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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 continuing focus on skills 'mismatch' and changing skills needs, particularly around new technology and helping people to thrive in and shape 'the future we want'.
- Several reports about migrants – the skills they bring, the support they need to play a productive role in the economy, and concerns related to the potential impact of Brexit on skilled migrant numbers.
- Investigations into the support young people need to move successfully into the labour market.
- A number of reviews of European learning and skills programmes – sufficient to warrant a separate section.

** 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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Analytical Services, Department for the Economy ✉ analyticalservices@economy-ni.gov.uk

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.

The Digest is prepared by:
Elaine Hendry
www.emhconnect.co.uk

16–19 EDUCATION

The Centre for Vocational Education Research (CVER) published [*Further analysis of the earnings differentials associated with BTECs*](#).

- Previous analyses have shown positive returns for BTEC qualifications for both males and females, while, more recently, CVER showed positive earnings differentials for women, but not for men.
- Analysis of the characteristics of learners with vocational qualifications (VQs) shows that those with BTECs typically have higher levels of prior attainment at school, and a higher proportion are from black, Asian and minority ethnic (BAME) backgrounds compared with people with other VQs at the same level.
 - BTECs more often act as a stepping stone to learning at higher levels (including degree level) compared with other VQs.
- For those with BTECs as their highest qualification:
 - earnings differentials are strong and positive for females across all specifications
 - earnings are only positive for males when compared to people with BTECs at the level immediately below, or to those enrolling in the same qualification but failing to achieve.

The OECD published [*The Future of Education and Skills 2030: The Future We Want*](#), setting out the first results from its Futures Project.

- The project aims to help countries find answers to two far-reaching questions:
 - What knowledge, skills, attitudes and values will today's students need to thrive and shape their world?
 - How can instructional systems develop these effectively?
- Children entering school in 2018 will need to value common prosperity, sustainability and wellbeing; and be responsible and empowered, placing collaboration above division, and sustainability above short-term gain.
 - Learning to form clear and purposeful goals, work with others with different perspectives, find untapped opportunities and identify multiple solutions to big problems will be essential.
 - Education must aim to do more than prepare young people for the world of work; it must equip them with the skills they need to become active, responsible and engaged citizens.
- Future-ready students need to exercise agency in their own education and throughout life.
 - Educators must not only recognise learners' individuality, but also acknowledge the wider relationships with teachers, peers, families and communities that influence learning: 'co-agency'.
- Two factors in particular help enable agency:
 - A personalised learning environment that supports and motivates each student to: nurture his or her passions; make connections between different learning experiences and opportunities; and design their own learning projects and processes in collaboration with others.
 - A solid foundation of literacy and numeracy, digital and data literacy, and physical health and mental wellbeing.
- Different types of knowledge will be important:
 - Disciplinary knowledge – the raw material for new knowledge and the capacity to think across the disciplinary boundaries
 - Epistemic knowledge – knowledge about disciplines, such as knowing how to think like a mathematician
 - Procedural knowledge – the series of steps or actions taken to accomplish a goal.
- The use of this broader range of knowledge and skills will be mediated by attitudes and values (e.g. motivation, trust, respect for diversity and virtue).
- If students are to play an active part in all dimensions of life they will need to navigate through uncertainty, across a wide variety of contexts, using three new types of competency:

- Creating new value – developing new products and services, jobs, processes and methods, ways of thinking and living, enterprises, sectors, business and social models; underpinned by constructs including adaptability, creativity, curiosity and open-mindedness.
- Reconciling tensions and dilemmas – thinking and acting in a way that takes into account contradictory or incompatible ideas, logics and positions, from both short- and long-term perspectives, i.e. learning to be systems thinkers.
- Taking responsibility – reflecting upon actions in the light of experience, goals, understanding and knowledge of what is right and wrong; underpinned by self-regulation – self-control, self-efficacy, responsibility, problem solving and adaptability.

The framework will be finalised by the end of 2018, and the project will begin to explore its translation into pedagogy, assessment and the design of an instructional system in 2019.

The OECD published [The Resilience of Students with an Immigrant Background: Factors that shape well-being.](#)

- In 2015, almost a quarter of 15 year-old students in OECD countries reported that they were either foreign-born or had at least one foreign-born parent, with migration flows from several decades ago still looming large.
- The ability of societies to maintain social cohesion in the presence of large migration flows depends on their capacity to integrate immigrants.
 - Education can help immigrants acquire skills and contribute to the economy, as well as contributing to their social and emotional wellbeing and their motivation to participate in social and civic life.
- Such students must first overcome the adversities associated with displacement, disadvantage, language barriers and the difficulty of forging a new identity.
 - Their resilience should be judged by academic proficiency, but also by their satisfaction with school and levels of anxiety.
- Students with an immigrant background – particularly first-generation immigrants – tend to underperform in school.
 - On average, 51% of first-generation immigrant students failed to reach baseline academic proficiency in reading, maths and science (compared to 28% of their indigenous peers); 41% reported a weak sense of belonging (33%); 31% low life satisfaction (28%); and 67% high schoolwork-related anxiety (61%).
- Education systems can play a significant role in helping such students integrate, overcome adversity and build resilience.
- A number of interventions can improve wellbeing, including: early assessment of language and other skills; targeted language training; diversity-aware teachers; additional support for disadvantaged students and schools; effective anti-bullying programmes; extracurricular activities and engagement with parents.

