university can attract and retain high quality students with equivalent qualifications to A levels.

- Sheffield broadly reflects national trends in terms of a growth in new students with equivalent qualifications, and in terms of poorer degree outcomes for BTEC-only compared with A level only students.
 - The number of students holding a BTEC has increased over time as a percentage share of university applications.
 - Overall, between 2011 and 2016 a consistently higher percentage of students who entered with just A levels obtained a good degree; however, it is not clear whether this is due to differing ability, because students with equivalent qualifications are less understood or less recognised as a minority, or for other reasons.
- Given most students in most subjects in selective universities hold A levels, a danger exists that the different pedagogical experience of those students with equivalent qualifications is ignored or prior knowledge is assumed.
- Recommendations:
 - HE providers and schools/colleges should develop appropriate relationships, involving linking academic/teaching staff where possible.
 - HE providers and schools/colleges should work together to ensure accurate information about BTECs and other non-A level qualifications is disseminated widely within the provider; this will support 'myth-busting' and enable staff to make informed decisions about the appropriate match between prior qualifications and chosen HE courses.

- HE providers should support an inclusive teaching and learning environment and be aware of how negative preconceived views on equivalent qualifications may impact on students.
- HE providers should improve data capture for students with equivalent qualifications, and should ensure admissions criteria are clear and informative.
- HE providers should consider the transition activities they might undertake to support success for students with equivalent qualifications, who will have already met competitive criteria for entry.

BMJ Open published [What is the effect of secondary \(high\) schooling on subsequent medical school performance?](#) – a national, UK-based cohort study, which provides the first robust evidence on ‘grade discounting’.

- 11 or 12 applications are made for each place to study medicine in the UK, and entry requirements are high – at least AAA at A level.
- There is an over-representation of socioeconomically privileged individuals and most of the schools that provide medical students are selective.
 - Some medical schools offer ‘grade discounts’ to applicants from less well-performing schools, but evidence to guide such policies is lacking.
- Overall, those on medicine courses with lower A-level grades and from the worst-performing schools do at least as well as their peers, justifying the practice of grade discounting.

The Higher Education Policy Institute (HEPI) and Advance HE published the findings from their latest [Student Academic Experience Survey](#), based on responses from 14,000 UK undergraduates.

- 38% of students perceive their experience of HE to date as representing good value for money (vfm), up from 35% last year; 32% feel they have received poor value (-2ppt).
 - By domicile nation, the percentage who experience good vfm are: Scotland 60% (+4ppt); Wales 48% (+1ppt); Northern Ireland 36% (-6ppt); England 35% (+3ppt).
[NB Due to the baseline numbers the changes for Northern Ireland and Wales aren’t statistically significant.]
 - 40% of institutions awarded Gold in the TEF exercise were defined as good/very good vfm, compared with 33% of Silver institutions and 34% of Bronze.
 - Russell Group students remain the most positive at 42% (+3ppt); vfm ratings at pre-92 institutions are unchanged (37%) and for post-92 institutions have risen by 3ppt to 35%.
 - 62% of students on medicine and dentistry courses have received good vfm, compared with 28% on business and administrative studies.
- The top five reasons for rating good/very good vfm are: teaching quality (68%), course content (67%), course facilities (62%), career prospects (53%) and quality of campus (51%).
- The top five for poor/very poor vfm are: tuition fees (62%), teaching quality (45%), contact hours (44%), course content (37%) and cost of living (37%).
- If they had the chance to start again: 65% would make the same choice; 12% would choose the same course but a different institution; 8% would choose a different course at the same institution; 7% would change both course and institution; 5% would not enter HE.
 - Students studying subjects with relatively low workload are more likely to say they would have chosen another course; the exception is physical sciences, which has an above average workload and a high propensity of students who would change course.
- 63% of students say they have learnt a lot at university; 29% have learnt a little; 7% feel they have learnt little or not much.

These are just some of the highlights from a detailed report. The [underlying data](#) are also available.

HEPI published [How different is Oxbridge?](#) comparing the experience of 1,625 students at the Universities of Oxford and Cambridge with 18,354 at other Russell Group and 60,221 at all UK universities.

- The ‘key lesson for policymakers is... don’t get too obsessed about Oxbridge’ as they are ‘very different and exceptionally good’.
 - 59% of Oxbridge undergraduates are ‘very satisfied’ with their course (31% of students at other Russell Group institutions).

- 77% at Oxbridge see their course as providing good/very good value for money (compared to 46% of other Russell Group students).
- Oxbridge students work an average 43 hrs/week in term-time (12 hrs more than other Russell Group or all students).
- 96% of Oxbridge students have at least 1hr/week in classes with 0–5 others (36% of other Russell Group students).
- 42% of students at Oxbridge and overall have at least one class/week with over 100 others (59% of other Russell Group students).
- 82% of Oxbridge students receive feedback within one week (13% of other Russell Group students).
- 41% of Oxbridge students say their teachers use original or creative teaching methods a lot/quite a bit (45% of other Russell Group students, 52% of all UK students).

The 24 Russell Group universities include Queen's University Belfast.

IZA published [Smartphone Use and Academic Performance: Correlation or Causal Relationship?](#) a study of the impact of smartphone use on the exam scores of first-year students at two Belgian universities.

- A one-standard-deviation increase in daily smartphone use results in a decrease in average exam scores of about one point (out of 20).
 - Heavy smartphone use is both associated with, and a cause of, lower exam marks.
- The use of a smartphone may improve the efficiency of students' study activities by allowing them to continuously search for study-related information and by facilitating teamwork, however students mainly see smartphones as sources of entertainment, rather than as study tools.
- Policymakers should invest in information and awareness campaigns to highlight this trade-off.

The OfS published [The effect of postgraduate loans](#), offering new data on postgraduate entrants.

- The loans were introduced in 2016/17 and are worth up to £10,000 to assist with tuition fees and living costs.
- Entrant numbers for courses eligible for new masters' loans have increased, while those for non-eligible courses decreased.
 - Single-year transition rates straight from undergraduate degree to postgraduate study saw a similar increase.
- There have been larger increases for: students aged 25 and under; black students (up from 8% to 11% of entrants); disabled students (up from 12% to 15%); students in low participation areas.

Vitae, in partnership with the Institute for Employment Studies (IES) and the University of Ghent, published [Exploring wellbeing and mental health and associated support services for postgraduate researchers \(PGRs\)](#).

- The policies and provision of PGRs at ten UK higher education institutions (HEIs) were examined, plus the mental health risk factors, the challenges institutions face and the effectiveness of provision.
- The pressures facing PGRs and their experiences can be very different to undergraduates.
 - Possible causes of stress include difficulties in the supervisory relationship and financial concerns.
 - Particular cohorts might be at risk of developing poor mental health, such as those working in isolation, on fieldwork or remote campuses, and international PGRs who may struggle to adjust to a new culture, or face challenges with visas.
 - Provision of support needs to take this into account.
- Ten recommendations for UK Research & Innovation (UKRI) and HEIs relate to: changing the culture of high achievement and high workloads associated with postgraduate study; the role of supervisors and postgraduate tutors; provision of resource for student support services; the need to share practice.

The Centre for Global Higher Education (CGHE) published [EU students at UK universities: patterns & trends](#), outlining the potential impact of Brexit on the UK's international student body.

- Currently, Russell Group universities and universities located in London and Scotland are most attractive to EU students.
- After Brexit, EU students enrolling in the UK will most likely be treated as overseas students, meaning they will no longer benefit from the protection of EU law and the principle of non-discrimination between home and other EU nationals.
 - They will pay higher fees and will no longer be eligible for UK tuition loans.
 - The distribution of EU students in the UK is likely to become more uneven, with English universities outside large cities experiencing the biggest drop in EU student numbers.
- In Scotland, free tuition for non-UK EU students was extended by the Scottish Government to the 2019/20 academic year.
 - Universities in Edinburgh, Glasgow and Aberdeen compete with the top London universities, attracting more EU students than Oxbridge; the University of Aberdeen has the highest percentage of EU students of any university in the UK.
 - It is predicted that higher concentrations of EU students will relocate to Scotland after Brexit, although Scotland's tuition fee system beyond 2020 may change.
- By contrast, English universities outside London and Oxbridge, which already have lower proportions of EU students, are likely to become even less attractive post-Brexit.

Ulster University is 26th on the list of 30 universities with more than 5,000 students with the highest number of non-UK EU domiciled students – the only university outside England and Scotland to feature.

The UK Government's [white paper](#) on Brexit offers no clarity on this issue.

HIGHER EDUCATION: WIDENING PARTICIPATION

The OfS published [National Collaborative Outreach Programme \[NCOP\]: The first year, reporting on a widening participation programme it funds in England.](#)

- NCOP consortia are tasked with developing programmes of sustained and progressive outreach appropriate to the needs and aspirations of the young people living in their allocated target areas.
 - In 2017 NCOP consortia engaged with 52,878 13–18 year-olds in 1,234 schools; in 2018 the number is forecast to be 115,000 young people.
 - Enhanced collaboration between diverse partners – particularly further education (FE) colleges – is helping to generate fresh ideas and ensure a varied offer of experiences and opportunities for learners.
 - Consortia are offering activities such as master classes, mentoring, teacher professional development, parent/career engagement and community engagement; current undergraduates and recent graduates are important contributors as ambassadors and mentors.
 - Close engagement with schools and colleges has also been important, with some offered the opportunity to develop a bespoke programme, while others have been offered a more generic approach.

The report sets out who is involved in NCOP partnerships, the volume of learners and education providers engaged, and the impact of the relationships fostered. It includes case studies and insights from a range of NCOP consortia across England to show how these networks have been forged.

The National Union of Students (NUS) published [Class dismissed: Getting in and getting on in further and higher education](#), the report of its Poverty Commission.

- Key findings include:
 - Students from working-class backgrounds face a 'poverty premium', often paying higher costs in order to access post-16 education.
 - Working-class students are most likely to be employed in a job that requires more than the recommended 15 hours/week while studying.
 - Apprentice pay is inadequate – a significant proportion are paid less than the legal minimum wage; cost of childcare exceeds wages and many are not entitled to access additional support.
 - Rising costs of transport and cuts to bus services make it more difficult for working-class students.
 - Average student expenditure routinely exceeds the income available through student support, leaving many students without the means to pay for food or heating.

- Student halls routinely exceed what is affordable given the maintenance loan available to students.
- Students are currently missing out because the means-testing system for student loans has been frozen since 2008.
- Dropout rates are highest among working-class students, with a third of part-time students and 10.3% of black students leaving before their second year.
- The dominant culture of HE is middle class, and working-class students can be made to feel they do not belong, feeling disconnected or bullied.
- Recommendations include:
 - The introduction of a minimum living income for students across FE and HE and apprenticeships.
 - Reinstatement of the entitlement to grant funding across FE and HE, including maintenance grants for undergraduate students, Educational Maintenance Allowance for young FE students, and NHS bursaries at significantly improved rates.
 - Review of the operation of means-testing to ensure a fair funding system.
 - Learning providers should offer practical solutions such as deposit schemes or weekly payments to help lessen the burden of course costs or apprenticeship programmes.
 - Measures to ensure access to affordable accommodation for low-income students should form part of Access and Retention Agreements.
 - Universities and colleges should open their doors to part-time learners in other ways than through formal courses.

HEPI published [Benchmarking widening participation: How should we measure and report progress?](#)

- The UK's POLAR (Participation of Local Areas) system ranks wards according to their participation rates and divides them into five 'quintiles': quintile 1 areas have the lowest participation rates and quintile 5 the highest.
- A commonly used measure of equitable access to resources used in other fields is the Gini index or coefficient, which measures income distribution across a population: 0 represents complete equality (every resident has the same income); 1 represents perfect inequality (one resident earns all income).
- A chart of Gini index calculations on POLAR distribution for undergraduate admissions in 2016 shows the University of Hull to be the most 'equal' institution, and Cambridge to be the least equal.

