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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:

- A number of reports from Advance HE on leadership in higher education, with a particular focus on encouraging and supporting diversity.
- A long list of research reports published as part of England's Review of Post-18 Education & Funding, dealing not only with finance, but also with student choice. We have not attempted to summarise them, but have included them for quick reference.
- A continuing focus on the future of work, the skills and support that individuals will need to transition to future occupations, and – more generally – job quality and 'good' work.

** 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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The research summarised here presents the views of various researchers and organisations and does not represent the views or policy of the Northern Ireland Executive or those of the authors.

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SCIENCE, TECHNOLOGY, ENGINEERING & MATHS (STEM)

The Nuffield Foundation published [Evaluation of Nuffield Research Placements: interim report](#).

- Nuffield Research Placements (NRPs) are four- to six-week summer STEM placements in universities, research institutes and private sector firms for high-attaining Year 12/13 UK students interested in studying STEM at university.
 - In recent years there has been a focus on reaching more disadvantaged students.
 - The programme began in 1996 and over 16,000 students participated in the period to 2016, when the evaluation of the 2014 cohort was commissioned.
- Key findings include:
 - Undertaking an NRP is associated with an 8ppt higher enrolment rate in a STEM course and 8ppt higher enrolment rate in a Russell Group university, both for all pupils and for more disadvantaged pupils.
 - The programme is successfully targeting disadvantaged pupils.
 - The experience is perceived to enhance study motivation, overall confidence in abilities and specific skills in presenting, writing and time management.
 - Students report improved understanding of what STEM researchers do, but no change in their interest in a STEM career, how much they enjoy STEM subjects or their aspiration to study for a STEM degree.
 - Although 56% of placement students were female in 2016, the proportion should be higher given their prior educational attainment.

The Institute of Labor Economics (IZA) published [Female Science Advisors and the STEM Gender Gap](#), examining the impact of advisor gender on women's STEM degree attainment.

- The study is based on data from the American University of Beirut, a private four-year college where students are randomly assigned to academic advisors in their first year for one-on-one mentoring.
 - **The advisor's** main role is to provide students with support regarding course selection; students choose their major subject at the end of first year following repeated interaction with advisors.
- Being matched to a female rather than a male science advisor substantially narrows the gender gaps in STEM enrolment and graduation; the strongest effects occur with students who are highly skilled in maths.
 - Females also have improved grade point average (GPA) when assigned a female science advisor.
- However, the gender of a non-science advisor **has no impact on students'** major choice.
- Results indicate that close mentoring or advice by female scientists can play an important role in **promoting women's** participation and persistence in STEM fields.

EMPLOYABILITY & CAREERS

LKMco published [More Than A Job's Worth: Making Careers Education Age-Appropriate](#) commissioned by Founders4Schools, examining the careers education young people should receive, and when.

- Major benefits of quality careers education include: opening up learners' horizons to a broad range of ideas and possible future pathways; challenging the early formation of stereotypes; and helping young people to learn about themselves.
- The main barriers to quality careers education are: having enough time, prioritisation and buy-in; the division of labour in schools, and between schools and external partners; embedding careers in the curriculum; working with parents and carers; location; teachers' knowledge; networks and brokerage; and balancing the need to expand horizons while narrowing down options.
- Some learners, including girls and those from disadvantaged and minority ethnic backgrounds, are less likely to have a variety of quality careers experiences.
- Recommendations include: starting age-appropriate careers education as soon as children start school; appointing a senior leader to take responsibility; and working with parents throughout.

LKMco also published [More Than A Job's Worth: Making Work Experience Fit For Purpose](#), commissioned by Founders4Schools and Workfinder.

- The benefits of work experience for pupils include gaining: insight into the world of work, career-relevant skills valued by employers, and improved long-term careers outcomes.
- The experience itself is often poor quality, although it is likely to be higher quality for more affluent pupils with access to stronger, higher-status networks.
- Poverty, minority ethnic status, gender or special educational needs or disabilities **reduce pupils'** likelihood of participating in work experience.
 - Access to work experience is also affected by subject choices, e.g. those who choose 'academic' routes are less likely to participate, and placements are more readily available in some sectors and with some organisations than others.
- Recommendations include:
 - Schools monitoring and evaluating work experience quality, and identifying and addressing access inequalities.
 - Employers creating meaningful, authentic experiences that are open to all pupils.

City University of London published [Evaluating employer career interventions in English schools](#).

- Empirical evidence is very limited, but research suggests that young people trust employer support more and perceive it as more genuine than career advisers or teachers telling them what to do.
 - Students also **place a greater premium on 'experiential' information** – including face-to-face contact with outside visitors such as employers – than paper-based information.
 - Guidance interviews tend to explore the personal choices learners bring to the discussion, whereas employer **presentations introduce possible occupations, including previously 'invisible' jobs**.
- Overall, the two types of intervention are complementary: employer interventions may broaden awareness of opportunities more than guidance interviews; but guidance interviews may help young people to process information more effectively than employer interventions.
 - A practitioner in a guidance interview might also offer a more balanced view, discussing negative as well as positive aspects of an occupation.
- A research project in nine state schools in Leeds in 2014/15 compared three interventions: guidance interview; careers fair; and fair plus 'wraparound' **led by a careers practitioner, preparing them for the fair and helping them to reflect afterwards**.
 - Surveys assessed their impact on three different learning outcomes: vocational identity (a clear, **stable picture of one's goals, interests** and talents); opportunity awareness; and career decision-making self-efficacy.
- All three interventions improved each of the selected learning outcomes.
 - Opportunity awareness was improved by guidance interviews and employer-centred careers fairs to the same degree, but the guidance interview appears to have been a more effective mechanism for developing vocational identity and decision-making.
- It is widely argued **that the effectiveness of schools' careers programmes is determined not so much by individual interventions, but rather how different interventions are connected in a curriculum-wide approach**.

The Republic of Ireland's (RoI's) Department of Education & Skills published [Indecon Review of Career Guidance](#).

- The aim was to improve the career guidance tools and information in the education and training system and enhance engagement with enterprise.
 - The **RoI's career guidance support system includes post-primary education, higher education (HE) and further education (FE) and training**.
 - Career guidance includes career education and information and direct contact with work; guidance counselling is holistic and integrative and encompasses social/personal, vocational and educational guidance.
- 18 recommendations under four themes – improvement in career guidance tools and career information; better engagement with enterprise; inclusion; and enhanced governance structures – include:

- Establishing a support organisation with a new approach to guidance services that makes best use of digital and online technology.
- Strengthening and promoting a user-friendly centralised careers portal.
- Providing access for special education and adult learners to enhanced central career support services, including information on labour market opportunities.

The Centre for Vocational Education Research (CVER) published [Post-16 Aspirations and Outcomes: Comparison of the LSYPE \[Longitudinal Study of Young People in England\] Cohorts](#), summarising key findings from research commissioned by England’s Department for Education in support of its Review of Post-18 Education [see p.40].

- The academic route remains the more popular among 16–18 year-olds, particularly among those with higher attainment at GCSE.
 - For a given level of prior attainment, there is also evidence that young people are more likely to aspire to an academic qualification if they are from a more advantaged background.
- However, as overall post-16 participation has increased, a higher proportion of the later cohort is undertaking vocational Level 3 learning, including improved progression rates from Level 2 vocational courses.
- There is also increased interest in apprenticeships, with more young people considering them as a possible option, for example in school careers discussions.
 - However, there is only limited evidence of increased participation, particularly for Advanced (Level 3) Apprenticeships.
- Among lower level vocational learners, there is only limited evidence of ‘churning’ between low level courses and the labour market, with a majority who start such a course in Year 12 remaining in education throughout that year.

CVER published [A comparison of earnings related to higher level vocational/technical and academic education](#), analysing data from 622,000 English secondary school leavers.

- Most of the micro-econometric research on the earnings effects and social mobility created by HE focuses on honours degrees, with none to date focused on programmes of higher vocational and technical education.
- Students with Level 4–5 vocational qualifications have very diverse education backgrounds, ranging from Entry level to Level 3.
 - This is very different to students aiming for degrees, who almost exclusively take A Levels.
 - Male and female students also make very different subject choices.
- By age 30 early earnings differentials associated with high-level vocational/technical education tend to disappear and degree holders earn more on average; however, there is strong heterogeneity by gender and subject area.
- Earnings for male degree holders are similar to higher vocational/technical education if they studied in non-Russell Group universities, and higher for those from Russell Group universities.
 - Earnings for female degree holders are higher, regardless of the university type, compared to those who achieved higher vocational/technical education.
- Earnings of males with Level 4–5 STEM qualifications are comparable or higher than earnings of STEM degree holders; results for male students with qualifications in construction are similar.

Impetus published [Research Briefing I: Establishing the Employment Gap](#), by the National Institute of Economic & Social Research, on the employment of 18–24 year-olds in England from 2009 to 2017.

- In March 2017:
 - 26% of disadvantaged young people were not in employment, education or training (NEET) compared to 13% of their similarly qualified but better-off peers – i.e. disadvantaged young people were around 50% more likely to be NEET at all levels of qualification and regardless of age.
 - 26% of NEETs were from disadvantaged backgrounds, despite being only 16% of the population.
- This employment gap was consistent regardless of the age of the young people during the period covered by the briefing.

- The gap is similar in magnitude to the effect on NEET rates of caring responsibilities, substance abuse and youth offending.
- A disadvantaged young person is about 50% more likely to be NEET in the North East compared to London.
 - London's small gap is driven by a low NEET rate for disadvantaged young people.
 - The North East has the highest NEET rate, driven partly by ~33% of disadvantaged young people being NEET.
 - Variations within regions are even more stark, with complex interplay between levels of disadvantage and NEET, and differences between the two groups.
- 29% of young people with low qualifications were NEET compared to 15% of those with five GCSEs.
 - The highest qualified experienced the lowest NEET rates (8%).
 - 50% of all NEETs were low qualified, despite comprising only around 25% of the total population in the study.

The Economic & Social Research Institute (ESRI) and SOLAS (Further Education & Training Authority) published [Evaluation of the National Youthreach Programmes](#) in the RoI.

- Youthreach supports early school leavers into jobs via training, education and work experience.
- There has been a steady decline in the number of early school leavers over the past decade, however those who leave school early need more specialist support than in the past and are in greater danger of marginalisation.
 - From 2015 to 2017 there was an increase in the number of severely marginalised young people requiring Youthreach support, including Irish Travellers and young migrants.
 - There was also an increase in the number of Youthreach participants with mental health issues.
- Only 10% of early school leavers entered education or training courses between 2010 and 2017.
 - 45% of those who participated in Youthreach went on to further education and training courses.
 - Approximately 69% of Youthreach learners completed the programme; around 60% of these received certification.

UK Youth and Coca-Cola published [The Barriers to Employability](#), a brief report of findings from a survey of 2,000 adults as part of the [Reach Up](#) pilot project.

- 55% of 16–25 year-olds believe anxiety is one of the biggest barriers to securing a job; other barriers include being a carer, not having a driving licence and having a physical disability.
 - 31% had experienced anxiety and depression when job hunting and it had hindered their search.
 - 30% found work within less than a month after leaving education; 22% took at least a year.
- 81% of respondents felt that confidence would have the biggest advantage in gaining work, 59% said flexibility about where you work and 54% said having an academic record.

The Institutional Landscape

HIGHER EDUCATION: APPLICANTS & STUDENTS

Think-tank Policy Exchange published [Sins of Admission: How university application processes impact schools and colleges](#).

- Any focus on the intrinsic nature of education is too often lost amid demands that universities fulfil extrinsic goals related to social inclusion or the needs of the economy.
 - In particular, competition for students, driven by a need to secure revenue streams, has come to shape the actions of many universities.
 - They make greater use of unconditional offers and contextual offers and accept more students through clearing and adjustment.
 - This transformation in student recruitment has occurred with relatively little public discussion.
- Decisions made by universities are increasingly perceived as confusing and opaque.
 - Teachers no longer feel confident in offering pupils advice about their next move.

- Unconditional offers can demotivate pupils before their final exams and, when given in significant numbers, can disadvantage a cohort as a whole.
- Contextual offers – **often simply lower entry criteria dependent upon an applicant’s postcode** – are a crude mechanism for promoting equal opportunity and can create a perception of unfairness.
- There is no correct number of HE students, and universities are autonomous institutions; however, there are growing tensions between universities, schools and sixth form colleges, which are often acting in opposition to one another.
 - Universities need to act in ways that support the practice of schools and colleges, and it is particularly vital that questions are asked about provision and opportunities for those who do not go on to university.
- Recommendations:
 - Move to a post-qualifications admissions system
 - Stop the routine use of unconditional offers
 - Remove predicted grades from the application process
 - Stop the routine use of contextual offers; rather, higher education institutions (HEIs) should support the education of disadvantaged young people through a close and deep network of partner schools
 - **End HE as a ‘rite of passage’**; A levels should be worthwhile qualifications in their own right, and schools should promote a wide range of alternative routes.

England’s Office for Students (OfS) published [*Preparing for degree study: Analysis of Access to Higher Education Diplomas and integrated foundation year courses*](#).

- Numbers taking Access to HE Diplomas (Access courses) have fallen by 18% since 2012/13 to around 30,400; numbers taking integrated foundation years have almost tripled to 30,000.
- There are similarities between the courses, but:
 - the wider geographical spread of Access courses means they may be suitable for a wider range of potential HE students and enable progression to many different courses
 - foundation years may be more likely to attract students with a higher level of commitment to taking degree-level study at a specific provider.
- Key findings:
 - 40% of Access students held a qualification equivalent to A level, compared with 80% of foundation year students.
 - Most Access course entrants were over 21, whereas most of those starting foundation years were 20 or younger.
 - Access courses were almost entirely taught at FE colleges; foundation years were predominantly taught at HEIs, meaning students usually had to travel further.
 - ‘Subjects allied to medicine’ was the most common subject area for entrants to Access courses; ‘business and administrative studies’ was the most common for foundation years.
 - 62% of students progressed to a degree programme in the four years following an Access course compared with 79% after a foundation year; these figures have remained broadly stable over time.
 - Students from both courses sometimes started a degree course after two or more years, rather than immediately.
 - Students who started without A level or equivalent qualifications had a lower rate of progression to degree-level study (Access – 55%; foundation – 61%), than those with A levels (71%/89%).
 - 63% of those who progressed after a foundation year completed their degree within four years, compared with 53% of those progressing from an Access course.
 - Of those who gained a degree, 70% of Access course students achieved first- or upper second-class degrees, compared with 67% of foundation year students.

Universities UK International (UUKi) published [*Gone International: Rising Aspirations – Report on the 2016–17 graduating cohort*](#), its fifth report on student mobility.

- 18,510 students (7.8%) had at least one period abroad as part of their undergraduate first degree, compared to 16,580 (7.2%) in 2015/16.

- Students from Northern Ireland were the most mobile (13.2%), followed by Scotland (11.6%), Wales (9.7%) and England (7.2%).
- 9.5% of students from more advantaged socioeconomic backgrounds were mobile, compared to 5.6% of students from less advantaged backgrounds.
 - The rate for white students was 8.3% compared to 5.5% for Asian students and 5.1% for black students.
- Language graduates had the highest mobility rate at 33.9%, rising to 87.1% if linguistics students were excluded.
 - The next highest rates were for combined subjects (32.8%), medicine and dentistry (30.8%) and veterinary science (17.2%).
 - The lowest rates were for computer science (2.1%), education (2.2%) and subjects allied to medicine (2.7%).
- 50.8% of all mobility activities took place in the EU, 18.5% in North America and 12.3% in Asia.
 - 35.9% of mobility from the UK was to three countries: France (12.6%), Spain (11.8%) and the USA (11.5%).
 - The most frequent non-EU destinations were the USA, Australia (5.4%) and Canada (3.9%).