SCIENCE, TECHNOLOGY, ENGINEERING & MATHS (STEM)

Engineering UK published [The state of engineering 2018](#) – an annual survey.

- In 2016, 26.9% of 2.55m registered UK enterprises were in the engineering sector, up 5.6% on 2015.
 - There was growth across all industries within the engineering footprint, but ICT saw the largest increase – 7.6% over the year and 40.8% over the last five years.
- In 2016, 18.9% of the UK workforce were working in an engineering enterprise, 42.3% of them in manufacturing, 19.5% in ICT and 17.2% in construction.
- 7.7% of workers were EU nationals, compared with 6.1% in non-engineering sectors.
 - In the first quarter of 2017, there was a higher proportion of EU nationals in industries such as manufacturing (11.5%), construction (8.7%) and professional, scientific & technical activities (8.1%) than in the labour force overall (7.3%).
- April–June 2017 saw the highest vacancy ratio in the labour force since 2001: 2.6 job vacancies for every 100 filled jobs.

- The increasing fusion between the digital, physical, and biological is continuing to drive already strong demand for highly skilled labour, especially in the area of STEM.
 - Net requirement projections indicate that by 2024, 54.1% of the workforce will require Level 4+ qualifications, compared with 41.1% in 2014.
 - It is also expected that demand for lower-skilled jobs will increase because, while the semi-routine nature of many middle-skilled occupations makes them vulnerable to automation, traditionally low-skilled occupations often involve skills not readily automated.
 - This 'hourglass economy' is expected to hold for the UK well into the future.
- Between 2014 and 2024, 1.24m graduate and technician core engineering jobs will arise across all industries as a result of both replacement and expansion demand.
 - Assuming even distribution across the ten years, this implies 124,000 Level 3+ core engineering jobs every year.
 - Alongside this, an additional annual requirement for 79,000 'related' roles will require a mixed application of engineering knowledge and skill alongside other skill sets.
 - Altogether, this means 203,000 people with Level 3+ engineering skills are required per year to meet expected demand, of which 57.7% is expected to arise in the engineering sector.
- Given the supply of engineers coming from the educational pipeline, a shortfall of 37,000–59,000 is estimated, including a graduate-level shortfall of at least 22,000 per year.
 - Altogether, when looking at total demand for Level 3+ engineering skills across core and related engineering roles more broadly, the annual shortfall is estimated to be 83,000–110,000.

Tech City UK in partnership with Hays Digital Technology published [Tech Nation Talent: Part 3 – Future Talent](#), exploring the perceptions of tech careers of over 1,000 UK 15–21 year-olds.

- Technology was the most popular future career for males (36%), and the professions were most popular for females (36%).
 - Of those who wanted to work in tech, 70% were male.
 - Those aged 16 were more likely to want to work in tech.
- The main reasons for wanting to work in tech were its 'fast moving and exciting nature' (55%), 'interesting jobs' (54%) and 'good pay' (50%).
 - The most important reasons for wanting to work in tech were job security (93%) and salary (92%).
- 65% felt work experience was crucial to getting a first job.
- 59% felt there were too few training opportunities for those who didn't go to university.
- 60% would consider an apprenticeship instead of university if it led to a professional career.
- 50% of males and females said the main reason for not wanting to work in tech was that 'other areas are more appealing'; 45% of females said they wouldn't have the required skills (32% of males).

Parts 1 and 2 examined [the nationality of workers](#) and [skills supply](#) in the UK tech sector. Tech City UK becomes [Tech Nation](#) in April 2018, with funding for tech clusters, including one in Belfast.

[The Gender-Equality Paradox in Science, Technology, Engineering and Mathematics Education](#) was published in *Psychological Science* by academics from Leeds Beckett University and the University of Missouri.

- Countries such as Albania and Algeria have a greater percentage of women among their STEM graduates than countries with high levels of gender equality, such as Finland, Norway or Sweden.
 - This might be because countries with less gender equality often have little welfare support, making the choice of a relatively highly-paid STEM career more attractive.
- Across almost all countries and regions, while boys' and girls' achievement in STEM subjects is broadly similar, science is more likely to be boys' best subject.
 - Even when their ability in science equals or excels that of boys, girls are often likely to be better overall in reading comprehension, which relates to higher ability in non-STEM subjects.
 - Girls also tend to register a lower interest in science subjects.
- There is a universal disparity between the number of girls with the necessary ability in STEM and for whom it is also their best subject and the number of women graduating in STEM.

- However, the gap is again larger in more gender equal countries: in the UK, 29% of STEM graduates are female, whereas 48% of UK girls might be expected to take STEM subjects based on ability alone, dropping to 39% when both ability and interest are taken into account.

The research suggests that many girls are making perfectly valid choices not to pursue STEM subjects. Campaigns to increase women's participation should focus on those with both ability and interest in STEM subjects, but who still don't choose them.

EMPLOYABILITY & CAREERS

Education & Employers published [Employer engagement in education: insights from international evidence for effective practice and future research](#), commissioned by the Education Endowment Foundation (EEF).