The chart includes Northern Irish institutions.

HEPI and Brightside published [Reaching the parts of society universities have missed](#), a set of 35 short essays proposing priorities for England's new Director of Fair Access & Participation.

- Suggested priorities from a broad range of contributors include:
 - A Commissioner for Student Mental health
 - HE access for white working-class boys
 - A national programme for pupils in Years 5–11 to break cultural barriers to HE
 - A target for students with experience of being in care
 - A pilot connecting parents of first-generation students with parents of potential first-generation students
 - Reopen the debate on post-qualification admissions
 - Draw upon expertise in the FE sector
 - Put greater scrutiny on employers to ensure they are not just attracting students from a limited list of the least diverse institutions
 - Focus on the decline in part-time students.

IZA published [Does Ignorance of Economic Returns and Costs Explain the Educational Aspiration Gap? Evidence from Representative Survey Experiments](#) in Germany.

- As in many countries, in Germany there is a large gap in actual and aspired university enrolment by parents' educational background.

- In this survey, the share of the adult population that aspires for their children to go to university is 38ppt lower among those without a university degree than among those with a university degree.
- Those without a university degree are more likely to underestimate the returns and overestimate the costs of HE.
- Improving these informational asymmetries does not close the educational aspiration gap, as university graduates respond more strongly to the information provided by raising their educational aspirations, which widens the gap further.
- Consideration of the standard parameters of the traditional economic model of educational choices – returns, costs, time preferences and other relevant traits – does not seem to add to an understanding of the educational aspiration gap.
- There appears limited scope for policy interventions aimed at alleviating imperfect information to close the gap in educational aspirations.
 - Providing information on university returns and costs is not sufficient for aligning the aspirations of those with and without university backgrounds.

GRADUATES & GRADUATE EMPLOYMENT

Independent think-tank Reform published [A degree of uncertainty: An investigation into 'grade inflation' in universities](#).

- In the mid-1990s 7% of students were awarded a 'First'; this doubled to 13% between 1997 and 2009, and has doubled again to 26% since 2010.
 - The percentage of 2:1s has risen from 40% to 49% since 1995.
- Of those institutions with more than 1,000 students completing their degree last year, Imperial College London tops the list at 45% of their students being awarded a First, followed by the University of Surrey on 44%.
 - Bath Spa University and the University of Chichester jointly award the lowest proportion at 15%.
- There are now 40 institutions that award Firsts to at least 30% of their students; 54 institutions have seen their proportion of Firsts double or triple since 2010; seven institutions have seen their proportion of Firsts rise by over 20ppt since 2010.
- Around half of universities have changed their degree algorithm in the last five years 'to ensure that they do not disadvantage students in comparison with those in similar institutions'.
 - There are some concerns about how the algorithms treat borderline students, with accusations of universities 'massaging the figures'.
- There have been reports of academics being put under undue pressure to award higher classes of degree.
- The Quality Assurance Agency for Higher Education (QAA) assesses procedures for monitoring standards, but does not judge the standards themselves.
 - It is unclear how the OfS will prevent grade inflation when it must also promote competition and protect institutional autonomy.
- A single national assessment for each degree course, involving professional bodies and other similar organisations, would end grade inflation and improve consistency and comparability.

The UK Standing Committee for Quality Assessment – of which the OfS is a member – has asked Universities UK, GuildHE and the QAA to look at the comparability of degree standards and the complex issues around grade improvement and grade inflation. OfS will also be publishing further analysis later this year.

For just one of the many sector commentaries on the subject see [here](#).

England's Department for Education published [The relative labour market returns to different degrees](#) by the Institute for Fiscal Studies, for graduates from English HEIs, five years after graduation.

- Once different student characteristics have been controlled for, medicine and economics degrees have returns around 20% more than the average; business, computing and architecture degrees offer returns of 10%+ above the average.
 - Creative arts degrees – which enrol more than 10% of students – have returns around 15% below average.

- There is evidence that degrees have a different impact on different types of students:
 - Medicine, pharmacology and English have relatively higher returns for females than males; computer science is more beneficial for males.
 - Medicine and education have higher returns for students from lower socioeconomic backgrounds; economics and history have higher returns for students from higher socioeconomic backgrounds.
 - Social care and creative arts have a relatively higher return for students with lower levels of ability, as measured by their prior achievement.
- Once differences in student composition have been accounted for, traditionally high-status universities such as the Russell Group still provide the highest returns.
 - It is not clear whether this is due to the level of skills developed or the signalling value of having attended a prestigious university.
- Studying the same subject at a different institution can yield an earnings premium ranging from 100% above average to 40% below average.
- There is considerable variation in the impact of subjects on the probability of being in employment, although the differences don't correlate with earnings differentials.
 - Similarly there are variations in the impact of institution attended, but high-status universities have less impact than 'other' universities.

Caveats: earning cannot be used by themselves as a proxy for quality of provision; the findings reflect the past and may not reflect the returns gained in the future; individuals may experience different outcomes from the average; the findings don't reflect the non-monetary gains of HE.

Prospects Luminate published [What do Masters graduates do?](#) – an analysis of destinations of 41,000 UK-domiciled masters graduates in 2016, using data from the Higher Education Statistics Agency (HESA) Destinations of Leavers from HE (DLHE) survey; in 2015/16:

- 57% had studied full time; they were mainly under 30 when starting their degree, and typically started a masters within a year of finishing their first degree.
 - 59% were in full-time work six months after graduating; 13% were in part-time work; 3% were working and studying; 12% had gone on to further study; 7% were unemployed.
 - Full-time graduates enter a range of roles, often in business services, creative, engineering and legal or welfare jobs.
- Part-time leavers were usually over 30, with a significant proportion over 40; they had an employment history and took vocational qualifications with a strong continued professional development component.
 - 73% were in full-time work; 12% in part-time work; 4% working and studying; 3% in further study; 3% unemployed.
 - Part-time graduates often return to their employers – many in the public sector – either at a professional level or in a management role.
 - Health, education, government (both local and central) and research and development (R&D) are all common industries.
- A third of full-time and a quarter of part-time graduates started their career in London, although 57% of masters graduates working in London were already living there.
 - Part-time masters graduates were a little more evenly distributed around the UK, but were still more likely than their undergraduate counterparts to work in London.
 - Belfast is one of the cities that has a demand for masters qualifications, and 2.5% of full-time and 2.2% of part-time graduates were employed in Northern Ireland.

The data are also broken down by a number of subject groups.

Prospects Luminate published [Using Behaviour Change Theory to Enhance Employability](#), exploring whether 'nudge theory' can be used specifically to change student behaviour – research funded by the Higher Education Careers Service Unit (HECSU).

- In Study 1, graduates were sent an email containing many of the principles that were predicted to prompt graduates into signing up to the university's graduate support package; there was no increase in sign-up as a consequence of the intervention email.

- In Study 2, undergraduates, having recently studied on an employability module, were requested by email to complete an evaluation survey; they received the request either from a known tutor ('reciprocity') or from the careers centre (control condition).
 - Completion rates were higher from the group who received the 'tutor' compared to 'organisation' email.
 - Results from both studies combined suggest that the behavioural insight principle of reciprocity works best when based on a tangible partnership and is a key factor in nudging action.

The University of Aberdeen published [Summer Vacation Activities: An Investigation of Students' Attitudes, Experiences & Perceptions](#), a survey of 477 undergraduates, funded by HECSU.

- It looked at the range of summer activities undertaken, how to recognise, reward and support learning through these activities, and what impact they have on employability and personal development.
 - Students have a strong awareness of the employability enhancing value of their activities.
 - 31% undertook paid employment, 12% continued a term-time job; 14% had a paid internship/placement, 8% an unpaid internship; 7% volunteered; 12% travelled; 1% studied, 2% researched for a dissertation; 7% did not engage in any activity.
 - 44% completed their activities overseas; 28% sourced activities via family and friends.
- Employer networking sessions should be organised to help disadvantaged students access opportunities beyond their personal contacts.
- Universities should provide more structured reflection opportunities for students to analyse their wider learning and skills development, e.g. via a credit-bearing course/module.
 - Providing an accredited course would also help ensure students receive university recognition for their wider learning and achievements.
- Identify effective practice to help raise students' summer aspirations.
- Establish a longitudinal summer activities survey to help inform the strategic employability direction of universities.

Prospects Luminate published [Exploratory research into the impact the shortening of guidance appointments is having on practice](#), funded by HECSU.

- Guidance appointments have been made shorter to accommodate the increase in need and demand for services.
- Key findings include:
 - Students unequivocally value guidance, which provides them with an opportunity to discuss and shape sometimes difficult career decisions with someone independent.
 - They would value more time in guidance appointments – shorter appointments result in fewer benefits for students, particularly in terms of firming up their action plans.
 - Guidance practitioners feel that, with additional time, they could have met 'underlying needs' rather than merely the 'presenting issues'.
 - Students can have low or ill-defined expectations about what career guidance is; 'pre-contracting' work – through advance information, websites and raised national standards – could help students prepare for interviews to get the best from them.
 - The relationship between student loan debt and lifetime financial wellbeing is also negative: those with debt have lower levels of net worth, experience more financial distress, and have lower savings and retirement savings.
 - There is no consensus in the literature on the relationship between pursuing postgraduate studies and student loan debt; this relationship seems to vary extensively depending on students' demographic and background characteristics and institutional characteristics.

Universities UK International (UUKi) published [Gone International: mobility works](#), comparing attainment and employment outcomes of mobile and non-mobile first degree undergraduate students who graduated in 2014/15.

- The percentage of students who had a period of mobility during their studies increased from 5.4% in the 2013/14 graduating cohort, to 7.2%.

- About a third of mobile students were language students; however, at the specific subject level, the most common subject studied was clinical medicine.
- The lowest mobility rates are among those studying computer science, subjects allied to medicine and education.
- There is a correlation between outward mobility and improved academic and employment outcomes.
 - Graduates who were mobile during their degree were less likely to be unemployed (3.7% compared to 4.9%), and more likely to have earned a first or upper second class degree (80.1% compared to 73.6%) and be in further study (15% compared to 14%).
 - Those in work were more likely to be in a graduate-level job (76.4% compared to 69.9%) and earn 5% more than their non-mobile peers.
- The difference in outcomes between mobile and non-mobile students is particularly pronounced for disadvantaged and black and minority ethnic (BME) students, who are under-represented in mobility.
 - On average, graduates from more disadvantaged backgrounds who were mobile during their degree earned 6.1% more, and those in work were more likely to be in a graduate-level job (80.2% compared to 74.7%) than their non-mobile peers.
 - Black graduates who were mobile were 41% less likely to be unemployed (4.6% compared to 7.8%) than their non-mobile peers.
 - Asian graduates who were mobile earned on average 8% more and were 42% less likely to be unemployed (7.7% compared to 4.5%) than their non-mobile peers.

CGHE published [Graduate indebtedness: its perceived effects on behaviour and life choices – literature review](#).

- Cost-sharing policies, especially tuition fees and student loans, have fuelled the global expansion of HE and rising participation rates.
 - Yet, as student loan debt rises around the world, little is known about its long-term consequences for society as a whole, or for individuals' choices, behaviour and life events once they have left HE and later in life.
- Key findings include:
 - The relationship between student loan debt and career choices is mostly negative, in particular in terms of engaging in entrepreneurial ventures.
 - There is no consensus in the literature on the relationship between student loan debt and individuals' earnings.
 - Student loan debt is linked negatively to home ownership, including owning lower value properties; it is also likely to delay home ownership.
 - Family formation, including marriage and having children, is probably negatively related to student loan debt, but only for women.
 - Signs point to a negative association between student loan debt and health, especially mental health, during and after leaving HE.