UUKi's Go International: Stand Out campaign aims to help the sector double the percentage of UK-domiciled, full-time, first degree undergraduates who undertake an international placement by 2020.

See also pp.11–12 for two items on the impact of Erasmus+ on students, staff and HEIs.

The Higher Education Policy Institute (HEPI) and Advance HE published [Student Academic Experience Survey 2019](#), their 14th annual survey, which received 14,072 responses.

- The percentage saying their course offered good value for money increased by 3.0ppt for the second year in row, to 41%.
 - By nation: England 39% (+4.0ppt); Scotland 63% (+3.0ppt); Northern Ireland 38% (+2.0ppt, reversing **last year's decline**); Wales 47% (slight fall).
 - Students from other EU countries 44% (-3.0ppt).
 - By institution type: specialist 49% (+11.0ppt); Russell Group 45% (+3.0ppt); pre-92 40% (+3.0ppt); post-92 38% (+3.0ppt).
- Teaching quality is one of the main aspects that drive a positive experience, and this has increased across the board.
- 64% were happy with the choice they had made (-1.0ppt); 12% would rather have taken the same course at a different institution; 4% would rather have done an apprenticeship (a new option in the questionnaire).
- For the first time, students were asked about the idea of a two-year accelerated degree, with associated fee savings.
 - Positive/very positive 43%; neutral 24%; negative/very negative 29%.
 - The positive figure was higher for those aged 26+ (55%), those employed more than 10 hours per week (50%), and those travelling 10 miles or more to campus (53%).

These are just a few of the findings from this very detailed report.

HEPI published [Measuring well-being in higher education](#), a policy note.

- Measuring personal wellbeing has been debated in the UK for well over a decade, with the initial focus coming from economists who questioned whether there were better ways than assessing GDP to track progress in society.
 - This led to the Office for National Statistics (ONS) developing and implementing the current UK measure of wellbeing, initially used in the 2011 Annual Population Survey.
- Since 2014, HEPI and the Higher Education Academy/Advance HE have been building a time series on wellbeing among full-time undergraduate students via the Student Academic Experience Survey.
 - Other organisations have also begun to produce student data, including the Wonkhe/Trendence **research on student loneliness**, HESA's new survey of recent graduates (**Graduate Outcomes**) and the forthcoming HEPI/Unite Students' polling of applicants and students.

- However, understanding of wellbeing across the sector, the impact of HE on this and how the sector can best respond remain limited.

Prospects Luminate published [Motivations and concerns of potential postgraduates](#), results from a survey of 5,000 students thinking of taking postgraduate study.

- Postgraduate loans have been in place in England since 2016, but prospective students still seem unsure about how to fund a postgraduate course, with 54% saying information was difficult to find.
- 33% wanted to undertake further study to improve their career prospects and 25% as a requirement for a particular career; 30% were motivated by their enjoyment of the subject; only 4% were motivated by a higher salary.
- 67% were concerned about the cost of further study, while 49% worried about juggling other commitments around studying; concerns about the course itself were mentioned by less than 20%.
- 60% were prepared to relocate, with males more likely to consider this (64%) than females (57%); however, only 43% actually move to a different region for masters-level study.

ESRI published [Attracting and retaining international higher education students: Ireland](#), part of an EU-wide study funded by the European Commission and Department of Justice & Equality.

- The number of non-European Economic Area (EEA) migrants coming to the RoI to study increased by 45% between 2013 and 2017; around 13,500 first residence permits were issued to HE students in 2017.
 - Students form the largest category of non-EEA migrants arriving in the RoI each year.
 - Between 2013 and 2016 China was the top home country of full-time non-EEA students in state-funded HEIs, followed by Malaysia, USA, Canada, India and Saudi Arabia.
 - The majority of non-EEA students were studying health & welfare courses (31% of all full-time non-EEA enrolments).
- However, non-EEA students reported difficulties with immigration registration delays and accessing employment and accommodation; this could affect the RoI's attractiveness as a place to study and stay for post-study work.

HIGHER EDUCATION: WIDENING PARTICIPATION

Durham University Evidence Centre for Education published [Using contextualised admissions to widen access to higher education: a guide to the evidence base](#), summarising the findings and implications of an Economic & Social Research Council-funded research project.

- The OfS has set ambitious new widening access targets, which aim to eliminate the socioeconomic gap in access to higher-tariff universities in England within a generation.
 - The aim is for the ratio of young entrants from areas with the highest and lowest rates of young participation in HE to fall from around 5:1, to 3:1 by 2024/25 and to 1:1 by 2038/39.
 - A major barrier to achieving the targets is that young people from disadvantaged backgrounds are substantially less likely than their more advantaged peers to achieve the high academic entry requirements.
 - Higher-tariff providers will therefore need to set much lower academic entry requirements for socioeconomically disadvantaged learners if they are to achieve the targets.
- Evidence indicates that a contextualised approach to admissions, involving the reduction of academic entry requirements for disadvantaged learners, is arithmetically necessary.
 - A contextualised approach also represents a means of achieving fairer as well as wider access.
 - All Scottish universities have recently been mandated to put in place separate minimum entry requirements for contextually disadvantaged applicants.
- The potential risks involved in reducing entry requirements are a modest reduction in rates of degree completion and a more substantial reduction in rates of higher degree classifications awarded.
 - Both risks can be reduced by providing better support for contextually disadvantaged learners to fulfil their potential, using the most effective learning and teaching practices and interventions.

- HE providers should avoid using area-level measures such as POLAR to determine who is contextually disadvantaged; the most valid and reliable indicators are officially verifiable individual-level measures, such as free school meal status or lower household income.

Universities UK (UUK) and the National Union of Students (NUS) published [Black, Asian and minority ethnic student attainment at UK universities: #closingthegap](#), showing how structural inequality has a profound effect on achievement.

- Of the disparities that exist in HE, the gap between the likelihood of white students and students from black, Asian and minority ethnic (BAME) backgrounds getting a first/upper second is among the most stark – 13% among 2017/18 graduates.
 - Many universities have made a considerable effort to address this gap, but eliminating such differentials and transforming the experience of BAME students will require sustained work from across the sector.
- The five most significant steps needed are:
 - **Strong leadership:** university leaders and senior managers need to demonstrate their commitment and lead by example; a checklist is provided.
 - **Conversations about race and changing the culture:** universities and students need to create more opportunities to talk directly about race, racism and the attainment gap; a change in culture is needed alongside a clear institutional message that issues of race are embedded within wider strategic goals.
 - **Racially diverse and inclusive environments:** leadership teams are not representative of the student body and some curricula **do not reflect minority groups’ experiences**; BAME students need to have a good sense of belonging.
 - **Evidence and data analysis:** universities need to take a more scientific approach to tackling the attainment gap in order to inform discussions between leaders, academics, practitioners and students.
 - **What works:** universities can work together to ensure that evidence is of high quality, and to share the evidence.

UUK also published a collection of [case studies](#).

The Centre for Excellence for Children’s Care & Protection (CELCIS) published [‘Being a student with care experience is very daunting’ Findings from a survey of care experienced students in Scottish colleges and universities](#) on behalf of the Scottish Funding Council.

- Key findings include:
 - Most respondents said they did not get help with their application to college or university; those students who had more help felt more included in the college or university community.
 - 45% reported housing difficulties, including having to move accommodation during holiday periods and a lack of practical support with these moves.
 - A much higher proportion of care-experienced students consider leaving their courses; reasons include academic expectations, financial strain, lack of support, feelings of not belonging and social isolation, and caring commitment.
 - Many students said they received attentive and sensitive support from institutions, and access to academic and wider opportunities which they feel they would not have had without attending college or university.
- Eight key learning points include:
 - Having reliable, consistent relationships with a trusted member of staff is very important.
 - The complexity that care-experienced students face in their personal lives can impact on their ability to access and sustain their studies.
 - Access to supportive services should be consistent, enduring and without discrimination.
 - Practical support, such as providing finance and accommodation, can be an important enabling factor for students accessing and sustaining their education.
 - **Those aged 26+ who had ‘aged out’ of formal support felt that continued access to practical, financial and emotional support, advice and guidance was very important.**
- 18 recommendations include those relating to provision of year-round accommodation, financial support and flexible study arrangements.

The Organisation for Economic Cooperation & Development (OECD) published [How does socio-economic status influence entry into tertiary education?](#)

- Growing evidence that a tertiary education is associated with better labour market and social outcomes has raised a number of questions around access and equity.
- Using parental education as a proxy for socioeconomic background, on average 53% of new tertiary entrants have tertiary-educated parents, compared with 35% of 18–24 year-olds in general.
 - The UK figure is slightly higher than the OECD average.
- Such inequalities don't just reflect barriers to entry, but also the accumulation of inequalities from earlier levels of education.
- Factors affecting transition from upper secondary to tertiary level include:
 - **Choice of upper secondary programme:** in many countries, students from potentially disadvantaged backgrounds are more likely to enrol in vocational upper secondary education, making them less likely to pursue tertiary education.
 - **Completing upper secondary education:** students with at least one tertiary-educated parent are more likely to complete, regardless of programme orientation.
 - **Learning outcomes and student aspirations:** on average, the most disadvantaged 15 year-olds were 2.8 times less likely than their most advantaged peers to attain baseline proficiency in science in the latest Programme for International Student Assessment (PISA); 66% of the most advantaged students expected to complete a university degree, compared with only 26% of the most disadvantaged students.

GRADUATES & GRADUATE EMPLOYMENT

Prospects Luminate published [Humanities academics' perceptions of graduate employability, the report of a small-scale, qualitative study at a post-92 English university.](#)

- Humanities students develop research and analytical skills, critical thinking skills and communication, and demonstrate empathy and creativity.
 - However, they can lack awareness of such skills and may struggle to understand their value in the workplace.
- Humanities students ask more career-related questions during university open days and begin to engage with employability activities at an earlier stage in their degree.
 - Some lecturers feel that earlier engagement with employability can adversely affect student performance and the overall student experience.
- There is less engagement with work **that isn't** assessed towards the final degree; this can affect employability activities.
 - Engagement with optional placement modules and sandwich-year placements is low, possibly because students struggle to identify a link between placements and their degree subject.
- More humanities students are now taking up postgraduate study, while around 25% of English graduates in the UK who took up further study enrolled in teacher training.
 - A career in teaching may be a major motivation for studying a humanities degree, and it is one of the few careers that allows humanities graduates to continue with their subject.
 - Some humanities lecturers believe that their students opt for postgraduate study as a way to delay making a decision about career options.

Prospects Luminate published [Exploring how student employability is understood from an institution's FE and HE cohorts](#), the report of a Higher Education Careers Services Unit funded project undertaken in 2017/18 at Writtle University College.

- HE students were more likely than their FE counterparts to consider the development of specific skills or attributes as a key element of employability; more HE students felt that part-time work or work experience developed employability.
- There were also many similarities in how employability is conceived and presented, e.g. all students and staff generally thought that employability was a shared responsibility and not something that should be 'done to' passive students.

- At present, employability-related research, reports, careers materials and tools are divided between HE and FE; bridging this gap and sharing resources would benefit both practitioners and students from these different education spheres.

IZA published [What Do Student Jobs on Graduate CVs Signal to Employers?](#)

- 242 human resource (HR) professionals were asked to evaluate five fictitious student profiles, and indicate to what extent they agreed with statements linked to four possible signals that could be inferred by the inclusion of student jobs in a CV.
 - The signals were: human capital, social capital, trainability and attitude.
- Findings include:
 - Student work experience increased the probability of being invited for a job interview and the probability of being hired for the job; however, this was only the case when student work was done during the summer only (not when it was combined with study during the academic year).
 - Any type of student work experience allows job candidates to signal to potential employers that they have a better work attitude, a greater sense of responsibility, more maturity, increased motivation and a larger social network.
 - However, student employment does not signal more knowledge, particularly not when the employment took place during term time.
 - Only work experience in line with **the student's** field of study gives a positive signal for increased skills and trainability.
- Job applicants with student work experience should benefit from highlighting how it has increased their (job-specific) knowledge.
 - Applicants who had jobs during the academic year should signal that their primary orientation was towards their studies rather than work.
 - Applicants without work experience should underscore different experiences that provided them with work attitude and social capital.

The National Centre for Entrepreneurship in Education (NCEE) published [Inspiring Entrepreneurship in Education: Enterprise and Entrepreneurship in Higher Education 2018](#), drawing on a survey of 62 heads of enterprise from UK universities.

- 75% said that their university had increased its entrepreneurship activity over the past three years.
 - However, policy-related activity had fallen significantly since 2012, with fewer institutions having an explicit entrepreneurship strategy or pro-vice-chancellor for enterprise.
 - There had been a drop in support for enterprise in local schools (from 57% to 32%) and local communities (from 73% to 44%).
 - 18% of responding institutions offered enterprise workshops specifically for ethnic minority students (+6ppt from 2012) and 29% for female students (+6ppt).
 - EU funding supported activity in 40% of institutions.
- Interest in enterprise activity among school students arriving at university had increased over the last three years, with social media a particularly strong driver.

Only one respondent was based at an HEI in Northern Ireland.

HIGHER EDUCATION: TEACHING, RESEARCH & INSTITUTIONS

The National Centre for Universities & Business (NCUB) published its 2019 [State of the Relationship](#) report, the sixth annual assessment of the health of collaborative partnerships, using data from 2016/17. [Note: figures in brackets relate to Northern Ireland.]

- Among the findings:
 - University interactions with SMEs were down by 13% (+62.1%) on the previous year, but the size of the average deal was up by 21.8% (-31.8%); interactions with large businesses were up by 1.6% (-20.2%), but the average value was down by 4.5% (+30.3%).
 - Universities registered an increase of 16.1% (over double) in granted patents; the total of 1,416 (46) patents exceeded the five-year average.
 - The number of spin-off companies that have survived for at least three years grew 4.0% to 1,072 (no change).

- Universities reported a 1.1% decrease (-1.3%) in industry income from knowledge exchange activities, excluding licencing, from £956m to £954m; this contraction is a continuation of that observed in 2016.
 - Innovate UK grants increased by 33.8% (-19.4%), although the average grant fell by 72.3% (-51.4%).
 - The share of investment in R&D from overseas sources increased 8.1% to £1.46b – with a 2.3% increase in the share of investment from business sources.
- 'Foreign investment trends speak to the continuing attraction of the UK as a place to realise R&D ambitions, at least in the immediate aftermath of the EU referendum. But the overall decrease in business investment is potentially concerning from the perspective of plans to increase investment in R&D to 2.4% of GDP by 2027.'*

The Centre for Global Higher Education published [Private providers of higher education in the UK: mapping the terrain](#).

- There are around 813 private providers of HE in the UK, up from 732 in 2014 and 674 in 2011.
 - 88% operate exclusively in England.
- 50% of those operating in 2014 had ceased to operate – at least as HE providers – three years later.
 - 165 were listed as dissolved; 70 had simply vanished; 128 were still in operation but no longer providing HE courses, or possibly never had.
- Providers range from a few large-scale colleges and private universities with 1,000+ enrolled students to small-scale providers offering courses in addition to their principal business.
 - 64% are for-profit enterprises; for-profit enterprises accounted for 61% of private providers in 2014, but 90% of those that had closed down by 2017.
- Around 50% offer Level 6 qualifications, often described as 'diplomas'; only 20% offer traditional bachelor's degrees, while many offer sub-degree qualifications such as HNCs and HNDs, or vocational postgraduate qualifications at Level 7.
 - 56% offer courses in business and administration, 20% in subjects allied to medicine and 14% in creative arts and design subjects.
- The official system of HE oversight is about to be restructured – for the first time both public and private providers will be subject to the same regulatory regime.
 - This is likely to include less than 20% of the current private providers in operation, although it will probably include the largest and most significant institutions.
 - Providers that lie outside the new framework will continue to remain 'an unknown quantity, unregistered and essentially unregulated'.