- Employer engagement can be:
 - Supplementary: directly supporting conventional teaching and learning approaches to achieve established learning outcomes (e.g. reading support).
 - Complementary: offering alternative means to achieve established learning outcomes (e.g. mentoring).
 - Additional: offering means to achieve learning outcomes additional to those found in conventional teaching and learning (e.g. enterprise activities).
- Four broad areas of employer engagement in education can benefit young people:
 - Enhancing understanding of jobs and careers
 - Providing knowledge and skills demanded by the contemporary labour market
 - Providing the knowledge and skills demanded for successful school-to-work transitions
 - Enriching education and underpinning pupil attainment.
- Encounters with new people can lead a young person to change an important element of their thinking about themselves and their sense of agency.
 - To be effective, provision must be authentic, real world, frequent, valued, contextualised, personalised, and begun young.

The UK Parliament All-Party Parliamentary Group (APPG) on Youth Employment published [Those Furthest from the Labour Market](#), the report of its inquiry into best practice support for young people.

- Young people furthest from the labour market often have significant barriers to employment, including: disability, mental health issues, low education attainment, homelessness, care leavers, carers, a criminal record, low aspirations.
 - Without first overcoming these barriers they cannot be expected to make good and sustained progress.
 - Personalised support can make progress more likely; this may include a key worker, non-formal training, and/or supported work experience.
- Recommendations include:
 - Ensure that all young people in education have access to work experience; information, advice and guidance must be both aspirational and practical and include help with soft skills.
 - Ensure that all young people have adequate mental health support and that early intervention models are in place; they must be taught how to develop resilience and take care of themselves.
 - A one-size fits all approach does not work – services must recognise each person's unique potential.
 - Provide financial and information support for employers to work with young people who are furthest from the labour market.

The Centre for European Policy Studies (CEPS) published [Blame it on my youth! Policy recommendations for re-evaluating and reducing youth unemployment](#).

- It explores how to define and measure youth unemployment, its causes and effects, and what can be done about it.
- A new definition for 'youth' is proposed, expanding the age range from 15–24 to 15–29, compiling data for 15–19, 20–24 and 25–29 years.

- Other measures proposed include 'youth labour market outsidersness' (YLMO).
- A youth unemployment *ratio* would be more accurate than *rate*.
- High youth unemployment can be caused by: school-to-work transition; the 'employment trap' (needing experience to gain experience); the interaction of youthfulness with factors such as gender and ethnicity; an overall poor labour market; and the increasing use of 'precarious' job contracts.
- Policy proposals include a number relating to education:
 - Ensure high-quality education for all levels, particularly early childhood and primary school – focus on prevention, early identification and support for youth in vulnerable households.
 - Increase opportunities for low- and middle-class children – especially children from vulnerable households – to pursue higher education.
 - Promote a more holistic and accurate understanding of youth unemployment.
 - Encourage youth employment policy innovation and experimentation, as well as knowledge-sharing mechanisms.
 - Strengthen the role of the education system in school-to-work transitions.
 - Help those not in education, employment or training (NEET) and early school leavers back into school or employment.

Cedefop published a set of [online resources](#) for managers of careers services, practitioners and policymakers working in career development and activation policies.

- Labour market intelligence (LMI) is being produced in vast amounts across Europe, and recent developments in technology make this information more accessible to users.
- However, moving away from traditional face-to-face services means that new approaches are needed to provide guidance and counselling using new online tools.
- The resources comprise: a [toolkit](#) on LMI usage, [training modules](#) on how to use LMI and information technologies in guidance, and a [handbook](#).

The Institutional Landscape

HIGHER EDUCATION: APPLICANTS & STUDENTS

The Institute of Labor Economics (IZA) published [The Economics of University Dropouts and Delayed Graduation: A Survey](#).

- The decision to invest in tertiary education is a sequential process made under gradually decreasing levels of uncertainty on education costs and future returns.
 - Students update their information each academic year and revise associated benefits and costs, deciding whether or not to continue their studies in order to get a degree.
- The decision process clusters university outcomes into four main categories drawn from empirical evidence:
 - Students' characteristics, abilities and behaviour
 - Parental background and family networks
 - Characteristics of the tertiary education system and its institutions
 - Labour market performance.
- The resulting policy advice is to provide an all-inclusive orientation activity for students before they enrol at university.
 - A complete understanding of the potential costs and benefits can reduce the risk of early withdrawal or delayed graduation.
 - Activities devoted to helping first-year students adapt to university environment and life may also increase students' success.

The Sutton Trust published [Home and Away: Social, ethnic and spatial inequalities in student mobility](#), stating that whether or not a student leaves home to study is a 'major dimension of inequality within HE choice and experience'.

- It uses a specially created typology of long-, medium- and short-distance 'commuters' and 'movers', based on distances travelled of 152+, 57–152 and 0–57 miles.
- In 2014/15, 55.8% of young people in the UK attended a university less than 55 miles from their home.
- Only 10% attended a university over 150 miles away; those who do are socially, ethnically and geographically distinct groups.
- Disadvantaged students are less likely to leave home and travel further: 44.9% of students in the lowest social class group commute from home, compared with 13.1% in the highest group.
 - State school students are 2.6 times more likely to stay at home than their privately educated counterparts.
 - British Pakistani and Bangladeshi students are six times more likely than White students to stay at home.
- Mobility paths vary enormously across the different UK nations – where young people live seems to affect whether they will opt for one of the routes in the mobility typology.
 - Northern Ireland has the highest proportion of students (over 20%) attending a university over 152 miles away.