Harper Adams University published [Factors influencing the choice of self-employment or starting a business as an initial graduate destination](#), the report of a project funded by HECSU.

- Surveys were carried out with 40 self-employed leavers and 112 employed leavers from the specialist HEI, which primarily offers courses related to the land-based sector.
- Self-employed leavers generally perceived themselves as more entrepreneurial than employed leavers; they also felt that as individuals they were more entrepreneurial than their businesses.
 - However, the respondents in both survey groups did not always have a consistent understanding or definition of enterprise and entrepreneurship.
- Individual traits that were significantly more true of self-employed than employed leavers were:
 - I have many business ideas I want to pursue
 - I like to manage my own workload
 - I like to be in control of my own time
 - I am self-confident.
- Individual traits that were significantly more true of employed than self-employed leavers were:

- Secure employment is important to me
- Financial security is important to me
- Professional success motivates me
- Professional success is important to me.
- Self-employed leavers were more likely to have encountered self-employment and/or entrepreneurship at university than employed leavers; no difference was found in the exposure of the two survey groups at school or college.
 - However, some employed leavers reported negative stereotypes or comments relating to self-employment.
- Respondents from both groups referred positively to a range of information and resources, including content incorporated into their course, information, advice and guidance from the university careers service, information from guest speakers and case studies, and some external resources.

HIGHER EDUCATION: TEACHING, RESEARCH & INSTITUTIONS

HEPI published [Change is coming: how universities can navigate through turbulent political times](#), a policy note based on a series of roundtable discussions with senior HE leaders.

- HEI leadership teams need to tread a careful path between unity and diversity to cope with change and ensure future success.
- On the one hand, this involves coming together to:
 - learn from each other's experiences in the global context
 - identify common challenges
 - develop appropriate fixes
 - present a collective voice in the sector against current political sentiment.
- On the other hand, this also involves enhancing the distinctiveness of HEIs to:
 - ensure they make a real difference on the ground in other parts of the world
 - ensure challenges specific to different institutions do not get lost in the general policy debate
 - develop appropriate strategies for success
 - get ahead in an environment of increased competition.
- This approach is what will help universities to overcome some of the biggest emerging policy challenges of our time, posed by the pressures of internationalisation, advancements in technology and domestic political developments.
- Universities ultimately have two obligations – ensure their own individual success, and preserve their part in a healthy, wider HE sector, complete with variety and choice, for generations to come.

Researchers at Moray House School of Education, University of Edinburgh, published two papers on future teaching trends in HE as part of a [Near Future Teaching](#) project.

- The project is looking at the key trends and influences likely to be shaping digital education in universities over the short to medium term.
- [Future Teaching trends: education and society](#) provides an overview of the 'global societal shifts likely to impact on education', including the following:
 - Global recruitment competition for international students and shifting UK and Western demographics
 - Lifelong learning and reskilling for an ageing population and diversification of provision with the growth in private universities
 - 'Unbundling' of HE (disaggregation into its component parts), disruption due to new degree and credit models, fast-tracks and MOOCs (massive open online courses)
 - The automation of teaching with potential efficiency gains
 - Lower lifetime earnings and widening participation
 - Greater public accountability and increasingly precarious employment in HE.

- [Future Teaching trends: science and technology](#) highlights the technological trends likely to have significant implications for the future of HE, including the following:
 - Datafication of society and education, from data-driven decision making, to learning analytics aiding prediction of student success, and the Internet of Things
 - Artificial intelligence, with intelligent tutoring systems and support for collaborative learning
 - Neuroscience and cognitive enhancement leading to new ways of teaching, educational neurotech, such as new brain-computer interfaces, and cognitive enhancement drugs
 - Virtual and augmented realities, from identity tourism to rich, risk-free simulations for high-level complex skills
 - New ways in which value is likely to be measured and exchanged, such as blockchain diminishing the reliance on institutional gatekeepers like universities, and distributed ledger technologies giving individuals greater control over the recording and transfer of their educational data.

The University of Edinburgh launched [EqualBITE: Gender equality in higher education](#), published by Sense Publishers.

- It explores 'the messy reality of efforts' to improve equality for staff and students, 'from salaries and promotion, to representation in the curriculum'.
- It includes articles, papers, practical advice and examples, and highlights difficult and complex areas.
- Themes include gender balancing the academy and career development, language and leadership.
- Ten recommendations include: closing the gap between policy and practice; taking a pragmatic, evidence-based approach to implementing equity; involving everyone to attain equity; and removing conscious and unconscious bias in learning and teaching.

The National Centre for Universities & Business (NCUB) published [State of the Relationship 2018](#), the annual report of UK-wide university and business collaboration; in Northern Ireland:

- Universities saw a decrease in industry income from knowledge exchange activities and a minimal change in graduate employment in innovative sectors compared to 2015.
 - There was a considerable fall in interactions with business of all sizes.
 - The average size of the deals with large businesses fell by 1.7% but increased by 71.4% with SMEs.
- The commercialisation efforts of Northern Irish universities decreased or stayed unchanged.
 - Licenses granted to businesses fell by over 50%.
 - Patents granted were down by 32.3%.

It includes a case study of a Knowledge Transfer Partnership between Ulster University and CDE Global on Immersive Virtual Reality in the mining industry.

WORKFORCE ISSUES

The Education & Training Foundation published [Training Needs in the Further Education Sector](#), analysis of those who work in post-16 education and training organisations in England.

- There is a strong training culture in the sector, with frequent and varied organisational and individual participation in training and development activity.
 - Participation does not meet all needs; there is scope and demand for additional training, particularly in leadership and management, maths and English, and use of digital and other new technologies for teaching and learning.
 - A substantial minority of staff believed that some of the training they undertook was not particularly productive – of little value to them or as 'tick box' training for their employers; this training may, however, be a statutory requirement.
- There is much interest in using technology in training by introducing or extending the use of online and other methods of distance learning and virtual learning environments.
- Key challenges for providers are the restriction on budgets and difficulty of releasing staff.
- Subject knowledge, leadership and management skills, and teaching and classroom competences remain the most frequent areas of demand.

- There is particular demand for training which leads to higher-level qualifications in education and training such as Postgraduate Certificate of Education (PGCE) or the Diplomas in Education and Training (DET).
- The main future training needs identified include: governance, leadership and management; mental health and wellbeing; digital skills; public policy, procedures and funding; and assessor expertise.

The Equality Challenge Unit, part of Advance HE, published [Research Insight – Migrant female academics in higher education](#) [login is required to access the full article].

- It examines the influence of non-UK nationality and ethnicity on migrant female academics' roles and positions in UK HE.
- There are specific barriers to career progression and promotion for BME female academics.
 - This is compounded by nationality for non-EU BME female staff.
- Institutions should address issues with contract levels for the above if they wish to retain non-UK staff.

The Workplace

APPRENTICESHIPS & TRAINEESHIPS

The OECD published [Apprenticeships in England, United Kingdom](#), comparing the current reforms with the experience and example of other countries.

- Few countries can match the energy and range of England's reform programme; however, international comparison suggests several ways in which the reforms might be adapted to achieve higher quality and better outcomes.
- The Government should seek an expansion of quality youth apprenticeships – in other countries such apprenticeships play a major role.
 - Youth apprenticeships should provide more general education, including for apprentices that already have Level 2 English and maths qualifications.
 - The eligibility of apprentices aged 16–19 for social benefits should also be re-appraised, recognising that the attractiveness of apprenticeships needs to be sustained.
- The key advantage of apprenticeships over other forms of vocational training is work-based learning; employer engagement should be encouraged by introducing clear standards for work-based learning, and investing in the training capacity of employers.
 - Regulations and standards should also ensure that apprentices are not used solely as unskilled labour – in England nearly one in five apprentices is paid below the legal minimum.
- Apprenticeship qualifications need to: be clearly articulated with associated technical qualifications; be sufficiently broad, and therefore few in number – well under 1,000; have clear arrangements to allow informally acquired skills to be certified through end-point assessments.
 - England's current plans for competition in the assessment market need to be reviewed, as they will make it very difficult to realise consistency in assessment standards.
- Low-skilled school leavers will need preparation and support – dropout is already a challenge, and, by international standards, teenagers in England have relatively weak basic skills.
 - England should further explore pre-apprenticeship and alternative apprenticeship programmes that effectively prepare young people for a full apprenticeship, equip them with basic and employability skills, and grant them workplace experience and career advice.
- The growth in degree apprenticeships is a positive development, but only if it restructures university degrees into quality apprenticeships with a substantial element of work-based learning, rather than just a part-time degree plus a job.
- Small employers play a big role in apprenticeship provision, and may need special support.

The Education Policy Institute (EPI) published [Apprenticeship training in England – a cost-effective model for firms?](#) examining the potential benefits of a Swiss-style apprenticeship model for ten occupations.

- The Swiss model includes longer training programmes and more 'off-the-job' training, and is recognised for creating an effective transition from school to the labour market.
 - Switzerland outperforms many European countries in the area of skills.
- Apprenticeships of longer duration would be likely to bring higher returns for employers and apprentices, due to productivity increases over the course of training – companies could benefit significantly from three-year apprenticeship programmes.
- Combined with a longer apprenticeships programme, the chances of a firm breaking even, or making gains at the end an apprenticeship are highest when apprentices are younger than 19 years.
- Large companies may be more likely than SMEs to experience net benefits from hiring apprentices, due to economies of scale and different salary structures; for sectors and areas with a high proportion of SMEs, additional policy interventions might be required to offset costs.
- Providing apprentices are on the minimum wage (£3.50), by the end of their training period a benefit for firms is generated in virtually all occupations.
 - In some of the occupations – bricklayers, electricians, and IT/software developers – employers can still see positive economic returns even after awarding higher pay.
 - However, higher wage scenarios are not financially sustainable for some occupations: car mechanics, commercial bank employees, cooks, retail cashiers and waiters.
- Retention after training is crucial for apprenticeships to be profitable for all employers long term.
- Recommendations for government include:
 - Focus on improving quality, potentially increasing productivity, making training programmes more attractive to firms, and improving wages and skills for apprentices.
 - Consider expanding apprenticeships for 16–18 year-olds, in line with other advanced economies.
 - Consider policies to support SMEs.

The Learning & Work Institute published [All change: Where next for apprenticeships? Ten essays on quality, access and the future](#) by leading experts.

- Essay themes include calls for:
 - half of young people going on to HE to be apprentices
 - part of the apprenticeship levy to be used to help prepare people for apprenticeships
 - urgent action to tackle the inequalities of access – applications from BME and Asian backgrounds are half as likely to succeed as those from white backgrounds, and women comprise only 600 of 17,500 engineering apprenticeships
 - an apprentice premium to better support under-represented groups.

England's Department for Education published [Exploring the funding and support for apprentices with additional support needs](#).

- Interviews with providers, employers and third party organisations explored how they define and identify support needs, the support they provide, the funding they access and the outcomes in terms of successful participation and completion.
- Support needs tend to fall into two broad categories:
 - Meeting the apprenticeship learning requirements for those with 'diagnosed' or 'undiagnosed' learning difficulties and disabilities (LDDs) and for those who simply need further support.
 - More general 'social and safeguarding' support to address factors such as financial hardship, insecure housing or lack of familial support; these might be encountered by people who aren't necessarily eligible for standard 'disadvantage' funding.
 - Mental health issues are also becoming more prevalent, and providers and employers don't always feel equipped to deal with them.
- Providers tend to take responsibility for identifying and assessing needs, although employers may also identify them when they affect in-work training or their ability to do the job; at that point, a line manager might become involved.
- While providers and employers encourage individuals to declare their needs, some don't due to fear of stigmatisation, or because they are themselves unaware of their LDDs.