The British Council published [The shape of global higher education: international comparisons with Europe](#), its fourth such annual report.

- The report seeks to capture the impact of over 50 countries' national frameworks for: international student mobility; transnational education; academic mobility and research; and sustainable development.
 - Special attention is paid to national commitments to internationalisation of HE.
- Overall, global education is hugely competitive and most countries have increased their national support for internationalisation since the first report was published in 2016.
- Many countries have renewed or recently published international HE strategies; these are often accompanied by international student targets.
- There is a positive relationship between the inbound student mobility rate and the wealth of a country, as measured by GDP per capita.

British Council also provides an [interactive HE policy monitor](#), which provides details of 37 indicators across 43 countries/territories to identify areas of international HE that attract a high level of national support.

The European Commission published [Erasmus+ Higher Education Impact Study](#), conducted by CHE Consult and ICF Consulting.

- The study aimed to assess the impact of Erasmus+ on staff, students and HEIs.

- 2m students and staff had an Erasmus+ learning, training or teaching period abroad between 2014 and 2018; findings are based on responses from almost 77k of these participants.
- 80% of Erasmus+ graduates were employed within three months of graduation; 72% said their Erasmus+ experience helped them to gain their first job.
 - Almost 50% of Erasmus+ trainees were offered a job in the company where they trained.
- 84% of Erasmus+ graduates feel they have opportunities to grow professionally, compared to 78% of non-mobile graduates.
 - They are more satisfied with their earnings than students who did not participate in Erasmus+.
- Over 66% of Erasmus+ students and trainees gained career insights by studying or training abroad.
 - This allowed them to better orient their studies and training to match career ambitions, and led to 'happier careers' and expanded professional opportunities.
- 90% of Erasmus+ students said the programme improved their ability to collaborate with people from different cultures and were more positive about the role of the EU in society.
- Almost 80% of academics said their experience abroad led to the development of more modern and innovative teaching practices and curricula in their faculties.
- 90% of HEIs reported Erasmus+ to be very important or essential for them.

The European Commission published [Study on the impact of Erasmus+ Higher Education Partnerships and Knowledge Alliances at local, national and European levels on key Higher Education policy priorities](#), conducted by PPMI (Lithuania) and the Austrian Institute of Technology.

- The study looked at the impact of two types of Erasmus+ cooperation projects – HE Strategic Partnerships and Knowledge Alliances – and how they affected the modernisation of HE systems in Europe.
 - They led to an increase in quality, relevance, innovation and accessibility.
 - 90% of HEIs said Strategic Partnerships improved the quality and relevance of curricula or learning and teaching.
 - 80% feel better equipped to tackle skills mismatches in the labour market.
- Almost 66% of universities said Erasmus+ projects have increased social inclusion and non-discrimination in HE.
- Erasmus+ cooperation projects have enabled students, HE staff and other stakeholders to develop innovation and business skills.
 - 25% of projects contributed to strengthening entrepreneurial education and entrepreneurship.
 - Almost 33% resulted in startups and spin-off enterprises.

The OECD published [Science-industry knowledge exchange: A mapping of policy instruments and their interactions](#).

- The paper develops a conceptual framework for such mapping and offers insights on the policy mix across OECD countries.
- 21 types of policy instrument are identified that support industry–science knowledge transfer.
 - These include: grants for collaborative research; tax incentives for firms to purchase services; financial support for university spin-offs; mobility schemes for researchers; open access to research; and networking events or road-mapping exercises.
 - New forms are emerging, including: adapting knowledge exchange to the digital age (e.g. digital platforms); emphasising co-creation (e.g. joint labs); and connecting to the global knowledge base (e.g. attracting leading universities from abroad).
- The combination of several policy instruments may create synergies but also weaken the success of individual instruments, e.g. offering grants for collaborative projects without providing support for intellectual property management.
 - Funding may also be split across a large number of programmes, and coordination challenges may arise as a result of diverse funding options.
 - Interaction with other science and innovation and economic and social policies also needs consideration, e.g. labour market policies influence researcher mobility.

- There are significant differences across countries in the importance given to different policies in terms of budget, target groups, eligibility, time horizon and implementation.
- **When evaluating a country's policies**, the following factors need consideration:
 - Business sector: firm size, sector of activity, technological capability and ownership structure
 - Universities and research institutes: level of investment in research, basic/applied science orientation and governance systems
 - General macroeconomic conditions as they influence: the public resources available, private company strategies and researcher mobility.

LEADERSHIP & WORKFORCE

Advance HE published [Transformational Change in the Higher Education Sector: an inquiry into leadership practice](#) by University of Hertfordshire researchers, based on case studies from six UK universities. [An email address is required to access the full report.]

- The inquiry looked at practice of leadership team members in undertaking transformation projects in their institutions.
- Leaders were fully aware of the demands of the increased marketisation of the sector and accepted the need to adapt to survive; however rapid change often prompted anxiety arising from increased competition and higher turnover among their senior colleagues.
- Seven qualities and capabilities of senior managers were identified that might be under-represented in organisations undergoing transformational change:
 - The ability to live with contradictions, ambivalence and doubt
 - The development of practical judgement, including about when to intervene and when not to
 - The ability to take themselves seriously as managers and seek different ways of developing their capacities, their reflective abilities and critical self-awareness
 - Enhanced political judgement about how to work productively with power
 - The ability to work more skilfully in groups
 - Enhanced ability to endure the negative emotions that result from change
 - Being able to tell a good story of change, uncluttered with cliché and jargon, and recognise the community being addressed.

Advance HE published [Leadership Journeys: Tracking the challenge and impact of the Top Management Programme \[TMP\]](#), an interim report examining the effectiveness of this senior leadership development initiative by researchers at Ulster University Business School.

- TMP is UK HE's 'flagship' senior leadership development programme, with over 800 alumni including 70 current vice-chancellors.
- The study uses a 'story-based evaluation' technique– a qualitative 360-degree feedback process – to identify leadership themes of TMP alumni, rather than rating characteristics.
 - TMP: promotes introspection and learning about personal leadership style, enabling participants to think deeply about their strengths and weaknesses; stimulates innovative leadership behaviours; promotes strategic leadership; and enhances skills including communications and decision-making.

Advance HE published [Support for Current and Aspiring Women Leaders: an Exploration of UK Higher Education Institutions' Responses](#) by Robert Gordon University researchers.

- Findings are based on survey responses from 34 HEIs (including one in Northern Ireland), plus 1,241 responses from current and aspiring women leaders (2% from Northern Ireland).
- HEIs make various sources of support and resources available to support leadership aspirations:
 - For both female and male employees: 97% offer in-house development; 91% flexible time; 88% mentoring/coaching; 82% leadership programmes; 79% skills workshops; 71% sabbaticals; 68% collaborations with other HEIs; 62% funding; 59% time off; and 53% development forums.
 - 86% offer women-only initiatives; 68% offer Advance HE's Aurora programme.
- Over 50% of women surveyed had applied for a leadership programme; around 66% had applied for or sought promotion at least once; and 75% saw benefits to women-only programmes.

- Aspects such as ethnicity or nationality, disability, type of role, care responsibilities and marital status were perceived to have had an impact on women's career aspirations.

Advance HE published [Mindsets, Paths and Identities: the Experiences of Senior Black, Asian, and Minority Ethnic Leaders in Higher Education](#). [An email address is required to access the full report.]

- There is significant under-representation of BAME people at senior levels in HEIs and increasing interest in the experiences of those who have reached senior levels, including their views on what helped them to attain their positions.
- Conducive conditions and situations include:
 - Establishing networks as action groups to target initiatives for BAME progression
 - Offering 'reverse mentoring' schemes that pair non-BAME senior leaders with BAME leaders
 - Formal development of BAME staff as part of the institution's talent management strategy
 - Further developing institutional cultures that better represent equality, diversity and inclusion.

Advance HE published [Cracking the concrete ceiling: Tracking the impact of the Diversifying Leadership programme](#). [An email address is required to access the full report.]

- The Diversifying Leadership programme is aimed at early career academic or professional services staff from BAME backgrounds who are planning or aspire to move into a senior or leadership role.
- Findings suggest:
 - The programme is valued by participants and has achieved some positive improvements.
 - However, there was evidence of declines in BAME staff profiles and negative perceptions of some staff.

HEPI published [Pressure Vessels: The epidemic of poor mental health among higher education staff](#).

- Data was gathered from 59 UK HEIs on referrals to counselling and occupational health services.
 - Between 2009 and 2015: 50% increases in referrals to counselling were common, with increases of up to 316% at the University of Warwick; staff referrals to occupational health saw increases of up to 424% at the University of Kent.
 - There was a sharp increase in referrals after 2012 and implementation of the Browne Review funding arrangements [England]; pressure on staff to enhance the student experience may have resulted in work-related stress.
 - Referrals continue to escalate; for example, numbers of staff accessing counselling at De Montfort University went up by 304% in 2015/16.
- The following causes of poor mental health in HEIs are identified:
 - Excessive workloads and workload models that frequently under-count time necessary for fulfilling tasks.
 - Audit and metrics dominate the working lives of academics, driven by the need to comply with external nationwide audits, such as the Research Excellence and Teaching Excellence Frameworks.
 - Many academics are employed on a succession of precarious contracts that don't allow for career planning or advancement.
 - Performance management is linked to often unattainable short-term outcomes and expectations.

Advance HE published [Equality in colleges in Scotland: An analysis of the qualitative data of disabled staff experiences](#), based on new analysis of a 2018 staff survey.

- Disabled staff feel nervous about disclosing equality information due to a lack of follow-up support and the lack of reasonable adjustments being made as a result.
 - They feel overlooked for promotion and disadvantaged by restrictive working policies.
 - Mental health cases can be poorly handled.
- College mergers have created accessibility issues due to the need for travel between campuses and some new buildings lacking reasonable facilities.
- Recommendations include:
 - Taking positive action to recruit, develop and retain disabled staff

- Developing mental health and wellbeing policies
- Reviewing sickness absence policies and considering introducing broader types of leave, such as wellbeing days or disability-related leave.

The Workplace

APPRENTICESHIPS & TRAINEESHIPS

The Learning & Work (L&W) Institute published [*Best practice in the design and delivery of pre-apprenticeship programmes*](#), exploring practice across Europe through a literature review, interviews, study visits and a workshop.

- Pre-apprenticeship programmes are defined as those that are targeted at 16–24 year-olds, where at least one of the stated aims is progression to an apprenticeship.
- Effective programmes:
 - clearly communicate pre-apprenticeships as a route to employment
 - engage young people via outreach and online marketing, as well as promotional events and referrals from other agencies
 - explore applicants' expectations, aspirations, capabilities and skills
 - include preparatory activities prior to work experience placements, particularly as participants typically need support to develop their confidence and their employability skills
 - offer holistic support, tailored to needs, often including mentoring by tutors, staff with specialist backgrounds, employer representatives and/or peers (e.g. apprentices)
 - engage employers in order to facilitate effective work placements; ensure that the programme reflects labour market needs and enhances progression opportunities; inspire participants, particularly through encounters with individuals who share characteristics (e.g. disabilities or low attainment); and **help to overcome employers' negative stereotypes**
 - embed progression into every element, including: the assessment of young people; the selection of employers and the development of ongoing relationships with them; exit interviews; and maximising learning from placements.

England's Department for Education published [*Estimating the impact of Traineeships: Final Report*](#), an evaluation based on national data.

- The evaluation is part of a larger study that will also draw on surveys of trainees, employers and providers and provider case studies.
- Traineeships last from six weeks to six months; they are mainly for 16–24 year-olds qualified below Level 3 **who aren't in employment and have little work experience**.
 - They provide intensive work experience and work preparation training, as well as English and maths support, and can be tailored to the needs of the individual and local employers.
- 75% had a positive destination in the 12 months after starting their traineeship: 29% began an apprenticeship; 57% started further learning; 19% of the 16–18 year-olds and 53% of the 19–23 year-olds moved into a job.

RECRUITMENT

Cedefop (European Centre for the Development of Vocational Training) published [*The online job vacancy market in the EU: Driving forces and emerging trends*](#).

- The paper synthesises the findings from its research into online job vacancy (OJV) portals across all EU countries, and analyses:
 - the drivers influencing the use of such portals in recruitment and job search
 - the structure of online job markets
 - the role of public and private players
 - the factors shaping the format and content of OJVs.
- OJV portals are becoming more important, due to the economic revival and the resulting labour shortages, even for jobs that were traditionally promoted via other channels.

- Employers are shifting their focus from specifying qualifications, skills and personality traits, to providing more information on the company and working conditions – OJVs are becoming more appealing, detailed and diverse.
- The main actors in online job markets are public employment services (PES) – offering free services for employers and jobseekers – and private portals, which generally provide free access to jobseekers while charging employers.
 - The dynamics of the OJV portal landscape in any particular country will arise from the strength of the PES compared to private portals, alongside the overall consolidation of the market.
 - North European countries (Denmark, Finland and Sweden) have stronger PES systems in relatively concentrated markets.
 - Online job markets in larger western European countries, with larger and more diverse labour markets (Germany, Italy, Netherlands and the UK), are more fragmented; in some cases the role of the PES in the online job market is less pronounced.
- The use of OJVs for recruitment is influenced by: economic sector; occupation; type of job and skill level required; size and outreach of the company; geographic location; and operational context, such as the legal framework for regulating OJV content.
- OJVs possess considerable signalling power – soft skills and personality traits are becoming increasingly important, which is reflected in OJVs across sectors and occupations.
 - However, in selective labour markets such as Germany or France, formal qualifications, fields of study, the profession and work experience continue to be the main factors driving recruitment.
- Continuing labour shortages are likely to result in OJVs becoming the preferred means of recruitment.
 - With new media offering opportunities to interact electronically with jobseekers, standardisation and classification systems will be needed to manage large amounts of information.
 - Information on work environment and employment conditions is likely to become more prominent.
 - Trends towards focusing on skills and work attitudes rather than formal qualifications and other requirements are likely to continue.
- Other developments are also likely to continue impacting the landscape, including: further consolidation of the market; emergence of more elaborate matching services; the increased importance of social media; and recruitment apps on mobile devices.
- Eventually, OJV portals are expected to evolve towards communication platforms where employers present their companies in an all-encompassing manner.
 - Many employers will engage directly with jobseekers and tailor job offers to them.
 - There is already a trend in some countries to combine written information with other types of communication, such as videos.

TRAINING & DEVELOPMENT

Kineo (part of the City & Guilds Group) published [Learning Insights 2019 #1: Learning focused on Micro, Personal and Networks](#), findings from a survey of 6,500 employees and 1,300 employers in 13 countries, investigating workplace learning and development (L&D).