The Sutton Trust published [The Lost Part-timers: The decline of part-time undergraduate higher education in England](#), with a particular focus on the impact of the 2012/13 funding reforms.

- Between 2010 and 2015, the number of part-time undergraduate entrants living in England attending UK universities and English further education (FE) colleges fell by 51% (63% at the Open University and 45% at other institutions).
 - Recent falls sit in the context of a longer term decline, influenced by factors including: the ending of funding for most graduates taking a second degree; the impact of the recession; and the rise of unrecorded learning opportunities, including massive open online courses (MOOCs).
- Between 2011 and 2012, home students from England saw a real increase in fees of 247%, compared to 2% for those from Scotland and Wales [*data were not used for Northern Ireland because of the relatively small numbers*].
 - By 2015, numbers in Scotland were 22% down on 2010, Wales 46%, and England 63%, with around 40% of the decline attributable to the fee changes.
- The biggest drops have been among students aged over 35 and those pursuing sub-degree qualifications and low-intensity courses (lower than 25% full-time equivalent).
- 17% of young part-time students are from the most disadvantaged group, compared to just 12% of full-time.
 - However, the drop in numbers between 2010 and 2015 has been higher for the most advantaged group of young entrants – 59% compared to 42% for the most disadvantaged.

The Higher Education Policy Institute (HEPI) published [What affects how much students learn? – analysis of students' self-reported learning gain based on the Student Academic Experience Survey](#).

- Looking at students who reported that they had learnt 'a lot', compared to those who said they had learnt 'a little', 'not much' or 'nothing', the analysis finds that learning gain is linked to:
 - Access to high-quality teaching
 - Undertaking high levels of independent study (especially 20+ hours a week)
 - Support for low wellbeing
 - Avoiding 17+ hours a week of paid work
 - Location of study – London-based students face extra challenges
 - Studying at an institution with a Gold rating in the Teaching Excellence Framework.

HEPI and Kaplan International Pathways published [The costs and benefits of international students by parliamentary constituency](#) by London Economics.

- 438,000 international students are studying for qualifications at higher education institutions (HEIs) across the UK (19% of all HE students) – they contribute significantly to economic and social prosperity during their studies and after they graduate.

- The economic benefits are estimated in terms of:
 - tuition fee income and the knock-on effects associated with universities spending tuition fee income on staff, goods and services
 - income from students' non-tuition fee expenditure and associated knock-on effects
 - income associated with the spending of friends and family visiting international students in the UK.
- The public costs associated with hosting international students are:
 - teaching grants incurred to fund HEI provision of teaching and learning activities (for EU students only)
 - tuition fee support provided to EU students
 - the provision of other public services to international students and their dependants (net of any direct contribution), including healthcare, housing, children's education, social security, public order and safety, and other general public services
 - other 'non-identifiable' public expenditure incurred by the UK Exchequer (e.g. relating to servicing the national debt) and expenditure on overseas activities (e.g. diplomatic activities).
- Key findings:
 - The gross benefits amount to £22.6b – an average £87k per EU and £102k per non-EU student.
 - The public costs total £2.3b – an average £19k per EU student and £7k per non-EU student.
 - The net impact is £20.3b – an average £68k per EU student and £95k per non-EU student.
 - Across the UK the net impact ranges from £4.64b in London to £0.17m in Northern Ireland.
 - The highest net impact by constituency overall is in Sheffield Central (£226m); the lowest is in Na h-Eileanan an Iar (formerly Western Isles) in Scotland (£3.6m).
 - The net impact by constituency in Northern Ireland ranges from £29.1m in Belfast South to £6.0m in North Down.

HIGHER EDUCATION: WIDENING PARTICIPATION

The Social Market Foundation published [Vocation, Vocation, Vocation: The role of vocational routes into higher education](#); although examining non-academic paths to university in England, it has wider relevance.

- BTECs are the most common type of vocational study at Level 3 and there has been a marked increase in their uptake.
 - 26% of university applicants from England have studied at least one BTEC qualification at Level 3.
- VQs are particularly important among students with demographic characteristics often associated with greater disadvantage.
 - Students were more likely to enter university with a VQ if: their parents worked in routine or manual occupations; they came from an ethnic minority background; they lived in an area that sends a low proportion of its young people to university.
- Challenges associated with the vocational route into HE include qualification design, prior attainment and current progression route.
 - Students from vocational backgrounds are not always well prepared for some university courses.
 - There can be a mismatch of subject matter and required skills, particularly where a course contains scientific or maths components.
 - A lack of clear progression routes for some degree programmes can hinder progression from VQs to HE.
- Further and higher education institutions and schools should work more closely together, particularly on progression routes.

University association MillionPlus published [Forgotten Learners: Building a system that works for mature students](#).

- The total number of UK mature students declined by 20% between 2011/12 and 2016/17, to 818,550.
 - This masks considerable variation between different sections of the mature student population.