- Learning support is generally seen as the role of the provider, although employers are open to making in-work adjustments and providing extra support.
- Providers use a range of approaches to supporting learning, such as: one-to-one assessments; paying for specialist assessments; using adaptive technologies; providing training for employers; and buddy systems.
- A range of social support options are used, e.g. additional tutoring or coaching; mentoring; counselling; financial support for travel, etc.; advice and guidance on money management; and providing equipment such as a laptop.
- While the funding discussed is England-specific, in general policy terms:
 - Wider definitions and greater flexibility are needed for support funding.
 - Funding and access to more specialist expertise are needed to support mental health conditions.

The Young Women’s Trust published [Equality at work? Positive action in gender segregated apprenticeships](#), with a focus on the construction, engineering and ICT sectors in England.

- In spite of confusion around the boundaries and legality of positive action, the majority of those participating favoured its use in apprenticeships and employment more generally.
 - However, it was only considered effective if used appropriately and robustly.
- There is a lack of mainstream use of positive action initiatives in the workplace.
 - Reasons include fear of the best person not being recruited, or of legal liability for ‘reverse discrimination’ and a belief that inclusive practice is a more appropriate and effective approach.
 - Fear of ‘getting it wrong’ was linked to a lack of clarity and guidance around legislation and definitions of positive action.
- The most frequently referenced obstacle was the lack of resources for SMEs to undertake robust and effective positive action.
 - SMEs were seen to have very little awareness of positive action and were unlikely to see the potential consequences of gender disparity as a priority.
 - The procurement process was considered the most effective means of engaging SMEs with positive action, but only if larger organisations and the public sector first demonstrate effective use and lead by example.
- A holistic approach is needed to include adherence to wider good practice in equality and diversity and measures that promote work-life balance and flexibility for women with children.
- There were mixed views on job adverts encouraging or targeted at women.
- Female role models were seen as vital, particularly within an education setting.
 - Gendered mentoring and networking were seen as effective, although there were concerns about potentially closing down systemic knowledge.
- Section 159 of the Equality Act 2010 allows employers to choose someone from an under-represented group when faced with two candidates of equal merit, known as the ‘tiebreak’ principle.
 - Very few of the participants understood the detail or how this would apply in relation to their own sector or remit.
- Overall, it was felt there was a clear need for guidance aimed at employers, although this should not encourage a standardised approach that might be seen as tokenistic.

Cedefop published a pilot [database of apprenticeship schemes in Europe](#), based on information collected in 2016.

- Information is available for 42 schemes in the 28 EU member states plus Iceland and Norway.

SKILLS POLICY

The new Centre for Progressive Policy published [The Data Deficit: Why a lack of information undermines the UK skills system](#).

- The UK skills system is an example of chronic policy failure, and the inability to equip people with the type and level of skills needed has helped to accelerate the shift to a more polarised labour market.

- Despite government attempts to drive productivity through skills, the inability of the system to respond has helped to incentivise businesses to rely increasingly on low-skilled, low value-added labour, often accompanied by precarious working practices.
- Four key insights can be used to ease chronic information failures and drive improved outcomes across the system, and help to bring the supply of skills in line with demand:
 - The wage differentials myth – HE is not the sole route to high earnings
 - The potential for significant increases in incomes by helping more people access high-quality technical education
 - The persistent technical skills shortages that result from the focus on HE as the key productivity strategy
 - The importance of place-based skills policy that responds to significant skill shortage variations.
- The report recommends:
 - Enhancing data and information across post-16 education, skills and careers guidance.
 - Place-based, data-driven commissioning through devolved skills funds, so as to better align post-16 provision with local labour market needs.
 - National and local government to work with business-led initiatives, designed to promote productivity-enhancing behaviours among firms and provide another route to encourage employer engagement and investment in workforce training.
 - Investing in the national and regional evidence base, on how different education and training inputs lead to productivity and competitiveness outcomes.

The report's reference to 'the UK' is misleading, as all the policies and data mentioned are from England. However, the insights and recommendations may be more widely applicable.

Cedefop published [Reaching out to 'invisible' young people and adults](#), a briefing note on the measures European countries have been developing to combat the marginalisation of those who 'slip through the cracks' of standard policies.

- Low qualifications, disengagement from education/training and long-term unemployment are interconnected and tend to cumulate through a person's life, resulting in disadvantaged people being drawn into a cycle of social marginalisation.
- People who lack basic skills require holistic strategies potentially involving health, social and psychological services.
- Policies need to cater for young people and adults, and to focus on recovery and rehabilitation as well as prevention.
 - They also need time and flexibility – in many countries, people lose entitlements to services when they get to a certain age.
- Outreach needs to rely on strong cooperation and exchange of information, and to 'go to the streets', beyond traditional 'open door' offices.
 - Policies must be built on the common understanding that no one should be left behind.

The briefing note highlights some of the most interesting approaches. A series of country reports is to follow.

CESifo published [Wages and Employment: The Role of Occupational Skills](#), examining the Swiss labour market for workers who graduated from VET in Switzerland.

- The paper aims to tackle three questions:
 - How do different skills acquired in VET affect employment and wages?
 - Which skills do firms demand most?
 - What is the value of the skills acquired in VET for workers and firms?
- The demand for – and hence, returns to – cognitive skills dominates the demand for interpersonal and manual skills, with average productivity almost twice as high.
- There is evidence of complementarity between cognitive and interpersonal skills, and of firms specialising either in manual or non-manual jobs.
- Overall, workers reap large benefits from VET.

- The average returns to VET skills amount to about 9% in hourly wages, and a VET degree appears to improve labour market opportunities through higher job 'arrival' rates and lower job 'destruction'.

IZA published [Beneficial Brain Drain and Non-Migrants' Welfare](#).

- The number of skilled immigrants with tertiary education living in OECD member countries has increased at a significantly higher rate than unskilled at least since the 1990s.
 - The skilled emigration rate or 'brain drain' in 2010/11 exceeded the overall emigration rate in 95% of 145 developing countries with available data.
 - The skilled share for OECD immigrants is greater than for OECD's population, e.g. 48% of USA immigrants in 2011–15 were college graduates, 55% higher than 31% for US-born adults.
 - Major reasons include the increase in the number of countries implementing skill-selective immigration policies, e.g. points systems, and the globalisation of the market for talent.
- Though a brain-drain-induced net brain gain has tended to be seen as a 'beneficial brain drain', the source country's residents are worse off than under a closed economy in most scenarios considered.

ILO published [World Employment and Social Outlook 2018: Greening with Jobs](#), analysing the impact on jobs of action to limit global warming.

- 24m new jobs will be created globally by 2030 if the right policies to promote a greener economy are put in place.
 - Most sectors of the economy will benefit from net job creation – of the 163 economic sectors analysed, only 14 will suffer employment losses of more than 10,000 jobs worldwide.
- Countries should take urgent action to anticipate the skills needed for the transition to greener economies and provide new training programmes.
- Environmental laws, regulations and policies that include labour issues also offer a powerful means to advance the ILO's Decent Work Agenda and environmental objectives.

PASCAL International Observatory published [Briefing Paper 15: Building entrepreneurship in sustainable learning cities](#).

- Entrepreneurship is now recognised as an important part of learning city development.
- The paper focuses on conceptual, skill and cultural aspects of building the foundations of entrepreneurship, outlining implications for policy and practice.
 - All learning cities and communities should develop planning and activities to foster entrepreneurship.
 - All education sectors should contribute, with an important role for schools providing the foundations for entrepreneurial skills.
 - Business and wider society should support education sectors through partnership.
 - Entrepreneurship should be seen as assisting individuals to meet the challenges of life and to thrive with entrepreneurial mindsets.
 - A wide range of resources can be used to build a sustainable entrepreneurial culture, including libraries, museums and education institutions.
 - Social enterprises for young people should be a prime vehicle for giving youth entrepreneurial and business skills and experience.

SKILLS GAPS & SHORTAGES

The Edge Foundation published [Skills Shortages in the UK Economy](#) – the first in a series of bulletins designed to help fill the gap left by the demise of the UK Commission for Employment & Skills (UKCES).

- The bulletin collates key data from England's Department for Education, British Chambers of Commerce, CBI/Pearson, the Open University and the construction sector.
 - It has been supported by a Skills Shortage Analysis Group bringing together the key organisations and academics with an interest to share plans, research data and messages.
 - This first edition has a specific focus on engineering.

The second bulletin will cover the digital sector, and the third will look at creative industries.

City & Guilds published [People Power: Does the UK economy have the skilled people it needs for the future?](#) a survey of 1,000 UK employers.

- 89% struggle with skills gaps.
 - 38% said this causes difficulty meeting customer demand.
 - 43% face a high level of competition for skilled people in their area.
 - 38% said the education system doesn't create the skills needed.
 - 63% anticipate skills gaps will remain the same (34%) or worsen (29%) over the next three to five years.
 - 54% said recruiting overseas was successful or very successful at closing skills gaps.
- 47% said the internal factor most likely to impact future productivity was recruiting skilled people.
 - 47% struggle to recruit team leaders and managers, 32% to recruit specialists.
- 46% said the external factor most likely to impact future productivity was Brexit.
 - 20% said Brexit had already impacted their ability to recruit skilled staff.
 - 81% are already putting measures in place to mitigate the impact, e.g. upskilling existing staff (27%), and improving the pay/benefits offered to UK employees (27%).
- Employers suggested actions that would help to close skills gaps, including:
 - 45% said companies need to invest more in training.
 - 45% said business, government and education need to collaborate better.
 - 45% said education should be more aligned to business.
- The government policy employers believe is most effective in tackling skills gaps is the apprenticeship levy (21%).
- Methods used by employers to encourage new workers into the workplace include apprenticeships (38%), work placement programmes (37%), internships (27%), graduate programmes (27%), and visits to universities (27%).
- 42% of employers offer apprenticeships to staff; 42% have in-house training programmes; 37% have traineeships; 34% have leadership and management training.
- 46% said training brings staff loyalty and retention, 45% said that it improves productivity.
- Nine recommendations for government, employers and the education sector include:
 - Careers education, information, advice and guidance needs to be redesigned, making greater use of digital channels to democratise access to information.
 - Make the most of the apprenticeship levy to build a talented home-grown workforce and upskill employees at all levels; government should provide greater support and advice to help employers recognise the benefits of apprenticeships and understand how to access the system.
 - Government should consider widening the apprenticeship levy to meet employer needs, working with employers to understand how they want to use their levy to support skills development.
 - Government and the education sector should demonstrate the value of investing in training and development on business performance, through evidence-based case studies.
 - Employers should consider allocating a buddy for new hires while they settle in, potentially lengthening this 'on-boarding' process to a year, and ensuring staff have adequate access to training and advice.
 - Employers should consider implementing a talent management programme to identify future managers and leaders, who will be essential to help navigate Brexit and in the post-Brexit world.
 - Training and development activity needs to be linked to business performance and its effectiveness constantly measured and evaluated.
 - An independent UK Skills Policy Institute, with representatives including policymakers, education/training and industry, should be created to have oversight and ensure policy meets current and future skills needs.

The report includes detailed sections on construction, retail and hospitality.

The European Commission published [A comparison of shortage and surplus occupations based on analyses of data from the European Public Employment Services \[PES\] and Labour Force Surveys: Labour shortages and surpluses 2017](#).

- This is the third study on imbalances in the European labour market – in EU member states, Norway, Iceland and Switzerland – using a survey of national PES.
- A clear distinction was identified between the competences associated with shortages and surpluses.
 - Shortages were dominated by technical competences, e.g. occupations at professional, associate professional and craft level in software, engineering and healthcare.
 - Surpluses were dominated by non-technical competences, e.g. sales, admin, arts and humanities.
- A considerable number of cross-border matching possibilities were identified between shortage occupations in some countries and surplus in others.
- The highest number of both shortage and surplus occupations were in professional rather than lower skilled occupations; this was not anticipated.
- Recommendations include launching a campaign to raise awareness of the importance of comprehensive information on shortages and surpluses.
 - A model for the systematic collection of data is proposed, to properly assess labour market imbalances and identify cross-country matching possibilities.