- Leaders identified a need for more ‘micro, personal and network’ approaches to govern workplace learning programmes.
- 79% of employees would like to see a bigger focus on training and people development in their workplace.
 - 39% fail to see a positive impact of L&D on their career progression, 29% on their performance, and 32% on their understanding of their organisation and sector.
 - Only 16% find learning offered at work very effective, 39% see no impact on career progression, and 32% see no improvement to their understanding of their organisation or sector.
- 85% say they have experienced problems accessing L&D activity in their workplace; not having enough time to get into training is a significant barrier, along with technical issues and design flaws.
- 59% say that current training content is not always exciting or engaging.
 - 38% want it to be more personalised and 26% would prefer more ‘bitesize’ content; 26% want a better blend of online and offline training.

- 66% had invested their personal time in learning, education or training activity, and 59% had sought online advice, guidance or e-learning solutions.
 - 71% would prefer to choose when and where they undertake training; 68% agree they would pick up skills faster if they had more direct control over the pace of workplace learning.
- Learning should: be focused, satisfy a clear need and have a short-term impact; enable people to access and engage with it in a way that works for them; and be engaging and help people to understand its relevance to work and its value to the sector.

The first of three reports, plus supporting guides, due to be published before the end of 2019.

The Centre for Economic Performance (CEP) published [Trade and Worker Deskilling](#) and a [Brexit Analysis](#) extract examining [How the post-Brexit pound has hurt Britain's workers](#).

- When the value of sterling plummeted immediately following the EU referendum in June 2016, this led to a fall in wages and training for workers employed in the most heavily hit sectors.
 - Businesses absorbed some of the increased costs of imports by lowering wages and investment in training.
 - Workers in industries that saw bigger increases in the price of intermediate imports experienced slower wage growth and reductions in job-related education and training.
 - The hardest-hit sectors were: finance, insurance and real estate; professional and scientific services; and information and communication.
- This provides evidence of a 'production complementarity between workers and intermediate imports' and demonstrates that changes in the cost of intermediate imports act as a driver of the impact of globalisation on worker welfare.
 - There are also growing concerns about poor productivity performance relating to skills and to patterns of wage stagnation in contemporary labour markets.
- This has implications for the future of work post-Brexit, as UK workers are facing reduced wages and future earning potential due to cutbacks in on-the-job training.

CEP published [Trainspotting: 'Good Jobs', Training and Skilled Immigration](#), exploring the impact of skilled immigration on the training and social mobility of native workers.

- From 2001 to 2018, training rates of UK-born workers:
 - declined while immigration rose strongly
 - declined significantly more in high-wage, non-traded goods sectors.
- There is evidence:
 - of different effects of skilled immigration across traded and non-traded sectors
 - that the employment of native UK workers in high-wage non-traded sectors has been negatively affected by skilled immigration.
- Skilled immigration may have a role in moving native workers away from jobs with training ('good jobs'); however it is unlikely to be a major driver of social mobility.

Cedefop published [Continuing vocational training in EU enterprises: Developments and challenges ahead](#), comparing the fifth round of the continuing vocational training survey (CVTS 5, 2015) to CVTS 4, 2010.

- There have been moderate but favourable increases in employer-sponsored CVT provision in the EU; 15 countries, including the UK, have seen an increase of more than 10%.
 - Training incidence – the share of enterprises providing training – reached 73% (+7ppt); training participation grew by 3.2ppt and intensity by 0.4 hours per 1,000 hours worked; total monetary expenditure was fairly stable.
- The training gap between large and small enterprises narrowed on all indicators, although considerable differences persist.
 - 95.3% of large enterprises provided staff training compared with 69.3% of small enterprises; participation was 47.7% in large enterprises compared with 30% in small enterprises; intensity was 7.4 hours per 1,000 worked compared with 4.4.
- 82% of those enterprises that didn't provide training said available qualifications, skills and competences matched current needs; 55% recruited new staff when they needed new skills; 33% pointed to the barriers of high workload and lack of staff time and 28% to high costs.

- The skills considered important for development in the near future were: technical/practical/job-specific (46%); customer handling (41%); team working (41%); problem solving (26%); management (25%); and general IT (21%).

The OECD published [Returns to different forms of job related training – Factoring in informal learning](#), a working paper.

- Formal and non-formal training are just the tip of the iceberg of the learning that occurs in workplaces – informal learning is far more important in incidence and intensity.
 - This, along with evidence of sizeable wage and productivity returns to informal learning, underscores the importance of improving the learning culture in the workplace.
- High performance work practices are shown to encourage informal learning and increase its returns, possibly through more opportunities to apply what has been learnt.
 - More could be done to foster this learning culture by encouraging innovative HR management practices.
- **While employers reap significant benefits from their workers’ engagement** in non-formal and informal learning, the skills that workers acquire are not easily recognised by other employers.
 - **This may weaken workers’ incentives to take up learning opportunities.**
 - It can also widen inequalities between those who have access to formal and non-formal training and those who learn primarily by doing their job.
 - Transparent, streamlined and widely-recognised certification mechanisms could improve the **visibility of workers’ human capital gains in the labour market, strengthen worker engagement** in learning and help facilitate labour mobility when necessary.
- Other findings include:
 - 70% of workers engaged in informal learning activities over a 12-month period, compared with 41% who engaged in non-formal training and just 8% who trained towards a formal qualification.
 - On average across the OECD, around 56% of workers learn at least once a week just by doing their job.
 - All things being equal, the chances of learning informally at work decrease with age and tenure, increase with educational attainment, and decrease with proficiency in literacy.
 - There is some evidence to support the idea that employers benefit from the training they provide more than workers do: the increase in value-added per hour worked associated with training is higher than the increase in wages.

IZA published [Training, Soft Skills and Productivity: Evidence from a Field Experiment](#).

- A training intervention was examined that aimed to boost leadership and communication skills among employees of a large Latin American retailer.
 - Relative to control group stores, the intervention increased daily sales by 10% in locations where only managers were trained and by 12.1% when both sales associates and managers received training.
 - The training was more effective in improving leadership than communication skills.
- Findings confirm that investing in soft-skills training can trigger productivity gains, with the training achieving positive effects on store- and individual-level productivity.
 - A well-targeted on-the-job-training intervention can positively impact workers’ performance levels.
 - Training and improving managers’ leadership skills not only increases their own sales but also has an indirect effect on the number of transactions and sales of untrained workers in the stores.

Nesta published [Motivations to Scale: How European entrepreneurs think about growth and finance](#) with Startup Europe Partnership, aiming to understand why few startups scale up.

- Key hurdles include the lack of a growth mindset, little awareness of finance options, and a lack of time and confidence to speak to investors.
- Growth-oriented entrepreneurs want to innovate, create value, have a positive impact on society and become dominant players.
 - However, they also need the skills to develop scalable business models and change roles as the business grows.

- Recommendations include:
 - Incorporating a 'mindset for growth' across all education sectors, to increase the pool of potential high-growth entrepreneurs.
 - Emphasising mindset training alongside existing business support programmes.
 - Improving and expanding existing resources, including finance hubs to offer tailored advice, matchmaking platforms and peer-to-peer learning initiatives.
 - Providing dedicated training to support growth-oriented entrepreneurs who failed previously to try again.

The Education Endowment Foundation published [Quality Assurance of Teachers' Continuing Professional Development \[CPD\]: Rapid evidence review](#) by Sheffield Institute of Education, including comparisons with other professions.

- In England, unlike a number of other countries, there is no system-wide process to quality assure the provision of CPD undertaken by teachers.
- The report looks at systems in other countries and regions including Scotland, Ontario, Japan, Shanghai, Singapore and New Zealand.
 - In Ontario and Scotland accreditation of CPD is undertaken by professional bodies.
- Systems for other professions are also examined, including dentistry, nursing and midwifery, surgery, veterinary practice and accountancy.

SKILLS POLICY

City & Guilds Group published [Sense & Instability 2019](#), its third major report on UK skills and education policy – the others were published in 2014 and 2016. [Note: although 'the UK' is referred to throughout, the focus is on England.]

- The analysis identifies significant gaps in the use of effective success measures in the design and delivery of a number of skills-based policies over the last 15 years.
- Lessons from several decades of skills policy implementation have not been learnt; programmes are not fit for purpose or delivering the right results for individuals, businesses and the economy.
- England's Department for Education does not have a value for money framework (unlike the Departments for Transport and International Development); value for money assessments are developed 'ad hoc', with the main focus on efficiency savings across schools and HE.
- A new independent body is needed to oversee the development and implementation of skills and education policy.
- The report calls for the Government to 'urgently rethink how skills and education policy' is designed and delivered; recommendations include:
 - Embedding success measures in skills programme design, consultation and delivery, including a thorough impact assessment process and clear intended outcomes and impact
 - Making better use of pilots to validate these measures and longitudinal impact studies to track outcomes
 - Developing a continuous improvement process within programme delivery and gathering lessons learnt for future reference
 - Developing a clear value for money framework for skills policy and an evidence base for the skills sector
 - Improving access to programmes for the most disadvantaged and hard-to-reach learner groups, such as single-parents, people with health and other conditions, ex-offenders and care leavers.

The RSA (Royal Society for the encouragement of Arts, Manufactures & Commerce), in partnership with WorldSkills UK and supported by the Further Education Trust for Leadership (FETL), published [Adopting global skills innovation for the UK](#).

- The paper reports on a seven-month project investigating inspiring examples of global innovation in technical and vocational education & training (TVET) and skills.
- Case studies from Switzerland, Shanghai, Russia and Singapore showcase the 'art of the possible'; although they have very different skills and economic systems, they have all had to respond to moments of crisis and opportunity.

- The following 'key success factors' will help UK policymakers and practitioners to think through and respond to the challenges they face:
 - Stakeholder-led, locally rooted governance
 - No dead ends
 - High quality, high status
 - Vision setting and movement building
 - Learn and innovate.

The Institute for Public Policy Research (IPPR) published [Measuring the benefits of integration: the value of tackling skills underutilisation](#).

- Well-qualified migrants are more likely than UK-born workers to be concentrated in relatively low-skilled jobs.
 - Only 2% of UK-born workers with degree-level qualifications are in low-skilled occupations, compared with 7% of EU-born workers and 4% of those born outside the EU.
- Reducing over-qualification among migrant workers to the levels among those who are UK born would increase annual economic output by approximately £7b.
- There is clearly an economic – as well as a moral and political – case, for investing in labour market integration; three priority investment areas are proposed:
 - **Language skills:** these are a key facilitator of labour market integration.
 - **Skills recognition:** the current system run by the UK National Recognition Information Centre (NARIC) has been criticised for being limited in scope and sometimes inaccurate; a Scottish pilot of more innovative approaches should be replicated in other parts of the UK.
 - **Local integration funds:** interventions are best targeted at a local level, and part of any additional spending on labour market integration should be managed by local authorities, prioritising skills matching.

Cedefop published [Matching skills: Inspiring policies for anticipating and matching skill needs, an information tool for policymakers](#).

- It showcases recently implemented, innovative policy instruments that use labour market information and anticipated skill needs to tackle unemployment, facilitate transitions to more appropriate jobs or make VET more responsive to future labour market developments.

Four UK instruments are included: Employer Ownership Pilot; Jobcentre Plus Support for Schools; sector-based work academies; and UKCES Employer Investment Fund.

Cedefop published the [2018 European Skills Index](#), offering a single measure of performance for skills systems.

- The Czech Republic heads the index (75.5/100); Spain is last (22.8); the UK is 19th (51.5).
- The index comprises three pillars, each with two 'sub-pillars'; the UK's pillar rankings are:
 - **Skills development** 15th: basic education 19th; training and other education 11th
 - **Skills activation** 8th: transition to work 16th; labour market participation 5th
 - **Skills matching** 24th: skills utilisation 20th; skills mismatch 24th.

Cedefop published [Vocational Education & Training in Europe: United Kingdom](#), part of a series prepared by its ReferNet network, of which the UK is currently a member.

- It provides a useful summary of VET and its role within the country's overall education and training system from a lifelong learning perspective, as well as its relevance to and interaction with the labour market.

A full set of country reports can be found [here](#).

Cedefop published [Qualifications Frameworks in Europe: 2018 Developments](#), a briefing note.

- 39 European countries are currently at different stages of developing 43 national qualifications frameworks (NQFs).
 - 17 have reached an early operational stage, with countries laying the groundwork for their NQFs, redesigning their qualifications based on learning outcomes and gradually populating their frameworks.

- 21 NQFs have reached advanced operational status and become an integrated part of national education and training systems, based on learning outcomes.
- 35 countries have formally linked their NQF to the European Qualifications Framework (EQF); the remaining four are expected to follow in 2019.
- European countries tend to use their frameworks to create comprehensive maps of qualifications in all sectors (VET, HE, general education and adult learning).
 - Many are being opened up to include qualifications awarded outside formal education and to help validate non-formally and informally acquired skills and competences – crucial to policies fostering lifelong learning and progression through different pathways.
- The oldest frameworks in Europe are from the RoI, France, Scotland and Wales, where they have become permanent features of national systems, underpinning all education and training policies and integrating all types of qualifications as well as non-formal and informal learning.
- To be of real value to citizens, frameworks need to become more visible; some countries have taken steps to promote awareness of their NQFs.
 - For example, the RoI has carried out campaigns targeted at providers and guidance professionals who, in turn, promote awareness among learners and other end users; a 2019 communication campaign will focus on awarding bodies, researchers, legislators and social partners.

The OECD published [OECD Skills Strategy 2019: Skills to Shape a Better Future](#), an updated version which includes a number of key changes.

- The revised strategy responds to the 'megatrends' that are having and will have a significant impact on skills needs: digitalisation, globalisation, demographics and migration.
 - A 'paradigm shift' is needed in skills policies to ensure people can be equipped with higher levels of skills and with new sets of horizontal skills.
 - In addition, traditional front-loaded education systems need to evolve into lifelong learning models, so that adults can adapt to a rapidly changing landscape; this requires a redesign of skills systems.
- There is a stronger emphasis on a whole-of-government and whole-of-society approach.
 - The major factor limiting the impact of skills policies is the 'silo' approach: the complexity of skills systems requires that policies from different sectors – education, labour, industry, economy, tax, etc. – are well aligned and the trade-offs identified.
- There is a new component: strengthening the governance of skills systems.
 - The development of lifelong learning systems requires the participation of many actors including different ministries, levels of government (central, regional and local) and stakeholders (such as employers, unions and private providers).
 - Governance refers to: the way in which responsibilities are shared and coordinated between all the relevant actors; the way in which they contribute to efficient funding; and the development of information systems that help identify stakeholder roles, resources available, policies to be adopted and policy impact.

The OECD published [Occupational mobility, skills and training needs](#), investigating how education and training policies can help workers move to new, quality occupations, and the training needed to help those whose jobs are at high risk of automation.

- Most occupations have relatively similar cognitive skills requirements, task-based skills and knowledge areas to other occupations, **and therefore only need 'small' (re)training** (i.e. up to six months).
 - However, only around 50% of occupations offer transitions that are acceptable in that they don't entail a large drop in wages or a significant underuse or loss of human capital.
 - It is particularly hard to find acceptable transitions for professionals and technicians.
- **If workers can undertake 'moderate' (re)training** (i.e. up to one year), almost 90% of occupations have transitions that could be acceptable both for the individual and the economy.
- The relationship between the number of acceptable transitions that can be achieved through training and the skill level of occupations is bell-shaped:
 - Low-skilled occupations tend to have relatively fewer acceptable transitions as most other occupations involve higher cognitive or task-based skills requirements.