- The decline has been heavily concentrated at English universities in both relative and absolute terms, with 42% fewer mature undergraduate entrants in England in 2016/17 than in 2011/12.
- Across all domiciles, three areas have seen the most heavily concentrated decline: part-time study; the 30+ age group; and those studying 'other' degrees (level 4 or 5).
 - From 2009/10 to 2016/17 the number of UK students fitting all three of these criteria fell by 70%.
 - Certain traditional courses, such as nursing, have been disproportionately affected.
- Funding remains a barrier to many, and the large drop in part-time applications demonstrates a worrying trend of missed opportunities.

Some separate data are provided for England and Scotland, but not for Northern Ireland or Wales. Most of the commentary relates to England.

Academia.edu published [Returning to Education: A Stressful Experience?](#) presenting results from a study of perceptions of stress among a group of returning master's students.

- As HE is increasingly seen as a lifelong process, more mature students are returning to education – a group that has problems additional to those experienced by younger students.
 - Returning to education creates additional demands on adults who already have multiple roles with families, communities and the workplace, resulting in a stressful educational experience.
- Mature students can succeed if they are afforded the opportunity, assistance and support – in terms of encouragement and understanding – that they need.
 - Having easy and informal access to tutors, being treated respectfully, and acknowledgement of prior knowledge and experience were all highly valued.
 - An awareness of the intellectual and practical difficulties faced initially can be particularly helpful; pre-entry workshops should cover the breadth of the student experience, including an academic induction.
 - Short courses on time management and coping strategies would help students balance time pressures; academic timetabling with no flexibility may discourage participation by those who can't commit to rigid schedules.
 - Financial grants and support are essential in alleviating stress among those facing constraints.
- Encouraging and supporting mature students can help HEIs become places of equal access and greater diversity; institutional strategy in this area should form part of future discourses around lifelong learning and widening participation.

GRADUATES & GRADUATE EMPLOYMENT

The Higher Education Careers Service Unit (HECSU) published [What do graduates do? 2017/18](#), providing data on the graduate labour market in 2016.

- Of the 248,525 UK-domiciled first-degree graduates who responded to the survey:
 - 74.2% were in employment six months after graduating
 - Only 5.3% were unemployed - the lowest rate since 1989
 - 71.3% of employed graduates were in a professional-level job
 - 21% of graduates went on to full- or part-time further study
 - The average salary for graduates in full-time employment in the UK was £21,776

Separate analyses are provided for: business & administrative studies; creative art; technology, engineering & maths; humanities; science; and social sciences. 'Career expert insights' also look at topics such as portfolio careers, apprenticeships, trends in science and the role of careers services in social mobility.

High Fliers Research published [The Graduate Market in 2018](#), a study of 100 leading UK graduate employers.

- Graduate vacancies fell by 4.9% in 2017, the first drop for five years.
 - The biggest falls were in accounting and professional services, banking and financial companies, and investment banks.
- Vacancies are expected to increase by 3.6% in 2018.

- The highest growth is expected in the public sector, accounting and professional services, and engineering and industrial companies.
- 75% of employers are offering paid vacation internships for penultimate year students; 60% offer six–12 month course placements for undergraduates.
- Over 33% say graduates with no work experience at all are unlikely to be recruited.
 - The number of work experience places is expected to grow by 0.8%, following a drop in 2017.
- More use was made of social media and face-to-face presentations in graduate recruitment; less use was made of advertising.

The Higher Education Funding Council for England (HEFCE) published [Vocational degrees and employment outcomes](#).

- All subjects have some vocational element(s); the size of the vocational aspect is important to student choices.
- An experimental 'occupation–subject concentration ratio' (OSCR) was constructed by analysing the proportion of employed, first-degree graduates who are working in the three most common highly skilled occupations associated with a given subject.
 - The mean OSCR is 0.365, i.e. on average more than a third of graduates from a given subject area are employed in just three highly skilled occupations related to that subject.
 - About 10% of subjects have an OSCR of over 0.9 and so are considered to be highly vocational – they are all in medicine, dentistry, veterinary sciences and allied subjects.
 - 10% have an OSCR above 0.5, including IT, landscape design and civil engineering.
 - There is substantial variation across and within broad subject groups, e.g. in 'Business & Management', marketing has an above-average OSCR of 0.427 while business studies has a much lower OSCR of 0.199.
- No relationship was found between how vocational a subject is and how many people study it; nor does how vocational a subject is vary across the type of HEI.
- Graduates in more vocational subjects are more likely to be employed in highly skilled roles, even when controlling for individual and institutional characteristics, and excluding graduates in medicine, dentistry, veterinary sciences and allied subjects.
- More vocational subjects are associated with higher early career earnings even when other factors are controlled for.
- There is no suggestion that subjects should become more or less vocational; less vocational subjects offer graduates a broad range of options, while more vocational subjects restrict these options in a graduate's early career.

NB HEFCE ceased to exist from 31 March; most of its responsibilities have been taken on by the new [Office for Students](#), and others by [Research England](#).

The Chartered Management Institute published [21st Century Leaders: Building employability through higher education](#), a survey of over 1,000 managers and 830 business and management students carried out with the Chartered Association of Business Schools and Institute of Student Employers.