Cedefop published [Skills Forecast: key EU trends to 2030](#), taking account of global developments up to May 2017.

- The employment level for the 28 EU member countries (EU28) is projected to increase by 6% during the period up to 2030, with highest growth in 2021–26.
- The working age population is forecast to increase by 3.5%, but the labour force is only expected to increase by 0.6%, with some countries seeing a decrease.
- The declining trend in employment over 2011–16 is forecast to moderate for most of the broad sectors of economic activity and inverse for the construction sector.
 - The primary sector and utilities will continue shrinking, while the decrease will be sharpest for mining and quarrying; the highest increase per annum in employment, for 17 EU member states, will be observed in business and other services.
- Most jobs that are likely to be created over the period will require medium levels of education; about 43% of jobs will require high levels and around 11% will require low levels.
 - The largest numbers of total job openings for high qualifications are expected to occur within business and administration, teaching, and legal, social and cultural professions.
 - An increasing number of job opportunities with high qualifications is expected for sales workers.
- People with high-level qualifications are expected to increase from 28% in 2011 to 40% in 2030.
 - Those with medium-level qualifications are expected to decrease from 49% to 45%, and with low levels from 23% to 15%.

Data are presented on an interactive website that can be browsed by sector, occupation, country and five policy themes: people and skills, matching skills and jobs, future jobs, labour market context, and a European skills index that provides a composite indicator of a country's skills system.

The European Commission published [A Blueprint for Sectoral Cooperation on Skills \(Wave II\): Responding to skills mismatches in six new sectors](#), a strategic framework to address short- and medium-term skills needs.

- The six new sectors are additive manufacturing, green technology and renewable energy, construction, maritime shipping, the paper-based value chain, and steel.
 - There were five sectors in a pilot phase: automotive, maritime technology, space data (geo information), textile/clothing/leather/footwear, and tourism.
- Stakeholders encouraged to cooperate include: research institutes; education, qualification and training providers; businesses; trade unions; and national and regional public authorities.
- The framework sets out how stakeholders can work together to develop skills strategies and solutions to help sectors grow, innovate, create high-quality jobs and contribute to Europe's prosperity, by:
 - assessing the skills mismatches between industry needs and the content of education programmes
 - updating or creating new curricula while promoting careers, sectoral qualifications and certifications, mobility and skills diversity
 - deploying new and innovative education and training approaches for skills and competences

- launching campaigns for lifelong training
- promoting sectoral partnerships and effective use of funding at national and regional levels.

OPITO and Robert Gordon University Oil & Gas Institute published [UKCS \[UK Continental Shelf\] Workforce Dynamics 2018–2035: Shaping the skills of tomorrow](#).

- The oil and gas sector should be able to sustain over 130k roles in 2035, compared to around 170k in 2017.
 - Over 80k workers are likely to retire or leave the sector by 2035, while over 40k people are expected to join.
 - Around 10k of the new intake are likely to be in new areas such as data science, data analytics, robotics, materials science, change management and remote operations.
- Closer collaboration is needed between industry and training providers to upskill and reskill the workforce to enhance technology skills and capabilities, including those required to deliver broader energy diversification.
- A new skills strategy is needed to ensure an effective response for future talent needs.
 - OPITO and others will work with employers, trade unions, governments, agencies, educational establishments and commercial training providers to develop appropriate programmes and courses to support the strategy.
 - Industry needs to establish common standards and work practices across energy sectors to create a more flexible workforce.
 - Training providers, vocational institutes and universities need to ensure provisions and delivery mechanisms are in place to support the upskilling and multi-skilling required.

THE IMPACT OF AUTOMATION

The House of Lords Select Committee on Artificial Intelligence (AI) published [AI in the UK: ready, willing and able?](#) – the report of a recent inquiry, which includes a number of recommendations around skills.

- The UK is in a strong position to be among the world leaders in the development of AI: it has leading AI companies, a dynamic academic research culture, a vigorous start-up ecosystem and a 'constellation' of legal, ethical, financial and linguistic strengths located close to each other.
 - AI presents a significant opportunity to solve complex problems and improve productivity.
 - AI is entering a crucial stage in its development and adoption that will enable it to be deployed far more extensively, bringing a host of opportunities, but also risks and challenges.
- Basic knowledge and understanding necessary to navigate an AI-driven world will be essential for all children; the ethical design and use of technology must become an integral part of the curriculum.
 - Some young people will need a thorough education in AI-related subjects, requiring adequate resourcing of the computing curriculum and support for teachers.
- Other recommendations include:
 - A PhD matching scheme with the costs shared with the private sector
 - An increase in visas for those with valuable skills in AI-related areas.
- Five overarching principles for an AI Code:
 - AI should be developed for the common good and benefit of humanity.
 - AI should operate on principles of intelligibility and fairness.
 - AI should not be used to diminish the data rights or privacy of individuals, families or communities.
 - All citizens have the right to be educated to enable them to flourish mentally, emotionally and economically alongside AI.
 - The autonomous power to hurt, destroy or deceive human beings should never be vested in AI.

Skills Development Scotland (SDS) and the Centre for Work-based Learning in Scotland published [Skills 4.0: A skills model to drive Scotland's future](#) for policymakers, education and skills providers and bodies, and employers.

- 'Industry 4.0' refers to the fourth industrial revolution, featuring automation, data, globalisation and an exponential rate of change.
 - The report proposes a model of the skills for the future needed to cope with and thrive in the change.
 - It seeks to provoke thought on the value society places on these skills, stimulate discussion on how they can be incorporated into learning programmes, and encourage testing of ways to deliver and measure them.
- It is anticipated that in future:
 - Digital technology will permeate all places and forms of work
 - Technology will continue to provide new ways of connecting and collaborating globally, making it easier to operate across wider and more disparate organisations and increasing market opportunities
 - The volume of information generated online will continue to increase exponentially, leading to a more complex information landscape
 - Collaboration will become increasingly complex as we are required to develop relationships in new and different ways
 - Technical skills and knowledge will be of a lower importance as machines learn to carry out technical tasks and AI allows for knowledge to be shared globally
 - As machines are able to carry out increasingly routine physical and mental tasks, humans will be left with tasks that are much harder for machines to carry out, such as working with and supporting others and using creativity and drive to solve complex societal challenges
 - An ageing population will change the face of the workforce, with fewer people of working age and an increasing need for caring professions
 - Climate change will continue to create an increasingly complex world and lead to new emerging sectors like the green economy
 - More people will work in less traditional employment contracts, e.g. self-employment and zero hours
 - The boundaries between jobs and industries will continue to blur with jobs continuing to emerge and evolve.
- The report sets out the skills needed for the future – in addition to the fundamental universal skills of literacy, numeracy and digital intelligence, it lists the following 'meta-skills':
 - Self-management: focusing, integrity, adapting and initiative
 - Social intelligence: communicating, collaborating, feeling and leading
 - Innovation: curiosity, creativity, sense making and critical thinking.

The Scottish Government and Scottish Trades Union Congress (STUC) published [Technological Change and the Scottish Labour Market](#).

- The report considers optimistic vs pessimistic visions of the future and highlights current anxiety about the consequences of automation for the labour market.
- There is little evidence that technology is significantly disrupting the labour market in Scotland or that it is likely to do so in the short to medium term, however the impact on workers may be hidden.
 - 76% of trade union branches surveyed identified automation or digitisation in their workplace.
 - 23% felt training needs due to new technologies were being fully met by the employer, 48% partially, 29% not at all.
- There will be renewed emphasis on in-work training with workers having to adapt and develop new skills throughout their careers.
- Workers must be supported to use new technologies, or the positive impacts the changes can have on productivity will be reduced.
- Employers will have to play a greater role in delivering this agenda.

The OECD published [Putting faces to the jobs at risk of automation](#), a policy brief on the future of work.

- About 14% of jobs in OECD countries are highly automatable, while another 32% could face substantial change in how they are carried out.

- The highest risk is in routine jobs needing low skills and often with low wages; the lowest risk applies to a broad range of jobs from professionals to social workers.
- Automation most affects manufacturing and agriculture, but some service sector jobs too.
- Student jobs and entry-level positions have a higher risk of automation than jobs held by older workers.
- Training is significantly lower for workers in jobs at high risk.
- There is considerable uncertainty, however, and not all jobs that are automatable will disappear; at the same time, other jobs will be created.
- Education systems need to adapt to the changes and teach skills that enable people to take full advantage of technology adoption, including cognitive and social intelligence and working effectively in a digital context, both as specialists and users.
- Adult learning is a crucial policy instrument, but needs to be complemented by reinforced help from labour market and social policies for those whose jobs may disappear and who may need to relocate as well as retrain.
- Good practice in work organisation, balancing routine and non-routine tasks, should be promoted.

The European Commission published [Robots at work – A report on automatable and non-automatable employment shares in Europe](#), looking at jobs in 24 European countries over the last 30 years.

- Two definitions are used for automatable work:
 - Jobs that were automatable in the last three decades.
 - Jobs that are recently automatable, capturing the most recent advances in technology, and allowing consideration of jobs that will become automatable over the next ten years.
- Jobs that remain non-automatable require deep thinking or high levels of interpersonal skills; these are not expected to decrease in the next decade.
- Many more jobs can now be automated, and the shares of these recently automatable jobs vary greatly from country to country.
 - The report highlights the countries, and their demographics, whose employment is the most vulnerable to disappearing because of automation, including countries that have substituted labour with automation at a faster rate over the last 20 years, and the jobs that are likely to stay as they are non-automatable.
 - For the UK, Germany, Italy, Czech Republic, France, Sweden, Austria, Spain, Estonia, Lithuania, Greece and Croatia there is no significant evidence of continued automation over the 30 years.
 - The estimates range from 37% of the total jobs being recently automatable for Norway, to 69% for the Czech Republic.
 - In the Republic of Ireland 21% of the jobs currently held are recently fully automatable, including vehicle drivers, packers and bank tellers (compared to 45% in Italy).
- Recent automation is not divisive along demographic lines, such as age or gender, when it comes to substituting for jobs.
 - The largest shares of jobs that can be lost belong to low-skilled individuals in low-income jobs; these people are likely to be the greatest losers due to technology advances.
- The shares of 'recently polarised automatable' jobs, such as lawyers, sales demonstrators and library assistants, are expected to decrease over time, although these occupations will not disappear.
 - 35% of jobs in Belgium are estimated to be recently polarised automatable; 13% in Norway.

DIGITAL SKILLS

Tech Nation published [Tech Nation 2018](#) examining the UK's 30 key 'digital clusters' including Belfast.

- The tech sector grew 2.6x faster than the rest of the UK economy in 2017.
- The UK is third globally for total capital invested in digital tech companies, after USA and China.
- In 83% of clusters, digital tech businesses said access to talent is their biggest challenge.

- Digital tech workers are more productive than non-digital workers.
- Jobs that require digital skills command higher salaries than those that don't.
- Only 19% of the digital tech workforce is female (compared to 49% across all UK jobs).
- Ethnic diversity is above the UK average – 15% of the workforce is BME and Asian (compared to 10% across all UK jobs).
- 72% of workers are aged over 35, older than the sector stereotype.
- Recommendations include business cultivating relationships with student tech societies and working with local codeclubs for children to help 'future-proof' the 'talent pipeline'.

Nesta published [Delivering Digital Skills: a guide to preparing the workforce for an inclusive digital economy](#).