- High-skilled occupations also have a lower number of acceptable transitions because many possible transitions would entail important wage decreases or skills excesses.
- The analysis supports the idea that countries need to invest in education and training to ensure that those at risk of losing their jobs due to automation can find new work.
 - Indeed, if workers need to move into occupations that are at low or medium risk of automation, most acceptable transitions require important upskilling or (re)training efforts.
- Ten occupations are identified as being in a particularly critical situation, as they are at high risk of automation and appear to require a substantive training effort to move to low- or medium-risk occupations.
 - They account for on average 1–6% of employment depending on the country considered.
- For occupations at high risk of automation, upskilling in cognitive skills needs to be combined with training in non-cognitive skills such as management and communications as well as self-organisation; upskilling in ICT and advanced numeracy skills is also important.
- Overall, the findings suggest that:
 - There is a need to rethink education and training programmes aimed at cost-effectively helping workers move away from occupations at risk of automation.
 - Those in greater need of support are also those who receive less of it, with workers in occupations at high risk of automation appearing less likely to participate in on-the-job training.
 - Employers mainly provide training in job-specific skills and only a very small share of workers go back to formal education in most countries.

SKILLS GAPS & SHORTAGES

The Edge Foundation published [Skills Shortages in the UK Economy](#), its fourth such bulletin, gathering key data from a range of recent publications:

- *Joint Dialogue – How are schools developing real employability skills?* (Education and Employers, Edge and the National Education Union)
- *Over-skilled and underused: Investigating the untapped potential of UK skills* (Chartered Institute of Personnel & Development (CIPD))
- *Good work in an age of radical technologies* (RSA)
- *The Future of Jobs Report 2018* (World Economic Forum).

It also contains a spotlight on the hospitality industry, including two case studies.

CVER published [The Changing Demand for Skills in the UK](#), drawing on the US O*NET (Occupational Information Network) system to construct a database of occupational skills profiles.

- The profiles use three indices: analytical/cognitive; interpersonal; and physical/manual.
- Between 2002 and 2016, the use of analytical skills and interpersonal skills increased and physical skills declined.
 - Most of the change was within, rather than between, occupations, suggesting that the changes were pervasive throughout employment.
- The analytical approach provides a much more detailed depiction of skills than is available through more conventional measures such as qualifications or occupation classification.
 - Given the inherent weaknesses in these standard proxies, the methodology has the potential to substantially advance understanding and knowledge of the nature of skills demand in the UK.

The IPPR Centre for Economic Justice published [The UK in the global economy](#), stating that the UK faces 'serious risks of instability and potential recession' and the 'broken' economic model needs to change.

- Skills-related issues highlighted include:
 - Off-shoring and automation are catalysing the hollowing-out of mid-skilled jobs.
 - Low-skilled workers are most likely to be affected by automation; skills systems need to be proactive in ensuring displaced workers can find new jobs.

- How automation is handled could either result in more gender-equal futures or deepen gender gaps.
- Creativity, communication and caring skills are likely to be valued in the future economy.

Cedefop published [The Skills Employers Want!](#), a briefing note on its pan-European system for collecting information from job adverts and turning it into skills intelligence.

- The share of vacancies published online in the EU ranges from around 50% in Greece, Portugal and Romania to close to 100% in Estonia, Finland and Sweden.
- Since mid-2018, Cedefop's online job vacancies data retrieval system has collected around 32m unique vacancy postings in the Czech Republic, Germany, Spain, France, RoI, Italy and UK – labour markets that equal around two-thirds of EU employment.
- It is too early for detailed results, but there are some insights as to the skills employers seek.
 - The top three occupations in demand are software developers, sales assistants and freight handlers, at almost 3m job vacancies.
 - Teamwork and adapting to change are the most crucial skills in these three occupations and beyond.
 - Dealing with change in modern workplaces is a skill demanded in around 75% of vacancies analysed.
 - When employers struggle to find the staff they need, many look beyond national borders; in the RoI 25% of jobs posted online are addressed to job seekers abroad.

Cedefop also published a [booklet](#) presenting the key features of their online job vacancy data-gathering system. See the item on p.15 on OJV portals.

IZA published [Skill Shortages and Skill Mismatch in Europe: A Review of the Literature](#).

- Different approaches to measuring skill mismatch produce substantially different results.
 - Measures relying on self-reported mismatch produce a much lower share of well-matched individuals than statistical measures that compare individual skills with average skills in an occupation.
- Employers and managers are likely to have more accurate information than employees about skill requirements.
 - Skills shortage indicators derived from employer surveys need to be complemented by indirect measures of shortages in specific occupations, including price measures (wage growth), volume measures (employment growth, vacancy rates) and work intensity measures (incidence of overtime).
- Skill mismatch in Europe is countercyclical – during economic recessions skilled people are willing to take up jobs with lower skill requirements.
- In the long term, the adoption of new technologies creates demands for new skills that are not immediately available in the labour market, giving rise to skill shortages until the education system and employer training can meet the new skill requirements.
 - The importance of these shortages and the length of the adjustment process can be exacerbated if wages and working conditions fail to provide adequate signals of relative scarcity.
- Skill shortages and mismatch are costly to individuals, business and society because they negatively affect earnings, productivity, innovation and productivity growth.
- The responsibility for developing the skills needed should fall to job seekers, schools and employers; persistent skill shortages not solved by market mechanisms can be addressed to some extent by government policies.

The OECD published [What is happening to middle-skill workers?](#), a working paper.

- Middle-skill jobs were held by workers without a tertiary degree; they were also dominated by men and most likely to be in manufacturing.
- From the mid-1990s to 2014–16, the share of middle-skill occupations (truck drivers and machine operators for men, cashiers and secretaries for women) declined by over 11ppt.
 - This compares to growth of 8.6ppt in high-skill occupations and 3.0ppt in low-skill occupations.
 - The crisis accelerated the decline and young workers bore the brunt of the adjustment.

- Workers without a tertiary degree are increasingly working in low-skill jobs, which have substantially less job stability and are more likely to be on fixed-term contracts, part-time and poorly paid.

SECTOR-SPECIFIC SKILLS

The Open University (OU) published [Breaking Barriers to Nursing](#), analysis of the key factors contributing to the UK's shortage of nurses. [An email address is required to access the full report.]

- An extra 10,000 nurses could be fully qualified in ten years' time if all places to study nursing in the UK were filled each year, thus meeting 13% of the deficit currently forecast.
 - 6% of places to study nursing are unfilled.
 - 24% of students on average drop out before completing their course.
 - 32% of those currently studying are unsure of whether they still want to become a nurse.
- Barriers perceived by prospective students include study cost, travel, working hours and pressure, and entry requirements.
 - Of those for whom cost was the main factor, 40% said they would have gone on to become a nurse if they could work while studying, and 77% of those currently studying would have been interested in a degree apprenticeship.
 - Scottish universities generally have lower UCAS entry requirements than those in England.
- Recommendations include:
 - Increasing flexibility of courses via more technology-enabled learning
 - Widening access by removing unnecessary entry requirements and introducing new more flexible routes
 - Enabling nurses to earn while they learn
 - Promoting positive nursing stories.

The Scottish Parliament Information Service (SPICe) published [Brexit and veterinary workforce pressures – A perfect storm?](#) highlighting the situation in Scotland and wider UK.

- The veterinary surgeon (vet) profession already faced recruitment and retention challenges before the EU referendum in 2016.
- UK vet schools do not currently have the capacity to provide the graduate numbers needed to ensure an adequate post-Brexit workforce.
 - In 2017 there were 22,286 vets working in the UK – 2,277 in Scotland, 808 in Northern Ireland.
 - In Scotland, non-UK EU nationals comprise 15% of the 2,551 vets currently practising, 34% of vets in government services and 75% of those in abattoirs; 14% qualified in a non-UK EU country.
 - There are seven vet schools in the UK – five in England, two in Scotland.
 - 22% of vets working in academia in the UK are non-UK EU nationals, in roles directly linked to providing education and training within the undergraduate vet degree; a reduction in migrant vets in academia could affect the ability to educate and train domestic vets and the quality of academic research.

Cedefop published [Skills for green jobs: 2018 update – European synthesis report](#).

- This updates a report originally published in 2011 and revised in 2017, and synthesises information from six 2018 country reports: Denmark, Germany, Estonia, Spain, France and the UK.
- Key conclusions:
 - Since 2010 countries have experienced different patterns in the development of green jobs and skills, and have defined them in different ways.
 - Green skills and green jobs tend to be dealt with as a part of different policies and strategies covering environmental as well as employment and skills issues.
 - Good coordination among these policy fields and relevant policies is necessary to ensure a comprehensive national approach.
 - Green skills are typically covered by general skills anticipation mechanisms, one-off studies, and sector-based and regional/local approaches; consequently, they tend to be dealt with ad hoc.
 - Continuing monitoring and evaluation of policies and/or activities relevant to green skills are rare.

- Little or no consideration has so far been given to gender balance in occupations affected by the greening of the economy, even where requisite data are available.

OPITO, the skills body for the energy industry, in partnership with Robert Gordon University's Oil & Gas Institute, published [UKCS \[UK Continental Shelf\] Workforce Dynamics: The Skills Landscape 2019 – 2025](#) a strategy to prepare the UK industry for future requirements.

- Technology advances, internationalisation and transition to a lower carbon future are accelerating changing skills' demands in the sector.
- Upskilling and reskilling needs are substantial as around 80% of the current workforce will still be working in the sector in 2025.
- Around 25,000 new workers will also be needed by 2025, 4,500 of these in roles that don't currently exist, e.g. in data science, automation and new materials.
- New training methods such as simulation and augmented reality are becoming the preferred learning methods.
- Four strategic components of the plan are to: retain, retrain, recruit and renew, with the aim of developing a flexible, multi-skilled, technology-enabled workforce.
 - A '[route map](#)' includes developing new education and training courses, technology focused apprenticeships, and initiatives that support future recruitment and skills diversity.

The Scottish Government published [New Housing and Future Construction Skills: Adapting and Modernising for Growth](#) by an independent, short-life working group set up in 2018.

- The industry is entering a period of transition as new construction technologies, processes, energy devices and smart systems enter into use; the sector has to involve all key stakeholders in planning for the future.
 - Future skills needs will include the use of digital processes, building information modelling, sensors and virtual systems.
- 40 recommendations are made under nine headings:
 - **Short-term skills pressures** – there is a need to increase the supply of bricklayers, joiners and decorators particularly in rural areas, and to develop skills courses for house building.
 - **Tracking future needs and skills supply** – develop an annual regional skills analysis for those in training, and establish a construction skills and professions council.
 - **Funding, investment and fairness** – industry needs greater clarity on the outcomes of their contributions to the apprenticeship levy.
 - **Public sector statutory skills pipelines** – investment is needed in graduate apprenticeship routes for building standards and planning officers.
 - **Offsite construction skills** – support the development of an offsite skills training academy.
 - **Upskilling and career pathways** – there is a need to upskill teachers and careers staff in schools and colleges about future jobs, career paths and opportunities.
 - **Supportive public sector policies** – continue to use public sector procurement to encourage skills development and carry out a skills impact analysis.
 - **Attracting future workforce** – improve diversity and gender balance by using role models and ambassadors; increase support for outreach from industry to schools; attract skills transfer from non-construction sectors, bringing new attributes for future technology needs; and promote new clean tech, multidiscipline and international careers.
 - **Enabling medium- and long-term skills** – map the future demands and skills supply requirements, and ensure that digital training is at the right stages and levels before progressing.

DIGITAL SKILLS

Lloyds Bank published [UK Consumer Digital Index 2019](#), the annual report benchmarking the digital capability of people and organisations in the UK. [The sample size for Northern Ireland was too small to enable separate figures to be provided in a number of cases.]

- The new UK [Essential Digital Skills framework](#) is included, with three progressive tiers: Foundation (7 tasks), Skills for Life (29 tasks) and Skills for Work (17 tasks).

- 54% of UK people use the internet for work (up 15% from 2018), however 53% do not have the Essential Digital Skills for Work.
 - 33% of the workforce lacks cybersecurity skills.
 - Employees from the manufacturing, construction, utilities and retail sectors are the least digitally skilled.
 - 61% of those earning over £25,000 have essential workplace skills compared to 25% of those earning less than £11,499.
 - 34% of employees say their workplace gives them digital skills support.
- 22% do not have Essential Digital Skills for Life – 36% of those who are unemployed.
 - Those with a disability are 35% less likely to have Essential Digital Skills for Life, but in the workplace they are equally skilled.
- Digital capability analysis has three 'behavioural segmentations': Digitally Disengaged, Digitally Competent and Digital First, where the latter individuals use multiple devices, shop and stream online and prefer to manage money digitally.
 - In Northern Ireland, 63% are Digital First (62% UK), 27% are Digitally Competent (25% UK) and 10% are Digitally Disengaged (12% UK).
 - Digital First people are 1.7 times more likely to have improved their job prospects, and 57% have improved their employability through being online.

The UK Department for Digital, Culture, Media & Sport (DCMS) published [No longer optional: Employer Demand for Digital Skills](#), exploring current demand in the UK job market by analysing millions of online job adverts.

- Demand can be understood in terms of eight common 'clusters' of skills that are often found together in job postings.
 - The vast majority of job adverts across the economy request the 'baseline' digital skills found in the Productivity Software cluster.
 - The other seven clusters are skills required within specific roles or sectors: Software & Programming; Networking Systems; Data Analysis; Digital Marketing; Digital Design; Customer Relationship Management Software; and Machining & Manufacturing Technology.
- Digital skills are required in at least 82% of online advertised openings, but the precise skills demanded are not uniform across the country.
- To maximise chances of success in the digital economy, job seekers must go beyond baseline digital skills and develop more specific skills such as computer-aided design for engineers or customer relational management software for sales professionals.
 - These specific digital skills are required in 28% of low-skill jobs, 56% of middle-skill jobs and 68% of high-skill jobs.
 - Specific digital skills commonly complement uniquely human skills such as design, writing or communication; entering a role that requires such skills can reduce the risk of automation by 59%.
- Roles that require digital skills pay 29% more per annum at all skill levels than roles that don't, with the differential increasing at higher levels.

As part of this work, the Warwick Institute for Employment Research published [What digital skills do adults need to succeed in the workplace now and in the next 10 years?](#), an evidence brief.

The OU published [The Open University: Bridging the Digital Divide](#), highlighting the extent and impact of digital skills gaps on organisations and employees in Great Britain. [An email address is required to access the full report.]

- 90% of organisations currently lack digital skills, particularly in emerging technologies such as artificial intelligence (AI) and cloud-based technologies.
 - Mid-level and advanced digital skills are in shortest supply.
 - 52% report that new developments are coming too quickly for them to keep up with the skills required.
- Organisations' skills gaps are having a severe impact on performance:

- 56% report negative impact on productivity and 47% on their ability to implement new time or cost saving technologies, and 50% expect profitability to be negatively affected in the next five years.
- 37% of workplace roles are expected to alter significantly in the next five years.
 - 18% of the current workforce believe they will have to change jobs at some point due to new technology and automation.
- 67% of 18–34 year-old employees say they want digital training, compared to 48% of all employees.
 - 16% think that receiving digital skills training could open up new opportunities in their careers.
 - Organisations have increased their training budgets by 13% to increase digital skills.
 - 41% of employers report increased productivity and 31% better engagement among those who have upskilled.
- 28% of employers are looking to recruit digitally skilled talent.
 - 50% believe that the pipeline from abroad could dry up post-Brexit.
- Although 78% believe it would be more sustainable to develop skills through training, they choose to hire new employees due to cost concerns.
 - 55% believe recruiting new workers is cheaper than investing in digital skills training.
 - **64% don't believe their organisation has plans to upskill** or retrain existing staff to resolve digital shortages.
- 85% of senior leaders recognise it will be necessary to move to a lifelong learning model with employees constantly developing new skills.
 - **10% of employers don't know how to develop a training strategy** and 14% don't know who should receive training.