- Employers want all HE students to enter work with practical management and leadership skills – not just those graduating with business and management degrees.
 - 70% of managers believe management, enterprise and leadership modules should be integrated into all degree subjects to boost employability.
 - 85% want students to have work experience, yet only 29% say they offer placements.
 - 62% expect graduate recruits to demonstrate professional management skills.
 - 66% want to see graduates achieve professional qualifications as well as their main degree.
- 75% of students say they look for a combined professional body accreditation when selecting their degree, suggesting that business and management students recognise the advantages of such qualifications.
- The top professional abilities employers want in new managers are: taking responsibility (identified by 60%); people management skills (55%); being honest and ethical (55%); problem solving and critical analysis (52%); and collaboration and team-working (48%).

- The top strengths of business school graduates seen by managers are: managing innovation and digital technologies (83% somewhat/very strong); curiosity and willingness to learn (79%); inclusive and ability to work with different cultures (78%); honest and ethical (78%); and financial skills (72%).
- Eight recommendations include:
 - making students more aware of the skills they have acquired
 - expanding the reach of degree apprenticeships
 - meeting the demand for professional standards through dual accreditation.

HIGHER EDUCATION: TEACHING, RESEARCH & INSTITUTIONS

The Quality Assurance Agency for Higher Education (QAA) published [Trends in good practice from Higher Education Review \[HER\] 2013–16](#), an analysis of 308 HER reports.

- HER was QAA's principal review method for universities and further education colleges providing HE in England, Northern Ireland and Wales; it made a positive contribution to the maintenance of academic standards and the quality of learning and teaching.
 - HER thematic topics were: student engagement in quality assurance and quality enhancement; student employability; digital literacy; and internationalisation.
- The themes highlighted in the report are: graduates for the 21st century; collaborative provision and partnerships; innovative practice; internationalisation; use of data; and good practice.
- Reviewers found comprehensive evidence of improvements in the student experience and that providers had taken a coherent approach to enhancement and developing globally minded, work-ready graduates.
 - Embedding employability in more flexible curriculum structures, and increased opportunities for learning and assessment in the workplace, were shown to have developed graduate skills.
- Staff development was identified as good practice throughout the period of the review; the depth and breadth of training undertaken was particularly noteworthy.
 - Nearly all HEIs and alternative providers also expected teaching and learning staff to attain Higher Education Academy (HEA) Fellowship status.
 - There is an expectation that staff teaching vocational-professional subjects maintain their skills through relevant industrial updating.
- The importance of developing international partnerships and recruiting international students was seen as a key challenge.
 - Queens University Belfast is highlighted for its practice in developing international partnerships.

HEFCE published [Learning gain in English higher education](#) – an overview of progress in its 'learning gain' programme and related developments.

- In the context of HE, 'learning gain' considers the distance travelled by students in terms of increased knowledge, personal growth, acquisition and development of a wide range of skills, and how ready they become for the world of work.
- HEFCE has funded a range of underpinning studies and exploratory research projects including:
 - independent research into the current range and depth of learning gain activity
 - institutionally-led pilot projects and associated evaluation
 - a HEFCE-administered national project and associated evaluation
 - analysis of the potential application of administrative data to understand learning gain in HE.
- As a result of HEFCE's work, learning gain has been established as a concern throughout the learning and teaching community in England and in wider HE debates.
 - The research has revealed and developed concepts of learning gain that are relevant and applicable to institutional practice, and measures have been tested and developed across a diverse range of contexts, with more than 70 institutions participating in HEFCE projects.
 - There is an improved understanding of the conditions and factors required to implement learning gain measures effectively, including managing complex areas such as ethics, data sharing and privacy, and student participation.

- There have been impacts on wider learning and teaching practices; for example, two of the pilot project institutions are exploring their overall approaches to assessment practice.
- It is too early to provide data on the learning gain demonstrated through the projects, but HEFCE has been able to identify some of the challenges and benefits associated with measuring learning gain.
- Building on the research and activity so far, HEFCE is developing a Learning Gain Toolkit, which will provide a basis for methodologies to be quality assured and used comparatively.
 - Institutions will be able to undertake their own learning gain measurements and demonstrate the outcomes through assessments such as the TEF.
 - A student engagement plan will ensure the programme understands and is aligned to their interests, reflecting the focus of the new Office for Students.
 - The employer perspective is already embedded in the projects, and will be developed further through the development of the toolkit.

HEFCE published [*To what extent has the Higher Education Sector the Capacity to support Social Entrepreneurs? Ripple effects from supporting Social Innovation, Entrepreneurship & Leadership.*](#)

- It considers the impact and legacy of HEFCE's UnLtd programmes (2009/15), which invested more than £5m, matched by 86 English HEIs involved.
 - The report summarises results of a survey of 24 of the HEIs, looking at assets and resources, knowledge and skills, the range of support on offer, future needs, opportunities and routes.
- Overall, the majority have built significant capacity and are well placed to offer support currently and into the future:
 - They offer a wide range of support, comparable with the wider social enterprise support sector, and significant proportions of their offer are secure in the short term.
 - HEIs are getting it right most of the time, from the viewpoint of their own community and the marketplace.
 - Significant financial and non-financial support is being committed by some HEIs to support social entrepreneurship innovation and leadership activities.
 - Social entrepreneurs starting out at HEIs are accessing a broad range of follow-on support beyond the initial interventions provided.
 - Over 738 social ventures have been incorporated in the last five years across the HEIs surveyed.
 - The UnLtd programme coming to an end has had a negative impact on capacity – both on the ability to support social entrepreneurs and to invest in them.
 - Wider stakeholders value working with HEIs and the contribution they are making to support the social entrepreneurship agenda.