- Governments around the world are recognising the urgent need for adults to have better access to learning throughout their careers to ensure they don't get left behind, and are able to reap the rewards of digitalisation.
 - The guide aims to help policymakers who are tasked with finding ways to upskill the workforce.
- There are five key barriers to upskilling for digitalisation:
 - People think that learning is for the young.
 - People don't see a need for digital skills.
 - Organisations' leaders need to drive digital transformation.
 - Learning puts pressure on the resources of businesses and individuals.
 - People can't find training that is relevant to their needs.
- Nine elements are crucial for effective learning ecosystems, listed under four headings:
 - Labour market fit – skills forecasting and curriculum development
 - Learner fit – pathway guidance and assessment
 - Delivery support – funding, wraparound support, and training delivery
 - Career passport – accreditation and career support.
- Ten case studies from around the world address all nine elements, showing how governments and organisations can work together to create upskilling and reskilling opportunities.

The University of Leicester published [Mapping the Museum Digital Skills Ecosystem – Phase One Report](#) of the 'One by One' national digital literacy research project funded by the UK's Arts & Humanities Research Council.

- The project, led by the university in partnership with Culture24 and museum and academic partners, aims to help UK museums better define, improve, measure and embed the digital literacy of all staff and volunteers.
 - Phase one has mapped how digital skills are supplied, developed and deployed in the sector.
- There are different practices in how digital responsibilities and skills are distributed, managed and shared across UK museums.
 - Three models exemplify the patterns of digital engagement, how organisational structures and digital responsibilities are evolving, and what this means in practice for digital skills.
- Digital is increasingly seen as part of everyone's skill set and all roles have some kind of digital element; however digital skills are not in ready supply throughout the workforce.
 - Using, translating and developing in-house skills is the main approach for supplying digital skills, achieved via internal recruitment, informal development plus some formal training.
- Digital is becoming professionalised in the museum as digital roles and responsibilities become standard practice rather than an 'add-on' to people's roles.
 - The distinction between specialist digital and other roles is becoming blurred.
 - Museums are exploring, learning and demanding new digital skills as they innovate and create with digital.
- There is little evidence that museums are:

- systematically assessing and identifying digital skills needs
- using in-house formal and planned training around digital skills or digital literacy.
- Informal and ad hoc training to upskill and reskill staff and volunteers is being provided, with staff supporting each other and sharing skills.
- There is an assumption that 'digital skills' relate to a specific set of technical competencies.
 - This can create a reactive relationship with digital, resulting in low digital literacy across the museum, although the sector has the potential and intention to adapt.

NCUB published [*The Human Factor: Driving digital solutions for 21st century health and care, the final report of an NCUB Task Force.*](#)

- The inquiry focused primarily on ways to instil more partnering and brokering to support training, education and research in digital health and care, in particular:
 - Primary and ancillary workers, the role of patients, users and health consumers in driving change
 - The ways in which HE could deliver innovative graduates with the right skills
 - Impactful research and effective knowledge exchange.
- Nine conclusions and recommendations include:
 - Establishing a national campaign for digital health and care skills, as many professionals, patients, consumers and users lack the digital education and skills needed.
 - There is a huge gap between workforce digital skills and the needs of the system – universities and colleges must play a key role in training and upskilling to close the gap.
 - UKRI and universities should establish well-funded mechanisms for innovation in digital health and social care, and translation of innovation into business.

Lloyds Bank published [*UK Consumer Digital Index 2018: Benchmarking the digital and financial capability of people in the UK*](#) and a [*Spotlight on Northern Ireland.*](#)

- Basic Digital Skills are defined as: managing information, communicating, transacting, problem solving and creating.
- In Northern Ireland:
 - 44% have high digital and high financial capability (the UK average is 55%).
 - 47% feel their digital skills have improved over the last year (UK: 60%).
 - 14% of adults claiming benefits have low/no digital capability (UK: 18%).
 - 13% have improved their digital skills so they can be more productive at work (UK: 30%).
- Across the UK:
 - 79% have all five Basic Digital Skills; 8% have none.
 - 10% of the workforce don't have all five; they earn £13k less than those who do.
 - 56% of those without a bank account have all five.
 - 25% of those with a registered disability are offline.

TRAINING & DEVELOPMENT

The IES published [*Effective performance, development and career conversations at work*](#) as part of its [*IES Perspectives on HR*](#) series.

- It examines the aims, processes and benefits of conversations between managers and employees about performance, skills and learning, potential and career development.
- Effective performance and development conversations can lead to improved and sustainable organisational performance.
 - This includes agreed skill and/or career development actions central to improving the employee's business contribution.
 - Development includes the acquisition of skills and the application of skills, behaviours and know-how to tasks or situations.
 - For effective talent management, an organisation needs to support the employee in agreed career development actions, often by facilitating access to relevant work experience.

Cedefop published [From long-term unemployment to a matching job: The role of vocational training in sustainable return to work.](#)

- Skill deficits are a major bottleneck in sustainable activation of the long-term unemployed.
 - Those managing to get back to work often end up in less complex and skill-intensive jobs and have fewer opportunities to develop their potential.
 - Those not successful in making a transition to work are likely to face even more severe and complex skill deficits, among other problems.
- At different stages – engagement; programme interventions; job placement, matching and follow-up – innovative principles, policies and tools can make the return to work a long-lasting outcome.
- While training programmes may have questionable short-term impacts on job-finding, empirical evidence tends to show that vocational programmes have sustained and effective gains in the long run, especially among hard-to-place or disadvantaged long-term unemployed groups.
- Policymakers can benefit from viewing options and decisions through the lens of key intervention areas that can be broken down into specific actions that will meet national or local needs, including:
 - Optimising cooperation and coordination, e.g. involving services that address ‘non-skill problems’
 - Promoting sustainable job matches, e.g. by being more active in screening and preparation
 - Exploiting the potential of ICT, e.g. developing tools to disseminate labour market intelligence
 - Using European education and training tools, e.g. more widespread use of skills validations, such as ‘skills badges’
 - Balancing in-house provision and outsourcing.

ADULT LEARNING

The European Commission published [Promoting adult learning in the workplace](#), the final report of its Education & Training 2020 Working Group 2016–18 on Adult Learning.

- The Group’s aim was to identify policies that promote and support workplace learning of adults, covering those who:
 - struggle with reading, writing, making simple calculations and using digital tools
 - have medium skills in need of improving.
- Adult learning in the workplace:
 - can make a significant contribution to national and regional skills strategies
 - is an accessible and attractive way for adults to maintain and update the knowledge and skills they need for life, work and home
 - is an efficient and effective way for employers to keep employees’ skills up to date, keep them motivated, improve staff retention and improve competitiveness
 - is an economical and targeted way for EU member states to increase productivity, innovation and modernisation, maintain competitiveness and employment rates and raise overall skills levels
 - supports social and economic (re-)integration of vulnerable groups, inclusion, social cohesion and equality
 - meets individuals’, employers’ and society’s needs for greater adaptability to better prepare for future skills needs, mitigating projected skills shortages
 - improves adults’ lifelong employability.
- Adult learning in the workplace that responds to individuals’, employers’ and societal demands needs to become a policy priority, requiring:
 - a serious long-term commitment from all stakeholders
 - effective coordination between stakeholders
 - appropriate quality assurance mechanisms
 - equitable co-funding systems that are sustainable in the long term
 - effective systems to tailor provision to changing labour market and adult learners’ needs
 - clear governance arrangements including regular monitoring and evaluation.

The Learning & Work Institute published [Healthy, Wealthy and Wise: The impact of adult learning across the UK 2015–17](#) as part of its work for the European Agenda for Adult Learning.

- The report presents a distillation of key messages from research papers and case studies on the impact of adult learning under three broad themes: health, work and communities.
 - It aims to stimulate debate about the critical role of adult learning across the UK and Europe.
 - A section on Northern Ireland outlines policy drivers, key challenges and recommended actions.
- Ten strategic challenges for the UK include: fair work, skills mismatches and gaps, productivity, an ageing population, sustainable and mental health and wellbeing.
- Ten ways in which adult learning helps address those challenges include:
 - Strong links between health, longevity and the time spent in initial and continuing education.
 - A clear link between jobs and qualification levels, with learning for and in work contributing to the growth of individuals to access work, progress in their jobs and increase their income.
 - Developing individual skills and capabilities are a key part of employability and productivity while helping adults to help themselves in daily life.
- 12 recommendations for what could be done to maximise the impact of adult learning include:
 - Increasing investment in adult learning, by the state, employers and individuals.
 - Establishing a Careers Advancement Service to help people progress in work.
 - Creating and promoting inclusive learning pathways, with diverse access points and routes to development, to help address skills shortages and fill empty posts.
 - Establishing a universal entitlement to essential/basic skills, adopting an asset-based approach and using a range of capabilities to help everyone learn, develop and contribute.
- **For Northern Ireland:**
 - Eight **policy drivers** include: improvement of skills levels, especially at higher levels; addressing the current unemployment rate which is above the UK average; and tackling under-achievement among school leavers.
 - Eight **key challenges** include: the absence of explicit recognition and commitment to the enabling and developmental role of adult learning; the lack of comprehensive data to measure levels of participation in adult learning across different sectors; the project-based and short-term nature of funding for adult learning; and the potential loss of funding for many work and employability schemes post-Brexit as they currently rely heavily on European support.
 - Seven **actions** include: a commitment from the Executive for Northern Ireland to become a learning society; the adoption of a lifelong learning strategy; a comprehensive survey of provision across all sectors to establish a baseline; identification of alternative funding to ensure continuity of delivery in key areas including employability; and encouraging collaboration between policymakers and professionals in education, health, employment and community development.

EMPLOYMENT: RIGHTS, RESPONSIBILITIES & WAGES

The Chartered Institute of Personnel & Development (CIPD) published the [UK Working Lives survey](#), a new annual survey that measures job quality in the UK through seven dimensions.

- A representative survey of 6,000 UK workers suggests reasonable overall satisfaction with work and jobs, but that there are significant numbers who feel differently.
 - There are major systemic issues with overwork, stress and a lack of training and development.
- 64% are satisfied with their job overall (18% are dissatisfied); 11% regularly feel miserable at work.
 - 25% feel their job negatively affects their mental health; 30% say their workload is too much.
- 27% overall say their job does not offer good opportunities to develop their skills, rising to 43% of unskilled and casual workers.
 - Among those in low-skilled jobs, 37% say they have not received any training over the last year.
- 28% of middle managers say their work negatively affects their mental health; 35% say they have too much work.
- Those in senior manager roles are the most satisfied with their job, and feel less pressured than middle managers.

- 28% say they find it difficult to fulfil personal commitments because of their job, but 60% have the option of working from home in normal working hours.
- Improving the elements of work that most impact workers' wellbeing has a greater effect on job quality than any other factors.

The CIPD believes organisations should view wellbeing as a starting point for improving job quality.

CESifo published [Do Working Hours Affect Health? Evidence from Statutory Workweek Regulations in Germany.](#)

- The study exploits changes in the statutory working week regulations in the German public sector to provide causal evidence that longer working hours are detrimental for health.
 - In particular, an increase in working time leads to lower satisfaction with health, a moderate decline in self-assessed health, and a 13% increase in doctor visits.
- Working hours affect health particularly through increased time pressure outside of the workplace.
 - Adverse health responses are more pronounced among women and parents of minor children who generally face tight time constraints in organising the working week.
 - Extended working hours seem to cause a deterioration in mental rather than physical health.
- Current demographic trends, advances in technology and requirements of the global economy raise the demand for labour from underexploited resources, particularly women and parents.
 - While the optimal design of family work policies remains a much disputed issue within politics and research, so far the debate has largely ignored the potentially detrimental health effects of increasing labour supply among the target groups.
 - It remains open for further research whether, for example, flexible working time arrangements might mitigate the negative health effects of extended working time.