The Confederation of British Industry (CBI) and Tata Consultancy Services published [*Delivering Skills for the New Economy: Understanding the digital skills needs of the UK.*](#)

- Technology is transforming business models, opportunities and skills needs across the economy; **digital skills are the catalyst for today's data-driven economy** and demand is set to jump across all sectors and in companies of all sizes.
- 95% of businesses **expect their digital skills needs to grow and 58% say they'll need significantly more digital skills** in the next five years.
 - Most are 'somewhat confident' they will be able to hire people with the skills they need over the next five years.
 - 93% are taking action to address their needs; however, almost 50% are 'fishing in the same pool' for talent by viewing external UK workers as their go-to solution.
 - 80% of businesses acknowledge that they have a role and responsibility to help train the UK workforce – they now need to get ready for a gear change in upskilling across the UK workforce.
- Businesses that are taking action to strengthen their digital skills ecosystem share five core characteristics:
 - They start with crafting a long-term digital vision
 - They make digital skills a company-wide initiative
 - They look to collaborate externally, for example with the supply chain, local SMEs and local economic partnerships
 - They inspire and support the next generation, for example extending relationships with schools and education providers and using apprenticeships as a route into digital roles
 - They harness existing talent, by looking for hidden skills in the workforce and retraining at work.
- The UK needs to ramp up business–government collaboration, with the Government taking action in the:
 - **short term** to increase coordination and minimise duplication in regional digital skills initiatives
 - **medium term** to build digital understanding and core skills into any retraining schemes
 - **long term** to plan to ensure that 100% of the workforce has basic digital skills by 2025, and identify the education and training changes needed to embed a sustained and world-leading digital skills pipeline.

The OECD published [Skills Outlook 2019: Thriving in a digital world](#).

- The digital divide is increasingly defined by the different ways in which people are able to use the internet and the benefits they derive from their online activities.
 - A good level of literacy, numeracy and problem-solving skills in technology-rich environments is the key to unlocking all the benefits of internet use.
- A small group of countries, including Belgium, Denmark, Finland, the Netherlands, New Zealand, Norway and Sweden, are ahead of other countries in their exposure to digitalisation.
 - Their populations are also well equipped with adequate skills and supported by effective lifelong learning systems that enable them to benefit from digitalisation.
- The use of technology can help school students develop skills for a digital future, foster innovative ways of teaching and mitigate school failure; however, the impact depends on how it is integrated in the classroom to support teaching and learning practices.
 - Open education and massive open online courses (MOOCs) offer new ways to acquire and diffuse knowledge, and develop skills throughout life; but they are more likely to be used by highly educated and skilled adults, so their potential could be further exploited.
- Countries can foster lifelong learning by addressing inequalities in learning opportunities throughout life, adapting the school curriculum to changing skills requirements and providing more effective training to teachers.
 - They also need to ensure that adult education and training systems can respond to labour market changes, and adapt systems of recognition and certification of skills to ever-evolving skills needs.
- Policies also need to mitigate the concentration of benefits in cities and high-tech regions, although there are signs that some firms are using digital technologies to locate outside high-tech regions.
 - New technologies can mitigate inequalities due to an absence of high-quality teachers, a lack of training opportunities or a lack of access to sources of information; however, skills gaps emerge at an early age between children of different socioeconomic status and geographical locations.
- The need to foster lifelong learning and prevent geographical inequality requires a comprehensive approach to digital transformation that coordinates a range of skills and development policies and actors.

The report also includes analysis of the training needed to facilitate the transition to occupations less at risk of automation, which is set out in full in the OECD paper on occupational skills summarised on p.21.

AUTOMATION & ARTIFICIAL INTELLIGENCE

CIPD and PA Consulting published [People and machines: from hype to reality](#), looking at how automation and AI have affected jobs and organisations over recent years.

- 32% of 759 UK organisations surveyed had invested in AI and automation in the last five years, split evenly between equipment for cognitive tasks (22%) and for physical tasks (20%).
 - The most common reasons for investment were: to improve the quality of goods and services (38%); to deliver goods or services more cheaply (33%) or reduce overall costs (32%); and to keep up with competitors (32%) or the wider industry (32%).
- The most common reasons for not investing were: a lack of client/customer demand (ICT, legal sectors); not being aware of any AI/automation that would be of benefit (construction, hospitality & leisure); and being happy with the status quo (hospitality & leisure, transport, distribution).
- Among those using AI for physical tasks, 44% said that it had created jobs and 43% that it had eliminated/replaced jobs; for AI for cognitive tasks, the figures were 42% and 37% respectively.
 - AI for physical tasks had mainly affected semi-/unskilled work (25%), followed by professional/higher technical (21%) and manager/senior administrator/intermediate managerial (19%).
 - AI for cognitive tasks had mainly affected professional/higher technical (33%), followed by manager/senior administrator/intermediate managerial (21%) and clerical/junior managerial/professional/administrator (18%).
- AI/automation was having a net upskilling effect, with cognitive automation mainly creating high-skilled jobs and physical automation mainly replacing low-skilled jobs.
- AI in particular was shaping the content of jobs in specific ways; 61% of investing employers found that staff needed more skills and knowledge as a result.

- AI was also reshaping work for employees: 43% said they spent more time on learning new things (6% spent less time); 33% had more interesting tasks (6% had fewer); 50% saw a decrease in monotonous tasks (15% an increase); and 28% were completing more complex tasks (13% fewer).
- Organisations introducing AI were no more likely to increase training investment than those introducing other forms of technology.
 - Those introducing AI appeared as likely to engage in workforce planning (78%) as those investing in other forms of technology (81%).
- 40% of employers said that AI/automation had given employees greater control over their working hours and 51% over their job tasks.
 - 18% of employees had seen a positive effect on their physical health (negative: 8%); 25% on their mental health (negative: 15%).
- 52% of investing employers had seen the quality of goods/services improve, although this is similar to the impact of other digital technologies; differential impact was greatest for introducing a new product (29%) and increased revenue (34%).

The research doesn't give a breakdown of organisations or responses between the UK nations.

McKinsey Global Institute published [Tech for Good: Smoothing disruption, improving well-being](#), looking at the opportunities and challenges surrounding technology adoption and how technology could help mitigate negative outcomes.

- While technology adoption may be disruptive in the short term, especially to jobs and incomes, technology itself can help smooth those disruptions and pre-empt risks; for example:
 - Online training programmes and job-matching platforms can help workers improve skills and find employment.
 - Mobile payments and online marketplaces can reduce prices of goods and services.
 - Adaptive learning applications can better prepare young people for the labour market.
- Technology has been a significant contributor to welfare in Europe and the US in the past 40 years; however, it may only continue to be so if:
 - new frontier technology adoption is focused on innovation-led growth rather than purely on labour reduction and cost savings
 - **technology diffusion is actively accompanied by transition management that increases workers' mobility and equips them with new skills.**
- The potential boost to welfare (the sum of GDP and additional wellbeing components) could be between 0.5% and 1.0% per year in Europe and the US by 2030.
 - Other scenarios that pay less heed to managing transitions or boosting innovation could slow income growth, increase unemployment risk and lead to fewer improvements in leisure, health and longevity.
- The public sector can help drive innovation and improve welfare by:
 - supporting research and development
 - spurring technology adoption through procurement practices and progressive regulation
 - ensuring retraining and transition support for workers coping with workplace disruption.
- Among other steps, business can:
 - focus technology deployment on new products, services and markets
 - augment the skills of the workforce including with technological solutions
 - increase worker mobility by creating new career paths
 - prioritise technology solutions that simultaneously improve both the bottom line and outcomes for society.

McKinsey Global Institute published [The future of women at work: Transitions in the age of automation](#).

- In the automation age, women face new challenges overlaid onto long-established ones – technology adoption could displace millions from their jobs and many others will need to change the way they work.

- 40m–160m women across the world may need to move between occupations by 2030, often into higher-skilled roles.
- Women could find more productive, better paid work, but they face pervasive barriers – concerted and creative new solutions are needed to enable them to progress.
- In many countries, women account for more than 70% of workers in healthcare and social assistance, but less than 25% of machine operators and craft workers.
- In the ten countries studied, an average of 20–21% of both women and men could lose their jobs to automation by 2030; but rising demand for labour could imply around 20% more jobs for women and men, assuming their shares of sectors and occupations hold.
 - At least 50% of women’s job losses will be in service-oriented and clerical support occupations, while 40% of men’s will be in machine operation and craft work; women could gain jobs in healthcare, while men gain them in manufacturing.
 - Entirely new occupations will also be created, but approximately 60% of new US occupations have been in male-dominated fields.
- Both men and women will need to transition across occupations to the same extent, and new skills will be needed.
 - Mature economies will see growth in jobs requiring a college or advanced degree; emerging economies could see the many women working in subsistence agriculture having difficulty securing new work.
- More women than men work in lower-paid occupations which could see shrinking demand; enabling women to move up the skills ladder could prepare them for higher-paying jobs, however a glut of workers in lower-paid jobs could put pressure on wages.
- High priorities for policymakers and businesses include:
 - More investment in training and transitional support
 - More provision of childcare and safe and affordable transportation
 - Addressing stereotypes about occupations
 - **Boosting women’s access to mobile internet and digital skills in emerging economies**
 - Supporting women into STEM professions and entrepreneurship.

The Foundation for European Progressive Studies (FEPS) published [Platform Work in the UK 2016–2019](#), comparing the results of two surveys of over 2,200 UK 16–75 year-olds.

- The number of people working for online platforms at least once a week doubled from 4.7% of the adult population in 2016 to 9.6% in 2017.
- Platform workers **aren’t a distinct and separate labour market category**, as they can be found in all categories and form part of a diverse continuum of casual, precarious and on-call work.
 - For 71.5% platform work represents less than 50% of their income (67.1% in 2016).
 - 48.1% of people doing platform work say they are in full-time employment, with 10.7% saying they are self-employed.
 - Those making money from renting out rooms via online platforms rose from 8.2% to 18.7%; the sale of self-made products rose from 10% to 20.2%.
 - In 2016 10% of the adult working-age population reported using an app or website to be informed of new tasks, but by 2019 this had more than doubled to 21.0%; in each case, just under 50% of these workers were not platform workers.
- Men (16.5%) are somewhat more likely than women (14.1%) to do platform work.
- Platform workers are found in all age groups but 31.5% are aged 16–24; 28.7% are aged 25–34.
- Most people who do platform work report doing more than one type: 7.8% of the adult population do **online work**; 5.4% **provide services in other people’s homes**; 5.1% do driving and delivery work; and 3.5% run errands.
- 61% of the UK population have used platform services at some time; although wealthier households are more likely to do so, 51% of those earning less than £20,000 per year are platform customers, including many who are themselves platform workers.

Cedefop published a briefing note: [Artificial or Human Intelligence? Digitalisation and the future of jobs and skills: opportunities and risks](#).

- The paper **previews findings from its current 'CrowdLearn' study: an investigation into the skill needs and learning practices of 'crowd-workers'** – those earning income from work mediated by online labour platforms.
- A first typology has already been created of the most typical skills developed by individuals through crowd-work.
 - Skill formation is biased towards soft and entrepreneurial skills; crowd-workers tend to adopt self-regulated learning strategies, mostly using fast-paced and short online learning modules, with little support provided by platforms or platform clients.
 - Skills matching is also different – compared to standard labour markets, where publicly regulated **qualification systems play an important role, in the online labour market, platforms' proprietary data and matching algorithms dominate.**
- People, businesses and labour markets will have to adapt and fundamentally change the way they work in order to enable successful integration of new digital processes.
 - Workers across the board – from doctors to construction workers – will need to acquire new skills.
 - **Education and training will have to respond to people's upskilling and reskilling needs; it falls to policymakers to frame this vast ongoing transformation to ensure nobody is left behind.**
- Robot-compatible education is not primarily about digital skills but about blending an array of key competences (entrepreneurship, digital, STEM, languages, learning to learn) into curricula and learning methods, within comprehensive VET programmes and policy actions.

The briefing also summarises research on jobs impacted by automation and technological skills obsolescence and training.

THE FUTURE OF WORK

L&W Institute published [Tomorrow's World: Future of the labour market](#), the third report of its Youth Commission, looking at future changes in demographics and the labour market in England.

- The year-long Commission on Education & Employment Opportunities for Young People aims to find **ways to improve opportunities for England's 16–24 year-olds**; its first report identified five key challenges:
 - Better supporting 700,000 young people who are NEET
 - Increasing the number of young people qualified to at least Level 3
 - Improving attainment in literacy and numeracy and other basic skills
 - Creating a diversity of higher-level learning routes through life
 - Supporting job quality, career progression and economic security.
- In 1978 24% of people worked in manufacturing – today that figure is 8%.
 - The share of jobs in professional, scientific and technical activities has more than doubled to 9%, as has accommodation and food service activities (7%) and human health and social work activities (13%).
- Rising female participation in the labour market has helped cut the gender employment gap from 32ppt to 9ppt, though a significant gender pay gap and occupational segregation remain.
- Self-employment has risen in all sectors and grown particularly strongly in sectors such as agriculture, forestry and fishery, and construction.
 - With rising life expectancy, many young people will have careers spanning 50 years and an increasing number will live to the age of 100.
- The workforce is also likely to continue to become more diverse, with further increases in labour force participation by women and one in five working-age people – equating to some 1.5m young people – having a disability.
- Changes in sectors and occupations, coupled with changes within existing jobs, imply an increased demand for interpersonal and cognitive skills, customer and personal service, English language and management skills.
- Young people will need a rising level of skills and wider pool of skills to be able to enter and progress at work and adapt to change.

- A continuation of recent trends could mean that by 2030: 750,000 young people will be self-employed; 500,000 will worry that their hours could change unexpectedly; and 2.2m will be employed in jobs that require work at high speed most or all the time.

The OECD published [*The Future of Work: OECD Employment Outlook 2019*](#).

- The report presents new evidence on changes in job stability, underemployment and the share of well-paid jobs, and discusses the policy implications of these changes with respect to how technology, globalisation, population ageing and other megatrends are transforming the labour market in OECD countries.
- In summary:
 - The world of work is changing in response to technological progress, globalisation and ageing populations, while new organisational business models and evolving worker preferences are contributing to the emergence of new forms of work.
 - While some jobs and tasks are disappearing, others are emerging and employment has been growing; a key challenge lies in managing the transition towards new job opportunities.
 - Diversity in employment contracts can provide welcome flexibility, but there are important challenges in ensuring the quality of non-standard work.
 - The labour market outcomes of young people without tertiary education have worsened in most countries, raising significant policy challenges.
 - The emergence of new, non-standard forms of work poses challenges to employment regulations largely designed for permanent employees working for a single employer.
 - Those in non-standard forms of work must have access to labour and social protection, collective bargaining and lifelong learning.
 - Labour market regulations need to be extended and adapted to adequately protect workers, and to ensure that firms that respect these regulations are not disadvantaged.
 - Collective bargaining can help workers and companies adapt to the opportunities and challenges of a changing world of work, helping to shape new rights, regulate the use of new technologies or foster labour market security and adaptability.
 - There are low levels of organisation among workers, particularly non-standard workers; established trade unions are developing strategies to reach non-standard workers, while new **vehicles of workers' representation are also emerging.**
 - Effective adult learning can help prevent skills depreciation and facilitate transitions from declining jobs and sectors to those that are expanding; a major overhaul of adult learning programmes is needed to increase coverage, promote quality and increase participation among those who need training the most.
 - Training also needs to be of good quality and aligned to labour market needs in order to be effective, requiring adequate and sustainable funding and effective governance arrangements.
 - Accessing social protection can be especially difficult for workers in less secure forms of employment; key priorities include making protection more agile, ensuring that entitlements are portable across jobs and adapting support to evolving work patterns.