Localis published [*Place, Learning and Entrepreneurialism: The impact of entrepreneurial education on regional economies*](#), exploring what more can be done to encourage university entrepreneurial activity and its role in emerging local industrial strategy.

- There are pockets of excellence in supporting enterprise and entrepreneurship and there is an escalator of business support; however:
 - 35% of universities did not contribute to the production of any UK graduate start-ups in 2017
 - where there is good practice, too little is known of its true impact.
- Universities should make entrepreneurialism a strategic priority.
 - Every student should have the opportunity to develop enterprise and entrepreneurship skills and learning, within and outside the university curriculum.
 - Entrepreneurship should be identified and nurtured across all disciplines, with access provided to support as businesses grow.
 - Universities should play a more active role beyond pre start-up and start-up phases.

UCL Press published [*Shaping Higher Education with Students: Ways to Connect Research and Teaching*](#), showing how students and academics can work together to shape research-based education.

- Featuring student perspectives, the book offers academics and university leaders practical suggestions on HE pedagogy, including:

- the principles of working with students as partners
- connecting students with real-world outputs
- transcending disciplinary boundaries in student research activities
- connecting students with the workplace
- innovative assessment and teaching practices.

HEA published [Action Research: Practice Guide](#) accompanied by [Sector Case Studies](#) exemplifying the types of action research being undertaken across a range of disciplines.

- The guide is for practitioners interested in improving students' learning experiences through researching their own practice.
 - Action research is described as inquiry that is practical, theoretical, collaborative, reflexive and contextual.
 - Practitioners who would benefit from conducting action research include all lecturers and university teachers, librarians and information technology experts, support specialists such as counsellors, disability advisors, and those working in careers and employability.
 - The value of action research is that it enables professionals to take action on their teaching and/or assessment practice in order to improve students' learning experience, and to better understand why or how things work in the bigger context.
 - Themes include curriculum development, interactive teaching methods, use of technology in teaching, students as researchers, teacher education, student transition, and inclusive practice.

HEA, the Equality Challenge Unit and Leadership Foundation for Higher Education have merged to become [Advance HE](#), which was formally launched on 21 March. Owned by GuildHE and Universities UK, its new structure and programmes will be in place by 1 August 2018.

Universities UK (UUK) published [Higher Education Research in Facts and Figures](#), an overview of the quality of research, impact, international collaboration, students, staff and finance at UK universities.

- UK research accounts for 10% of global downloads, 11% of citations and 15% of the world's most highly cited articles, despite representing only 4.7% of researchers and a small share of global research investment.
- In 1981, 90% of UK research output was completely domestic, however this is now the case for less than 50%; six of the UK's top ten international collaboration partners are from Europe.
- The proportion of non-UK staff in UK HE research roles has increased from 34% in 2004/05 to 47% in 2015/16.
 - Since 2007/08, all UK nations have seen increases in the number of postgraduate research students [*actual numbers are not provided*].
- In 2015/16, UK universities received £7.8b in research income: £840m from EU sources outside of the UK; £440m from non-EU sources.
- The Government has increased investment and committed to meeting the OECD average for investment in research & development within ten years.

UUK International (UUKi) published [The Scale of UK Higher Education Transnational Education \[TNE\] 2015–16](#).

- It includes the first detailed analysis of regional trends drawing on data in the Higher Education Statistics Agency's Aggregate Offshore Record.
 - It also looks at the split between undergraduate and postgraduate study and at the different types of provision at both global and regional levels.
- Over 700,000 students were studying for UK degrees outside the UK in 2015/16 – 1.6 times the number of international students in the UK in the same year.
- Student numbers grew by 17% from 2012/13 to 2015/16; the growth rate from 2014/15 to 2015/16 was 5.3%, slightly higher than from 2013/14 to 2014/15 (4.3%).
 - 82% of UK universities provided TNE; 75% of TNE students were enrolled in a programme run by or associated with 11% of UK universities.
 - 23 UK universities hosted more than 5,000 TNE students, up from 18 in 2012; 82% of all TNE students attended these universities.

- 44% of students were studying through collaborative provision; 25% were studying through the reporting provider; 20% through distance, flexible or distributed learning; 8% through overseas campuses; 3% through other provision.
- 65% of students were undergraduates and 35% were postgraduates.
- The same ten countries hosted the most students in 2015/16 and 2014/15; Malaysia and Singapore hosted the highest number in both years.
- Of the 20 countries hosting the most students, seven are in Asia, six in Middle East & North Africa, four in Europe and three in the Americas, showing take-up across mature and emerging economies.
 - 76% of students are on programmes in the 20 highest-volume countries.
- South America had the highest average year-on-year growth from 2012/13 to 2015/16 (12.6%) and North America had the lowest (1.7%), while student numbers fell by 5% in non-EU Europe over the same period.
- The EU hosted the third highest number (13%); UK HE TNE student numbers grew by 5% from 2012/13 to 2015/16, the lowest increase of all regions.
 - The top five EU countries were Greece, Germany, Cyprus (EU), Republic of Ireland (RoI) and Spain.

There is no breakdown by provider or UK nation.