Demos published [Free Radicals](#), commissioned by IPSE (the Association of Independent Professionals & the Self-Employed), which makes 30 recommendations on what a 'new deal' might look like for the self-employed.

- Self-employment's recent rise (nearly 15% of the UK workforce is self-employed) has been driven by strong growth from: part-timers; older workers, specifically those aged 70+ for whom self-employment represents 50% of employment; the financial and business services sector; London and the South East.
 - The rise is not caused by or connected to the emergence of the 'platform economy'; nor is it best understood as a story between the 'privileged' and 'precariat'.
- The self-employed are most characterised by 'extreme heterogeneity', although a relevant characterisation for policy development would capture it with the description 'squeezed middle'.
 - This allows policymakers to focus their response on the broad challenges faced by both lower- and median-paid self-employed workers, which are relatively universal.
- Original polling evidence suggests that, in Britain:
 - 80% of the self-employed are happy and actively choose to be self-employed.
 - 70% are content to stay in self-employment for the foreseeable future.
 - Economic security issues – often associated with irregular income patterns – represent the biggest challenges in terms of the self-employed 'experience'.
 - Pensions or the lack of retirement savings is the biggest substantive policy issue within these challenges (net concern 46%).
- Recommendations include:
 - A strategy to improve the understanding of self-employment in schools, colleges and universities.
 - An auto-enrolment scheme for solo self-employed, with government acting as 'de facto' employer.
 - A reduction in the amount of tax contributions self-employed workers need to make in order to be eligible for the state pension.
 - A statutory definition of self-employment, to crack down on 'false self-employment' and exploitation.
 - A review of restrictive working practices in the platform economy, and steps to eradicate them.
 - Ensuring that every job centre has at least one dedicated self-employment specialist.

ILO published [The Future of Work: A Literature Review](#), providing the first systematic and synoptic overview of the area.

- It not only highlights the trends of the most important drivers as discussed in existing studies, it also defines what the expected outcomes of the future of work might be.
- Flexible and temporary work is expected to become more prevalent and many anticipate lower wages, reduced social protection and more work insecurity; however flexible and remote work could allow marginalised workers and those with family responsibilities to join the workforce.
- Social protection and the welfare state are expected to be challenged, with new forms of employment eliminating the contributions towards social protection schemes; meanwhile, social protection systems will be squeezed by ageing populations and inward migratory pressures.
- The forces that have already weakened unionisation rates are likely to continue, especially if trade unions don't reach out to new groups and address their rising demand for representation.

The OECD and ILO published [Building Trust in a Changing World of Work](#), the first report of an initiative launched in Sweden in 2016.

- Globalisation and rapid technological innovation have spurred unprecedented economic growth but not everyone has benefited.
- The Global Deal for Decent Work and Inclusive Growth is based on the premise that enhanced social dialogue can create 'win-win-win' opportunities: more inclusive labour markets and economic growth lead to better socioeconomic outcomes and wellbeing for workers, improved performance for businesses and restored trust for governments.
- The report outlines the foundations, trends and challenges connected to social dialogue and sound industrial relations.
- It highlights the crucial role that unions and employers can play in shaping the future of work by: jointly deciding what technologies to adopt and how; contributing to managing transitions for displaced workers; helping identify skills needs; and developing education and training programmes.
- When looking at the OECD Guidelines for Multinational Enterprises, companies with a higher social score – a measure of their capacity to generate trust and loyalty among the workforce, customers and wider society – also have a stronger financial performance.

The UK Government Equalities Office published [The gender pay gap in the UK: evidence from the UKHLS \(Household Longitudinal Survey\)](#), using data relating mainly to 2014–15.

- In sample statistics in 2014–15, 81% of part-time workers were women and 56% of full-time workers were men.
 - 38% of the female sample overall had children, rising to 51% for those who work part time; there was no similar effect for men.
- Similar percentages of women and men were in temporary contracts overall, but those on temporary contracts are higher for workers in part-time posts.
 - The discrepancy was greatest for male part-time workers: 8% of female part time workers were on temporary contracts compared to 18% of male part-time workers.
- Men in full-time jobs had 17.8 years' full-time work history, compared with 13.2 years for women; men in full-time jobs tended to have had little to no exposure to part-time or unpaid care work.
- The gender pay gap declined from 14.4% in 2009–10 to 13.4% in 2014–15.
 - In 2014–15 average hourly rates were £10.47 for women and £12.09 for men.
- The biggest drivers of the gap concern:
 - labour market history (56% of the drivers, accounting for £0.91 per hour)
 - observed and unobserved characteristics systematically associated with being female, e.g. discrimination and gendered behaviour (35% – £0.57)
 - industrial sector (29%) and occupational segregation (19%).
- In terms of 'protective' features (i.e. that decrease the pay gap), part-time employment is a new factor not apparent in earlier research.
 - This is attributable to the rise in male part-time employment of poor quality, and increased proportions of female 'retention part-time workers' – i.e. those previously working full time who have renegotiated their contract.

- 39% of women in part-time jobs are in the public sector, which typically has better working conditions.

The Institute for Public Policy Research (IPPR) published [The State of Pay: Demystifying the gender pay gap](#).

- Within industries, occupations and organisations, women earn less per hour, on average, than men.
 - The UK gender pay gap is 18.4%: 9.1% for full-time work; -5.1% for part-time work, which still contributes to the overall gap as it tends to be lower paid and overwhelmingly done by women.
- The pay gap has six drivers: occupational segregation; seniority; the maternity penalty; the lower level of part-time pay; historical skills gaps between men and women; and discrimination and bias.
 - Occupational segregation explains some, but not all, of the gap: 81% of occupations have a pay gap, even at a very granular level of detail – within-occupation differences, such as seniority, are therefore a significant driver.
 - The pay gap tends to be lower when pay itself is lower; this means that tackling the pay gap in isolation will not be sufficient to ensure that women are engaged in good, well-paid work.
 - The pay gap is largest for women of 40+, and persists for the rest of a woman’s working life.
- New firm-level data, published in April 2018 to meet new government requirements, suggests that most large employers have a gender pay gap, although they tend to be smaller than the gap for the industry in which they operate.
 - The most common strategies employers proposed to reduce their pay gaps were upskilling and in-work training, reviewing recruitment policies, and facilitating flexible working.
 - In many cases it would be possible for an employer to reduce its pay gap by taking action that could be detrimental to women, such as outsourcing its low-paid work; the pay gap is a blunt instrument, which should be interpreted in context and with caution.
- Initial recommendations are aimed at employers, including introducing a more structured approach to progression, rethinking policies around pay negotiation, and encouraging flexible working for men.

The Institute for Social & Economic Research published [The Distribution of the Gender Wage Gap](#), analysing the impact of the rising labour force participation of women on the wage gap.

- As modernising economies witness rapid growth in women’s workforce participation, simple economic theory suggests this will tend to depress women’s wages, potentially widening the gender wage gap.
- The extent to which this happens depends on the degree to which men and women are substitutes in the workplace – this varies in line with the task content of jobs.
- In high-paying occupations that are intensive in abstract and analytical skills, there is a high degree of substitutability between women and men, so that a large increase in (skilled) women may depress wages in general, but without increasing the gender wage gap.
- In low-paying occupations women and men are poor substitutes, so that increases in (low-skilled) women joining the labour force will tend to widen the gender wage gap.
- The gender wage gap will also depend on whether the demand for male vs female labour is growing: in fact demand trends have favoured women, attenuating the supply-driven downward pressure on women’s wages in low-paid occupations, and fully counteracting it in high-paid occupations.

Eurofound published [Statutory minimum wages 2018](#), setting out the EU countries that apply them, the rates and how they are determined.

- The European Commission states that the statutory minimum wage is defined in order to ‘enhance equity and establish a balance in the bargaining position between employers and workers’.
- Minimum wage setting can be seen as a double-edged sword and is often a controversial topic.
- According to a European Trade Union Confederation (ETUC) campaign to increase minimum wages across all member states, minimum wages play a particularly important role in raising wages overall.
 - Increases are also assumed to promote economic growth, because lower-paid workers show a greater propensity to spend the additional money they earn.
 - The findings of recent European studies differ with regard to the employment effect of minimum wage in different countries.

Labour Economics published [People versus machines: The impact of minimum wages on automatable jobs](#) by researchers from the London School of Economics and the University of California, Irvine. [Payment is required to access the full report.]

- Increasing the minimum wage decreases significantly the share of automatable employment held by low-skilled workers, and increases the likelihood that low-skilled workers in automatable jobs become non-employed or employed in worse jobs.
- The average effects mask significant heterogeneity by industry and demographic group, including substantive adverse effects for older, low-skilled workers in manufacturing.
- There is some evidence that the same changes improve job opportunities for higher-skilled workers.
- The findings imply that groups often ignored in the minimum wage literature are quite vulnerable to employment changes and job loss because of automation following a minimum wage increase.

IZA published [Monetary Policy and Inequality under Labor Market Frictions and Capital-Skill Complementarity](#) by European University Institute researchers.

- A New Keynesian model is used to improve understanding of the channels through which monetary policy has distributional consequences for skilled and unskilled workers and their capital-skill complementarity (CSC) in the production function.
- Unexpected monetary easing increases labour income inequality between high and low-skilled workers, and the interaction between CSC and search and matching asymmetry is crucial.
 - The increase in labour demand driven by monetary shock leads to larger wage increases for high-skilled than for low-skilled workers.
 - The increase in capital demand amplifies the wage divergence as skilled workers are more complementary to capital than 'substitutable' unskilled workers are.
- Strict inflation targeting is often the most successful rule in stabilising earnings inequality.
 - If high-skilled workers are allowed to search for low-skill jobs during contractionary monetary shock, inequality does not go down as high-skilled workers crowd out the low skilled.

International Comparisons

Cedefop published [Analysis and overview of NQF \[National Qualifications Framework\] level descriptors in European countries](#), celebrating the tenth anniversary of the European Qualifications Framework (EQF).

- All 39 countries taking part in the implementation of the EQF have now defined – and for a large part adopted – their levels of learning outcomes.
- National level descriptors are outcomes of extensive dialogue and consultation between different stakeholders; while influenced by the EQF and its generic descriptors, national level descriptors have been adjusted and further developed to address national needs and priorities.
- Qualifications frameworks have served as catalysts for change in education systems, in enhancing the image of VET and in bridging the divide between VET and HE.
 - Learners and workers, as well as employers, are the key beneficiaries of this process, which supports access, mobility and permeability.

The report includes a useful annex setting out the descriptors for all the countries, including those used in the four nations of the UK, which do vary.

The OECD published [Education Policy Outlook 2018: Putting Student Learning at the Centre](#), with detailed analysis of the evolution of key education priorities and policies in 43 systems.

- There are two common areas of priority and policy action:
 - Bridging different types of performance gap – socioeconomic, immigrant, minority, special education needs, gender and regional.
 - Equipping students with essential skills for today and the future, including by reducing skills mismatch and early school leaving rates, facilitating school to work transitions, and decreasing levels of youth unemployment and those who are NEET.
- Individual country 'snapshots' include a comparison of scores for selected indicators against the lowest, average and highest scores; the UK scores:

- around average for percentage of 18–24 year-olds who are NEET and 25–34 year-olds who have attained at least upper secondary education
- below average for share of students of all ages in upper secondary education following vocational programmes; percentage of variance in science performance explained by economic, social and cultural status; and percentage of low performers in science
- above average for proficiency in literacy among 16–64 year-olds and enrolment rates of three year-olds in early childhood and pre-primary education.

The British Council published [The Shape of Global Higher Education: Understanding the ASEAN Region \(Volume 3\)](#), reviewing the policy environment in the ten member states of the Association of South East Asian Nations.