Skillnet Ireland published [*The Future of Work Now: The Digital Transformation of Customer Service and the Emergence of Ireland's Cx Professional*](#).

- The RoI is 'increasingly positioned as a customer solutions hub for the global customer experience (Cx) sector'.
 - The study examined the impact of digital transformation, particularly the recruitment and **development of the sector's employees.**
 - 32 business leaders and 58 Cx employees were surveyed in two large financial services and ICT multinationals.
- The role of Cx employees is undergoing significant transformation due to advancements in new technology.
 - Cx employees are engaged in desk-based, knowledge-intensive work, either for internal or external customers.
 - Developments in AI, robotic process automation (RPA), online self-service solutions and the general automation of Cx processes have an impact on employees' needs and experiences of work.

- Unlike call centre agents of the past, Cx employees are highly skilled knowledge-workers with a significant depth and breadth of service skill, which is transferable across sectors, organisations and business domains.
- The study identifies the need for 'skill dexterity' in Cx employees, where dexterity is 'a sharpness of mind, or skill, in thinking creatively, and understanding and expressing information/ideas, quickly and easily, moving swiftly and smoothly between tasks'.
- The Cx professional skill set is defined as:
 - Task skills (things we do) – data dexterity; interdisciplinary dexterity
 - Relational skills (working with other people) – customer centricity; open-market negotiator
 - Cognitive skills (how we think) – sensemaker; critical thinker; agile worker; agile learner
 - Contextual business knowledge and acumen (business strategy, culture, products, services etc.).
- Recommendations include:
 - HR leaders need to work with senior management to further develop new approaches to designing jobs, develop real-time learning opportunities and create positive work environments.
 - HR leaders need to develop the concept of skill dexterity and an understanding of the Cx employee skill set.
 - The skill set should inform further development of cross-agency, partnership-based strategies for Cx acquisition and development, e.g. university cooperative programmes, internships, upskilling and transition programmes, apprenticeships, vocational and postgraduate transition programmes.

EMPLOYMENT: RIGHTS, RESPONSIBILITIES & WAGES

CIPD published [UK Working Lives: Survey Report 2019 – The CIPD Job Quality index.](#)

- 5,000 workers were asked to consider their jobs against 'good work' criteria, grouped into seven dimensions.
 - For each, the UK's performance was also compared to that of 24 economies, using an appropriate available measure.
- **Work-life balance** based on how often job demands interfere with family life: the UK comes 24th.
 - 60% of UK employees work longer hours than they want; almost 25% overwork by 10+ hours a week; UK workers commute on average for 3 hours 45 minutes per week.
 - Formal flexible work arrangements are relatively common, but there is an unmet demand, in particular for flexitime, compressed hours and working from home.
- **Pay and benefits:** the UK comes 15th on 'earnings quality'.
 - Just under 50% of workers consider themselves to be paid appropriately, and over 33% do not.
 - Only 33% of those earning less than the Real Living Wage (RLW) are satisfied, rising to nearly 50% for those earning the RLW and above.
- **Contracts:** the UK is 8th for contractual stability measured by part-time and temporary employment.
 - More than 75% of UK workers have permanent employment, either full- or part-time.
 - 'Contingent' contracts, e.g. temporary, zero-hours and short-hours, are relatively uncommon.
- **Job design and the nature of work:** the UK comes 7th for skills, autonomy and development.
 - 33% of workers considers that they have too much work to complete in their job; 20% don't have the time to do their job in their allocated hours.
 - 37% believe they are over-skilled for their job, and 12% under-skilled.
 - Only 30% feel they have good prospects for career advancement.
 - 10% don't think their job even contributes to their organisation.
- **Relationships at work:** the UK is 12th for the quality of work relationships.
 - 30% report experiencing at least one form of bullying or harassment in the workplace in the last 12 months.
 - Women record more cases of being undermined or humiliated and of unwanted sexual attention or harassment; men report more physical threats and false allegations.
- **Voice and representation:** the UK is 10th in terms of union density.

- Employees who have union or non-union representation, on average, are positive about their representatives, although about 25% feel their performance is poor.
- 33% feel management doesn't keep them adequately informed of discussions and decisions.
- **Health and wellbeing:** the UK is 16th for job strain and stress.
 - Up to 25% report intense and stressful working conditions; 40% report having experienced some form of work-related health condition in the last 12 months.

CIPD also published [Flexible Working in the UK](#), reviewing the evidence on progress and how this compares with selected EU economies.

- 'Glacial' progress has resulted in the share of people with flexible working arrangements – as defined by the Labour Force Survey – increasing from 23% to 27% between 2005 and 2017.
 - Much of this modest rise is driven by the increase in zero-hours contracts, which in large part reflects better reporting rather than increased use.
 - The underlying trend for other forms is flat, while the share of people working part-time but without a flexible arrangement declined from 20% to 18%.
 - **These figures don't** include homeworkers – up from 5% to 6%.
 - There has been a significant increase in self-employment, which is seen as attractive because of its flexibility; however, it is unknown whether people are choosing self-employment in order to enjoy greater flexibility.
- Similarly, there has been no significant underlying shift towards more flexible working across the EU in the past 15 years and, **compared to other EU countries, the UK is 'good to middling'**.
 - 25% of employees work part-time compared with the EU average of 21% (51% in the Netherlands); 20% do some work at home, compared with 11% average (30% in the Netherlands).
- Some flexible working arrangements are more common in the UK than in most other EU countries: in 2018, 80% of UK respondents to an EU survey said they had used, or had access to, arrangements such as flexitime, part-time and working at home, compared with the EU average of 67%.
 - However, only 59% had used them in the UK (EU average 42%); Sweden scored highest, with 84% availability and 74% use.
- In the UK, 70% wanted flexitime, compared with 58% across the EU; 28% wanted part-time work (EU 25%) and 29% wanted homeworking (EU 20%).
 - Data appear to suggest a supply-side problem, with significantly more people wanting to work flexibly than can do so; however, there is some demand-side constraint, with take-up relatively low even when available.

IPPR published [Decent Work: Harnessing the power of local government](#), showing how local authorities (LAs) in the north of England are innovating to improve job quality in their area, using their power as major employers.

- LAs face considerable financial challenges, but those in the north of England have managed to implement policies, finding that costs are often not as high as they first appear and can be worked through, e.g.:
 - Manchester mitigated costs in various ways, such as by tying the living wage to upskilling, and adopting a case-by-case approach to procurement.
 - Salford aims to become a living wage city and reduced costs by aligning implementation within the council with overall reforms to council pay, and phasing it into procurement over time.
- Potential legal issues have been addressed: EU law explicitly permits the use of decent work considerations in procurement; UK law actively encourages such practices and even compels authorities to consider social value.
- 'Soft power' has been used in a number of ways, e.g.:
 - Liverpool City Region is developing an employment charter and uses decent work criteria in decision-making about which projects to fund from its £500m Strategic Investment Fund.
- There is more that LAs can do to improve working conditions in their local areas:
 - Use their direct control over business or premises
 - Embed decent work in planning

- Highlight to businesses what each party can expect of each other.

The report includes recommendations as well as a 'Councillors' Guide' with ten practical steps.

The Social Market Foundation published [Pay progression for low-paid workers: The role of tax and wage regulation](#), including proposals for how training might be incentivised.

- Successive governments have done much to increase the wage floor over the last 20 years; however, the UK still has a significant low pay problem.
 - About 20% of employees earn less than 66% of the median hourly wage, contributing to high levels of in-work poverty.
 - Many also remain stuck on low pay for considerable periods of time, with only 17% of low-paid workers in 2006 managing to consistently escape low pay by 2016.
- Three categories of factor drive limited pay and career progression in the UK:
 - **Within-firm:** jobs hierarchies; differential access to training; low levels of bargaining power
 - **Between-firm:** clusters of low-paying firms; variations in productivity and pay rises across industries; variations in pay growth by company size
 - **Individual:** part-time working; gender/ethnic/disability biases; low educational attainment/lack of training.
- A range of countries use tax incentives to promote wage and career progression, including by increasing the training of workers, often with a particular focus on SMEs.
 - Evidence from the UK and elsewhere demonstrates that such policies, while effective, can carry risks of deadweight.
 - The latter may be minimised if low-wage workers – who receive little training – are specifically targeted.
 - Behavioural trials should be run to assess which form of tax incentives would be most likely to achieve an increase in training opportunities for low-paid workers.
- Opportunities for low-paid workers to progress earnings and careers may also be particularly limited in labour markets, such as coastal communities, dominated by sectors that offer low-paid work and weak progression opportunities.
 - 'Economic Growth Areas' could be piloted, offering tax incentives to firms in higher-paying sectors to relocate or start a business.
 - It may be beneficial to complement any such policies with additional training and advice opportunities for low-paid workers to ensure that they benefit from opportunities.

L&W Institute published [The Step Up Pilot Year 3 Extension Report](#), analysis of a programme that tested new approaches to help low-paid workers in London to progress their careers.

- Step Up ran from 2015 to 2018, with voluntary sector organisations each designing a distinct support model or targeting a specific group; it provided support to 837 low-paid Londoners.
- As the pilot became more established, its outcomes improved.
 - 39% of participants (+6ppt on the two-year evaluation) improved their employment situation by taking on more or better work, increasing their earnings or improving their hours.
 - 20% increased their hourly rate by over 10% (+3ppt); 19% increased their rate to London Living Wage or above (+5ppt); 20% increased weekly earnings to the equivalent of 36 hours at the London Living Wage (+5ppt).
 - Other, non-financial outcomes included: 21% of those who were on temporary, zero-hours or part-time contracts moved onto a permanent contract; 13% gained a new qualification.
- Participants reported that their improved self-confidence, awareness of labour market processes and increased skills were continuing to impact their progression prospects.
 - Tailored support and a basket of 'progression' measures were important, as participants had a range of individual definitions of 'better' work.
 - The importance of support to address core barriers such as basic skills, job-search ability and confidence was highlighted – building capability and resilience was critical for sustainable results.
 - There was also a desire for light-touch support for workers across their working life, and a particular demand for improved access to accredited training plus high-quality careers advice.

The Institute for Employment Studies (IES) published [Progression in Employment](#) with support from JPMorgan Chase Foundation's [New Skills at Work](#) initiative.

- The Progression in Employment project aimed to explore effective employer practice in supporting the in-work progression of low-skilled, low-paid adults.
 - Upskilling pathways were examined in four sectors – retail, hospitality, health and social care, across six countries – the UK, Sweden, France, Germany, Italy and Spain.
 - Progression covers: increasing earnings; moving from insecure to more secure employment; improving socioeconomic status; increasing responsibility or moving to a role that requires a higher level of skill or qualification; and improving job quality, e.g. minimum guaranteed hours.
- There are challenges in making progression a reality; market pressures and demand fluctuations may lead employers to adopt a low-cost, low-value business model with low investment in employees.
- However, the benefits for employers that support low-skilled workers include: enhanced brand and reputation; improvements in service quality and consistency; reduced employee turnover and recruitment costs; and improved retention and addressed skill shortages.
- Examples of employer practice include:
 - Redesigning jobs to facilitate the progression of part-time workers into management roles
 - Structured career development pathways that map different roles, the competencies required, and the training and development opportunities that facilitate movement between the roles
 - Contracted minimum hours to address underemployment and reduce turnover
 - The creation of specialist roles, training and pay associated with them.
 - Multi-organisation collaborations to support individuals to build a career within a particular sector.
 - Regular career conversations and the development of line management capability.
- Factors that enable successful implementation include:
 - Development of an evidence base and business case for the progression of low-skilled workers
 - Senior leadership support for progression, making it part of high-profile policy
 - Developing champions in the business to develop, implement and sustain progression practices
 - Systems and practices such as induction, performance appraisals and (personal) development provision
 - Taking a long-term view – anticipating future skills needs and thereby identifying opportunities for staff progression.

The CBI published [Great Job: Solving the productivity puzzle through the power of people](#), looking at how UK businesses could add £110b to the economy by improving their people management practices.

- Habits that will make a difference to how businesses lead, engage and develop their people include:
 - Making good people practices a shared priority across the business and putting people management on a par with commercial targets
 - Putting **people's** skills and competencies at the heart of the recruitment process and providing leading on-the-job development and support.
- To make a difference, business and government need to work together to:
 - kick-start a race to the top among businesses with great people practices, e.g. through new charters, kitemarks or a competition
 - increase opportunities for businesses to benchmark their performance on people issues and learn **from others' success**
 - create the right incentives for firms to enable more staff to have a shared stake in the success of the business to help boost employee engagement.

Acas published [Stress and anxiety at work: personal or cultural?](#), findings from an online poll of 2,000 employed adults in spring 2019.

- 66% of employees have felt stressed and/or anxious about work in the last 12 months.
 - The figures range from 76% for those aged under 35 to 54% for those aged 55+.

- 8% say their organisation is 'very good' at preventing employees from feeling stressed and/or anxious about work.
- The most commonly cited cause of stress and/or anxiety for employees is workload (60%), followed by the way they are managed (42%) and balancing home and work life (35%).
- 41% of employees who feel stressed tend to take time out to manage it, such as having a cup of tea or going for a walk; 28% don't do anything; 28% use annual leave; and 15% opt to take sick leave.
- 33% of employees think that 'a reduced workload' would help them to feel less stressed and/or anxious, followed by 'better flexible working opportunities' (26%) and 'more clarity around what is required from me for my job role' (23%).
- 43% would talk to their manager in the event of being stressed and/or anxious at work, while 22% would not talk to anyone at work.
- 72% think that it is a manager's role to recognise and address stress and anxiety in the workplace; 60% said it is their own role; 31% think it is their colleagues' role; and 28% said it is HR's role.

CIPD published [Health and Well-being at Work](#), the results of its 19th annual survey exploring trends and practices in UK workplaces.

- The analysis is based on replies from 1,078 organisations with 3.2m employees between them; among the findings:
 - 40% have a standalone wellbeing strategy; 44% are more reactive than proactive; 16% are not doing anything to improve employee wellbeing.
 - Just 50% agree that line managers have bought in to the importance of wellbeing; however, 61% agree that it is on senior leaders' agendas compared with 55% last year, with mental health a key and increasing focus.
 - Most organisations provide one or more wellbeing benefit to employees; most offer some form of health promotion and an increasing proportion provide counselling services and employee assistance programmes.
 - Better morale and engagement, a healthier and more inclusive culture and lower sickness absence remain the most common benefits of health and wellbeing activity.
 - The average level of employee absence – 5.9 days per employee per year, or 2.6% of working time lost – is the lowest ever recorded by the survey.
 - Stress-related absence has increased in nearly 20% of organisations, while just 8% report it has decreased; heavy workloads remain the most common cause, but an increased proportion blame management style.
 - 33% of those reporting an increase in stress-related absence are not taking any steps to address it.

Some findings are broken down by public, private and non-profit sectors, but none by country.

Willis Towers Watson published [Employee Health, Wellbeing and Benefits Barometer 2019: Attitudes of UK employees](#), based on a poll of 2,000 permanently employed adults.

- 89% believe benefit provision is important when deciding to work for a company; 94% among higher earners.
 - 62% put pensions in their top five benefits, 43% health insurance and 40% life insurance.
- 46% say their employer makes provision for their health and wellbeing, falling to 39% among lower earners.
- 30% believe their employer has a moral responsibility to help them lead a fit and healthy lifestyle; 39% of 18–24 year-olds.
 - 52% feel uncomfortable about their employer getting involved in lifestyle choices.
- 15% have, or work with somebody who has, a neurodevelopmental disorder such as autism or dyspraxia.
 - 32% say their employer doesn't give any additional support to such workers.
- 64% don't take regular breaks from their work because they're too busy.
 - 52% believe regular breaks would improve their health and wellbeing, but 46% say their company doesn't encourage them to take them.

- 23% suffer from a musculoskeletal condition (33% among those aged 55+); 66% say their current occupation has contributed to the condition and 22% blame their job entirely.
 - 33% say their employer doesn't offer adequate support, although 51% say it impacts on their ability to do their job.

The Work Foundation published [Workplace health interventions and accreditation schemes: A rapid evidence review and global mapping exercise](#) funded by Public Health England.

- **The rapid review** found a wide range of employer-led workplace-based interventions designed to improve employee health and wellbeing, primarily focused on specific conditions, e.g. obesity, musculoskeletal and mental health problems.
 - A significant minority look at health behaviours, e.g. smoking, alcohol consumption and physical inactivity.
 - **In all cases interventions aim to reduce employees' exposure to such lifestyle factors, often through counselling or medical interventions.**
 - Some interventions look at ways to reduce absenteeism and presenteeism, typically comprising a range of approaches such as health-risk screening, supervised exercise programmes and wellbeing initiatives.
 - Some take a holistic rather than biomedical approach to employee health and focus on improving the psychosocial quality of work.
 - Some seek to change employee behaviour via education or peer-to-peer learning.
 - Co-produced interventions with input from employee and employer and, if applicable, a relevant health practitioner, can be more effective; buy-in from senior management is also important.
 - Interventions aiming to **modify the employee's behaviour and the work environment tend to be more effective and more likely to achieve sustained change.**
- **The global mapping exercise** identified 17 charters/schemes, most provided by national, devolved or local government; some schemes include courses to improve understanding and develop skills.
 - There is a low level of take-up for schemes in general and a lack of evidence and evaluations about their effectiveness, raising questions about how much businesses value them.

The International Labour Organization (ILO) and Eurofound published [Working conditions in a global perspective](#), the first comparative analysis of job quality surveys carried out in 41 countries, mainly over the last five years.

- The report covers the EU28, China, the Republic of Korea, Turkey, USA, Central America, Argentina, Chile and Uruguay.
 - It looks at seven dimensions of job quality: the physical environment, work intensity, working time quality, the social environment, skills and development, and prospects and earnings.
- Among the findings:
 - Working time differences between countries are stark, with 17% of workers in EU countries working more than 48 hours per week, while in the Republic of Korea, Turkey and Chile around 50% of workers do so.
 - Over 70% of workers in the Republic of Korea are able to take an hour or two off work to take care of personal and family matters, compared with 20–40% of workers in Europe.
 - Intensive work – with tight deadlines and at high speed – is experienced by 33% of workers in the EU and 50% in the US, Turkey, El Salvador and Uruguay.
 - Regardless of the country, the least-educated get less access to opportunities to grow and develop their skills: the proportion of workers who report learning new things at work varies, from 72% and 84% in the US and the EU, but much lower in China (55%) and the Republic of Korea (30%).

IZA published [Wages, Experience and Training of Women over the Lifecycle](#), investigating the role of training in reducing the gender pay gap in the UK over an 18-year period.

- The study examines whether work-related training has a role to play in reducing the gender pay gap and whether it can be used to help reintegrate women into the labour market following a long absence.
 - **Women's careers are** often marked by interruptions related to childbirth, and women often work part-time while children are growing up; this underlies an increasing wage gap relative to men, and relative to those women who continue an uninterrupted career as full-time workers.

- A policy was evaluated for subsidising training for mothers with children under eight years-old.
 - A fixed subsidy of £1,500 substantially increased the take-up of employment and training, particularly for the lower education groups; it also increased lifetime disposable income by about 0.83%.
- Training is potentially important in compensating for the effects of children, especially for women who left education after completing high school.

The Scottish Government published [Employer Methods for Addressing the Gender Pay Gap](#), a research study based on interviews with employers in the private and public sectors.

- Narrowing the gender pay gap benefits employers and all workers, not just women.
 - It increases staff diversity and retention, performance benefits, and levels of motivation, commitment and engagement.
- Examples of good practice included:
 - Providing guidance and training on fair recruitment practices
 - Adopting flexible and agile working policies and improving provisions for maternity, paternity and parental leave
 - Improving career progression opportunities available to women workers and offering returner programmes.
- Challenges for employers that require wider societal change include deeply-embedded occupational segregation and unequal division of caring responsibilities among men and women.

International Comparisons

The European Commission published [Vocational mobility in Europe: analysing provision, take-up and impact](#), examining non-Erasmus VET mobility initiatives undertaken within 33 Erasmus+ countries.

- The study has produced a map of non-Erasmus+ VET mobility programmes/schemes, 33 country factsheets and seven case studies.
 - The programmes are diverse and unevenly distributed; in most countries Erasmus+ is the main programme supporting VET mobility.
 - Many initiatives have a rationale outside of a VET context, e.g. in connection with relationships to neighbouring countries or general 'intercultural understanding'.
- Considerable experience and knowledge exist in VET mobility.
 - The large investment at the EU level has achieved positive benefits at EU and national level; however this has not overcome the challenges still faced at national level.

The European Commission published [Adult Learning policy and provision in the Member States of the EU: A synthesis of reports by country experts](#).

- Adult learning policy is increasingly regarded as important in economic and social terms at local, national and European level; despite this focus, only a limited number of adults access learning opportunities in most member states.
 - There is an overarching ambition to increase levels of participation in adult learning; however actual rates of participation do not appear to keep pace with ambition.
 - Policy frameworks are compromised by fragmentation and a lack of strategic thinking.
- Adult learning policy and financing frameworks, national targets and interventions are complex.
- A greater degree of strategic planning is required, and a clear sense of the financial resource that needs to be allocated for particular interventions.
 - Information on financial investment in adult learning is missing from the evidence base, so systematic national comparisons cannot be made.
 - Member states would also benefit from mutual learning and sharing of practice.

NORTHERN IRELAND

The Department for the Economy (DfE) published [Survey of Further Education College Leavers Report: Academic Year 2016/17](#), presenting findings from the fourth annual survey, with over 4,400 responses.

- Among the findings:
 - 43.1% were in employment six months after achieving their 2016/17 qualification, up from 36.9% before their course began; the proportion in learning fell from 46.7% to 43.8%.
 - The most important reasons for doing their course were 'improve my career prospects' (25.4%), 'interested in the subject' (19.8%), and 'go on to further/higher learning' (18.3%).
 - The subject areas with the highest proportions of leavers in full-time employment were: education & training (54.9%); construction, planning & the built environment (54.8%); and business, administration & law (52.7%).
 - The subject areas with the lowest proportions of leavers in employment were social sciences (8.9%), and history, philosophy & theology (11.1%); however, these subjects had some of the highest proportions of leavers in further full-time study.
 - 40.2% of the leavers in employment had not been in employment before they started their course; 95.5% were working in Northern Ireland, 3.0% in the RoI, 0.7% in Great Britain and 0.8% overseas.
 - 71.9% of leavers in employment said the course had prepared them well for employment.
 - 61.3% of leavers in learning have continued their learning in the FE sector, while 34.2% have started university.
 - 90.7% of leavers in learning said their course had prepared them well for further study.

ENGLAND

An independent panel led by Philip Augar published its [Report to the Review of Post-18 Education and Funding in England](#); 53 detailed recommendations include:

- Strengthening technical education through a stronger system at sub-degree level.
 - Providing a new post-18 maintenance support package for all students taking Level 4–6 qualifications.
 - Streamlining the number and improving the status of Level 4/5 qualifications.
 - Awarding at least one interim qualification to all students who are following a Level 6 course successfully.
 - The OfS to be the national regulator of all L4+ non-apprenticeship provision.
- Reforming and refunding the FE college network by: increasing base rate funding for high-return courses; providing £1b additional capital investment; increasing investment in the workforce; rationalising the network and promoting closer links with HE and other providers.
 - FE colleges should have a protected title similar to that conferred on universities.
- Bearing down on 'low-value' HE and incentivising providers to offer more courses better aligned with the economy's needs.
- Increasing flexibility and lifetime learning through the introduction of a lifelong learning loan allowance at Levels 4–6 for those without a publicly funded degree.
 - A first 'full' Level 3 should be available free to all learners whether they are in work or not.
 - A first 'full' Level 2 qualification should be fully funded for those aged 24+ who are employed.
- Supporting disadvantaged students by reintroducing maintenance grants of at least £3,000 p.a., with a maximum set in line with the National Minimum Wage for 21–24 year-olds.
 - Increasing the amount of teaching grant funding that follows disadvantaged students.
 - Changing the measure of disadvantage used in the Student Premium so that funding closely follows the students who need support.

- Renaming the student loan system 'Student Contribution System' and ensuring those who benefit from HE contribute fairly by extending the repayment period to 40 years after study has ended and effectively freezing the repayment threshold.
- Improving the apprenticeship offer by providing better wage return information; making Ofsted the lead responsible body for the inspection of all levels; and better addressing the barriers faced by SMEs.
 - The Government should monitor closely the extent to which apprenticeship take-up reflects the priorities of the industrial strategy, both in content and in geographic spread.
 - Funding for Level 6+ apprenticeships should normally be available only for those who have not previously undertaken a publicly supported degree.

The Department for Education published a [series](#) of statistical publications providing additional breakdowns and context for evidence and figures used in the Augar Review, including:

- [Student income and expenditure analysis](#)
- [Participation in Foundation Degrees](#)
- [Measuring the cost of provision using Transparent Approach to Costing data](#).

The Department for Education also published a number of other reports related to the review:

- [Impact of the student finance system on participation, experience and outcomes of disadvantaged young people](#)
- [Alternative Student Finance \[ASF\]: current and future students' perspectives](#) – research into the experiences of Muslim students, graduates and potential students, and their views on the ASF model
- [Graduate choices in post-education jobs and careers: a literature review](#)
- [Wider non-market benefits of post 18 education for individuals and society](#)
- [Choices students make between different post-18 routes and whether these choices are effective and reliably informed](#), regarding choices between academic (HE), technical (FE) and vocational (apprenticeship) routes
- [Attitudes of higher education applicants, students and graduates towards the student finance system](#)
- [Attitudes towards the student finance system](#) – views of parents and the general population.

SCOTLAND

Skills Development Scotland (SDS) published [Skills Action Plan for Rural Scotland: 2019–2021 – Key issues and priority actions](#) developed with stakeholders.

- Numerous issues have a direct impact on skills in rural areas of Scotland, including:
 - Demographic challenges
 - Lower productivity and higher underemployment
 - The existence of more microbusinesses, fewer larger employers and fewer employers that fund training
 - Barriers to accessing education and training, such as a decreasing number of schools, difficulty recruiting teachers and the relatively small number of HEIs.
- 36 actions are presented under five priority areas:
 - Develop a better understanding of the skills rural employers need and align provision to support these.
 - Provide accessible education and skills to secure, sustain and progress individuals' careers in rural areas.
 - Focus on upskilling and reskilling the current workforce.
 - Build a secure talent pipeline for the future.
 - Take a coordinated, strategic approach to tackling skills in rural areas.

The Scottish Funding Council (SFC) published [Exit from the European Union and the impact on colleges](#), a strategic overview of the potential challenges facing the sector in Scotland as a result of Brexit.

- Challenges include:
 - Demographic changes across the country creating different demands on college provision
 - The loss of EU funding, access to programmes such as Erasmus+ and international curriculum development opportunities
 - The potential loss of EU-national students and staff, possibly resulting in some courses becoming unsustainable, and an increase in skills gaps.

WALES

Universities Wales published [Solving Future Skills Challenges in Wales](#), building on the implementation of Professor Sir Ian Diamond's recommendations on student support and HE funding.

- Continuing to implement 'Diamond' will enable a greater number of people to access higher-level skills and provide for a sustainable and longer-term HE system in Wales.
- In addition, it recommends:
 - Facilitating the development and provision of degree apprenticeships at Levels 6 and 7 across a range of subject areas to meet evidenced business demand and provide progression routes for those who have already completed an apprenticeship.
 - Government and HE providers working together to consider how modular or credit-based approaches to undergraduate study could increase flexibility in the long term; this may include greater targeted support for HEIs wishing to innovate in or scale up flexible learning.
 - Government should explore how collaborative activity could be supported through funding for existing partnerships and collaborations to help learners progress from Levels 2/3 into Levels 4, 5 and beyond.

REPUBLIC OF IRELAND (RoI)

SOLAS published [Monitoring Ireland's Skills Supply 2019](#) on behalf of the National Skills Council.

- Compared to other EU countries, the RoI has a high share of '3rd level' [*tertiary*] graduates in science and computing.
- The labour force participation rate is highest for graduates with agriculture/vet qualifications (92%), followed by engineering, manufacturing & construction (91%) (national average 86%).
- Almost 20% of 3rd level social science, business and law qualification holders in employment work in administration jobs, for which it could be argued they are overqualified.
- The number of Irish-domiciled graduates from UK HEIs has declined in recent years, although the decline for those studying health-related subjects has been less sharp.
- Over 75% of those who hold qualifications in education are female, compared to 53% across all fields of learning.

SOLAS published [Vacancy Overview 2018](#), annual data on the job titles and associated skills with the most frequent vacancies, on behalf of the National Skills Council.

- Based on annual averages, the construction, accommodation and food sectors, plus industry, experienced the most significant growth in employment from 2013 to 2018.
 - For construction: those employed in skilled trades (including plumbers, carpenters and painters) accounted for the majority of the increase.
 - For accommodation and food services: most of the increase related to elementary occupations (e.g. waiting staff, catering assistants etc.), while chefs contributed to some of the expansion.
 - For industry: increases were mainly due to an increase in professional and operative roles (e.g. engineers and food/process operatives).
- Some sectors that did not see significant annual employment growth, or saw a decline, still have skills in high demand or are jobs that are proving difficult to fill, including ICT, financial, insurance & real estate, and professional, scientific & technical.

Skillnet Ireland published [The Development and Implementation of an Accredited Continuing Professional Development Framework in Agriculture](#).

- There is currently no CPD framework in the farming and agricultural industry in the RoI.
 - 66.8% of those surveyed believe there is a need for a system in farming which recognises participation in continuing education/training/upskilling, and an additional 23.9% think there could be a need for CPD.
- The research paper includes:
 - A review of farming-related CPD frameworks in other industries and countries, including the UK
 - An examination of current FE options for farmers and those working in the sector
 - A proposed potential structure of a CPD framework for farming
 - A definition of career pathways in farming.

Skillnet Ireland published [Developing New Learning Technologies: Digital badge credentials in the Irish food and agri-food sector.](#)

- There is an opportunity to further develop, enhance and recognise the learning and upskilling of employees in the food and agri-food sector in the RoI.
 - The first two digital badges were developed and tested for non-accredited programmes in the sector.
- There is a low knowledge base around digital badges accreditation, value or meaning, both at a general and an individual employee level.
 - However, employers would be interested in supporting digital badges and agreed there is a need to recognise the skills and competencies of employees.
 - Employees said digital badges would be of value to them if they were recognised by their employers when applying for promotion or at interview.

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