- The ASEAN countries are Brunei, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, the Philippines, Singapore, Thailand and Vietnam.
- The study provides an insight for institutions outside of the ASEAN area, informing their interaction with, and profile within, the region.
 - It looks at the extent to which national systems support international collaboration in HE.
- The region includes several transnational education (TNE) hub countries, and has increasing intra-regional student mobility and in-region research partnerships and collaboration.
 - Bilateral agreements/memorandums of understanding with foreign education ministries focusing on different forms of HE collaboration are widespread.
 - Student mobility is important; it underpins much of the pan-ASEAN international HE alignment efforts and nine of the ten countries score high or very high.
 - All of the ASEAN countries have, or are trying to develop, significant levels of inbound TNE and are aiming to grow their HE systems and build relationships with foreign institutions.
 - It appears that links with a domestic partner are important, and in some cases essential, for the entry of foreign HE providers.
 - Support for international students via scholarships is less common in the region; the support that does exist tends to focus more on students from ASEAN nations.
 - The displacement of home students by international students is not a significant issue, except for in Singapore.
- Across the region, there are policies to support equitable access to HE from under-represented groups.
 - In Indonesia it is stated in law that a fifth of the country's student population should come from the lowest socioeconomic groups, and targets exist in Malaysia and Myanmar.
- 'Brain drain' is an issue for Malaysia, Cambodia, Brunei, Indonesia and the Philippines.
- Foreign language competence, particularly in English, is seen as important economically throughout the region.
 - Elements of educational instruction are delivered in English in every country in some part of the HE system.

[Volume 1](#) (2016) looked at national policies for international engagement of 26 countries; [Volume 2](#) (2017) explored the international mobility of students, research and education provision in 38 countries.

The European Commission/EACEA/Eurydice published [The European Higher Education Area \[EHEA\] in 2018: Bologna Process Implementation Report](#).

- The [Bologna Process](#) involves the intergovernmental cooperation of 48 countries, focused on:
 - the introduction of the three cycle system (bachelor/master/doctorate)
 - strengthened quality assurance
 - easier recognition of qualifications and periods of study.
- The report outlines the current state of play of the Bologna Process from various perspectives, and explores the priorities in learning and teaching, social inclusion, internationalisation, mobility and employability.

The OECD published [How is the tertiary-educated population evolving?](#) – the latest in its 'Education Indicators in Focus' series.

- The share of 25–34 year-old young adults with a tertiary education has increased in OECD-G20 countries over the past decade, to 22% in 2015; it is expected to keep growing, possibly to as high as 30% by 2030.
 - The increase is expected to be greater for women, thus widening the gender gap in tertiary attainment, from 2ppt in 2015 to possibly 5ppt in 2030.
- China and India combined will continue to contribute the largest share to the OECD-G20 pool of tertiary-educated young adults (currently 40%), despite projected falls in China's young adult population.
- If trends remain constant, China and India could account for a particularly high share of the OECD-G20 population with a tertiary degree in STEM: in 2015, over 35% of Chinese and Indian tertiary graduates obtained a STEM degree, compared to 15% on average in OECD countries.
 - Women remain a minority in STEM fields, comprising only 31% of tertiary graduates on average in 2015 in OECD and 38% in non-OECD countries; only in Argentina are over 50% of STEM graduates women (59%).

Government

NORTHERN IRELAND

[No relevant material sourced for this quarter's release.]

ENGLAND

The House of Lords Economic Affairs Committee published [Treating Students Fairly: the Economics of Post-School Education](#), the report of its inquiry into the system in England.

- Despite the many study options available, the successful expansion of HE in England has been dominated by full-time undergraduate degrees (Level 6), with a concomitant decline in Level 4 and 5 qualifications and part-time study.
 - There has also been a decline in Level 3 qualifications awarded to adults; they are largely awarded through the FE sector to those who didn't pursue HE at a young age.
- The UK produces more workers with undergraduate degrees than similar countries, and the committee is sceptical as to whether this is the best outcome for graduates and the economy.
 - Given the rise in skills shortages, some graduates might have been better off taking cheaper, shorter, more directly work-relevant HE qualifications.
- A 'monoculture' has developed around the primacy of the undergraduate degree, helped by a lack of information available to young people, the incentivisation of schools and the signals from employers.
 - The university finance system in England encourages HEIs to attract prospective students onto undergraduate degrees, including those who might have been better served by alternative HE qualifications.
 - The quality and availability of other options is variable.
- Recommendations include:
 - Better funding for other post-school options.
 - The introduction of a credit-based system whereby people can learn in a more modular way and at their own pace.

Overall, the report concludes that the 'system' is not a system.

SCOTLAND

The Scottish Government published a new [National Performance Framework](#); the first ten-year framework was published in 2007.

- 11 National Outcomes include:
 - 'We are well educated, skilled and able to contribute to society'.
- 81 National Indicators, used to track progress, include:

- Educational attainment, confidence, resilience and participation of children and young people, and engagement in extra-curricular activities
- Skills shortages and under-utilisation, and the skill profile of the population.

The Scottish Government published [The 15–24 Learner Journey Review](#), the final report of the review set up in 2016.

- A more balanced, coherent approach to education and learning opportunities is needed, offering better advice and guidance, more work-based learning, and shorter post-15 learner journeys.
- There are five key priorities for improvement:
 - Information, advice and support to deliver greater personalisation, to make it easier for young people to understand their learning and career choices at the earliest stage.
 - Real choice of provision, by broadening the approach to education, ensuring all young people access the work-based skills needed.
 - Alignment to deliver 'system purpose', giving greater flexibility for learners moving from school and college into years two and three of the four year degree where appropriate.
 - Building collective leadership across the education and skills system.
 - Knowing how well the education and skills system is performing.
- Significant and on-going work across schools, colleges and universities is expected in:
 - qualification design/joined up approaches to learning experiences
 - joint curriculum design and planning
 - transition planning for learners
 - resource sharing and logistical planning
 - shared measurements and integrated quality standards.

SDS published [Skills Investment Plan \[SIP\] for Scotland's Life and Chemical Sciences](#), a combined plan building on those launched separately for each sector in 2014.

- 3,800 extra workers are forecast to be needed for the sectors by 2027.
- Four priority themes are identified:
 - Addressing specific skill shortages, particularly in engineering, biomanufacturing, regulation and compliance, digital, and combined business, commercial, entrepreneurial and leadership skills.
 - Ensuring national coverage of skills and training provision, beyond the main concentrations in the central belt and east coast of the country.
 - Increasing exposure to and understanding of industry, such as via relevant work experience and the provision of graduate employability classes.
 - Enhancing the practical experience of those entering the sectors, particularly practical laboratory experience and the ability to perform basic laboratory tasks.

This is the latest in a [series of SIPs](#) by SDS, including for engineering, tourism, and food and drink.

The Scottish Government published [A Future Strategy for Scottish Agriculture: Final Report by the Scottish Government's Agriculture Champions](#), with recommendations including those related to careers and skills.

- Farming must be more visible as a career option and must attract more young people; this will need a huge increase in focus from schools onwards.
- Future farm funding must go on a menu of schemes to boost production efficiency, improve skills and training, and enhance natural capital and biodiversity.
- Digital skills training is crucial for operational purposes; all efforts must be made to assist those with specific difficulties to fulfil potential.
- At pre-apprenticeship and apprenticeship level, actions should include:
 - the expansion of the Rural Skills Modern Apprenticeship plus estate maintenance and environmental management
 - creation of centres of expertise involving skills training and research, and imaginative training methods

- the inclusion of self-employment skills
- consideration of shared apprenticeships, as a means of helping rural microbusinesses with insufficient time for mentoring and supervision.

Highlands & Islands Enterprise published [Skills Review for the Aquaculture Sector in Scotland](#) in collaboration with SDS, highlighting opportunities and major challenges.

- The workforce is ageing and gender imbalanced, with women severely under-represented in management.
- There are skills gaps and shortages in digital and IT, leadership and organisational management, engineering, health and safety, boat skills, fish health and disease control, high-quality R&D, team working, career management, and relationship building.
- Skills supply levels are insufficient to meet demand and vocational training is concentrated in a small area of the country.
- It recommends:
 - Promoting the sector as a career destination
 - Developing leadership, management and business capacity
 - Improving the consistency and transferability of training and education across the sector
 - Developing a digitally enabled workforce
 - Enhancing the provision of work-based learning and vocational training
 - Widening the recruitment pool.

WALES

[No relevant material sourced for this quarter's release.]

REPUBLIC OF IRELAND (RoI)

The Higher Education Authority published [A Study of Progression in Irish Higher Education 2014/15 to 2015/16](#).

- 86% of the 2014/15 undergraduate new entrants in publicly funded HEIs progressed to second year (up 1ppt from 2013/14).
 - Females are more likely than males to progress across all levels and sectors (89% to 83%).
- Rates of non-progression vary, from 23% in construction and related disciplines to 2% in medicine.
 - In the institute of technology sector at levels 6, 7 and 8, mature students are more likely to progress to the next year of study than a new entrant under the age of 23.
 - In the university and colleges sector at level 8, younger students are more likely to progress than mature students.
 - In all levels and sectors, Irish students had a non-progression rate of 15% (14% for non-Irish students).
 - Prior academic attainment (Leaving Certificate points) is the strongest predictor of non-progression; those entering with lower points are much less likely to progress than those with higher points.
- The student most likely to progress into second year is female, studying education or healthcare in a university or college, with relatively high Leaving Certificate points.
- The student most likely not to progress is male, with relatively low Leaving Certificate points, studying a level 6 or 7 course at an institute of technology in computer science, construction or engineering.

The Irish Government's advisory body on the current and future skills needs of the economy, the Expert Group on Future Skills Needs (EGFSN), published [Addressing the Skills Needs Arising from the Potential Trade Implications of Brexit](#).

- There are clear skills gaps and challenges associated with Brexit that require mitigation; however there is a significant amount of existing support, resources and training that can help organisations prepare.

- The report profiles the potential skills needs of enterprises across a number of internationally trading sectors and the main occupations in the freight transport, distribution and logistics (FTDL) sector.
 - It assesses the demand for logistics and supply chain skillsets under various Brexit scenarios over the coming decade.
 - It particularly focuses on the skills required to navigate a potentially more restrictive trading environment with the UK (e.g. customs clearance, logistics and supply chain management), and to facilitate the diversification of trade to non-UK markets (e.g. international management, sales, marketing, design and development, foreign languages and cultural awareness).
 - Customs clearance expertise and financial management were identified as clear skills gaps across a variety of respondents in all sectors; both are likely to become more important post-Brexit.
- It provides an overview of available and relevant education and training provision, and responses from other EU27 economies, namely Belgium, Denmark, the Netherlands and Sweden, as a source of policy learning for Ireland.
- Eight recommendations to enhance the pool of trade-related skills available to Irish-based enterprises, and their resilience in the face of Brexit, include the following:
 - Launch an industry awareness campaign to enhance understanding among internationally trading and FTDL enterprises and proactively address the skills needs arising from Brexit.
 - Introduce additional customs awareness and higher-level customs clearance training and advice for third country trading.
 - Enhance the provision of financial management advice, training and mentoring for internationally trading enterprises, focusing on currency management, VAT for third country trading, and contract management.
 - Undertake targeted campaigns to attract skilled personnel from overseas.
 - Promote measures to enhance the ability to diversify trade with non-UK markets, including: international trading and logistics/supply chain content in education and training provision; foreign language capability for international trade (particularly with Eurozone markets); intercultural awareness and international business experience; product design and development skills.
 - Support the development of, and promote the rollout of and engagement with, the logistics and service apprenticeship programmes.

EGFSN also published the [Annual Activity Statement 2017](#), outlining its research priorities and projects.

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