The Centre for Global Higher Education (CGHE), based at the University College London (UCL) Institute of Education, published: [Higher education and Brexit: current European perspectives](#), based on research with universities in the UK and nine other European countries.

- All the countries studied in the report expressed fear not only that the quality and reputation of European research would suffer with the UK's departure from Europe, but that Brexit posed a threat to the European project at large.
- Inevitably, the dominant theme was uncertainty, with little known about the future position of the UK in relation to EU research funding or about the conditions for student and staff mobility within post-Brexit Europe, making it difficult for institutional leaders to plan for the future.
- The UK has been sought as a prestigious research partner, thereby enhancing European research overall.
 - Not only might other countries lose a 'precious partner', but a 'good deal' for the UK might encourage other countries to leave.
- The UK's strong position in European HE and the market orientation of UK universities create imbalances and tensions in relationships with other partners.
 - However, all the countries studied value UK academics' role in leading research consortia and saw the participation of their UK partners as essential to many of their research projects.
- Many participants were concerned with finding ways of maintaining cooperation and expressing solidarity with their UK colleagues.
 - However, participants in some countries suggested Brexit might provide an opportunity to 'poach' high-profile, UK-based academics and funds.
- The loss of the UK as an academic exchange partner was a concern for countries sending significant numbers of students to the UK.
 - On the other hand, for countries such as Ireland, Netherlands and Denmark – which offer English-language tuition – Brexit was seen as an opportunity for increasing incoming numbers.
- UK-based academics feared waves of restructurings and redundancies and loss of funding in the wake of Brexit.
 - Brexit is likely to have a very unequal impact across the different nations of the UK, on different types of university and across disciplines.
 - There is also a widespread fear of a net loss of early-career academic positions, not only in the UK but also across the EU, as many of these positions are funded by research grants held with UK partners.
- Policymakers in the devolved nations were interviewed, including civil servants in Northern Ireland, who highlighted shared UK issues around international talent, research collaborations and funding, and Erasmus/Erasmus+, but some differences:

- 90% of EU students come from the Republic of Ireland.
- The problem of feeding HE concerns and priorities into discussions around border arrangements.
- The fear that Northern Ireland could particularly suffer from any loss of international students, raising serious financial issues for HE in the country.

The Workplace

RECRUITMENT

CVER published [Skills, Signals, and Employability: An Experimental Investigation](#), looking at how a broad range of 'skills signals' are valued by employers during recruitment.

- Since the skills of labour market entrants are not usually directly observed by employers, individuals acquire 'skill signals' in three domains: cognitive, social and maturity.
 - The authors drew up fictitious job applications for apprenticeship vacancies using a range of such signals and asked a large sample of German HR managers (who were aware the applicants weren't real) to select those for interview.
 - Among secondary school leavers:
 - A one grade higher school grade point average (GPA) increased the probability of an interview by 22ppt for both males and females.
 - Extended IT skills also had an effect, which was more pronounced for female applicants.
 - Applicants who signalled social skills by social volunteering had a 37ppt higher probability of an interview; participating in team sports had no effect.
 - There was a significant advantage in being even a few months older, particularly among male applicants; there was no advantage in having undertaken a longer internship.
 - Among college graduates:
 - A one-grade higher college GPA increased the likelihood of interview by 38ppt; extended IT skills and English proficiency had no effect.
 - Volunteering work with intensive social interactions had an advantage over less social options For female graduates, whereas no such effect was found for males.
 - Participation in team sports increased the probability of a job interview, possibly as it would be seen to be driven by personal choice.
 - There was no advantage to being older; however there was an advantage to having undertaken a longer internship.

APPRENTICESHIPS & TRAINEESHIPS

The National Centre for Universities & Business (NCUB) published [Degree Apprenticeships: Impacts, Challenges and Future Opportunities](#); although focused on England, it includes the impact of the apprenticeship levy on levy-paying employers with staff across the UK.

- Employers face challenges with restrictions on levy spend outside England and differences in policy across devolved administrations where they want to implement a consistent 'early talent' strategy throughout their business.
 - One employer's comment summed up the challenge: 'It is utterly problematic for us. We can't give funding to our Belfast Office. And our people that move around – how to track them? ... We pay a bill for all our people but can't get the money back – it's frustrating'.
 - The UK Government should consider minimising how the levy and the differences in apprenticeship policy in the devolved administrations impact on UK-wide businesses.

IZA published [Are Apprenticeships Business Cycle Proof?](#) examining the impact of the economy on firms' apprenticeship programmes, using data from Swiss cantons.

- Although there is evidence that apprenticeship training can ease the transition of youth into the labour market and thereby reduce youth unemployment, many policymakers fear that firms will cut their apprenticeship budgets during economic downturns and thus increase youth unemployment.

- Economic shocks were found to induce a small, pro-cyclical immediate response in the apprenticeship market; however, within a year firms compensate for their initial reaction resulting in no permanent observable effect.
- Once a company has decided to get involved in apprenticeship training, it does so on a regular basis; the majority of firms only postpone (or advance) their initial training decisions depending on the economic climate.
- Recessions impact the number of apprenticeships by forcing some training firms out of the market; however, fluctuations in the number of apprentices in the market mainly follow changes in the number of school leavers.
 - From a policy perspective, the youth situation in the apprenticeship training market depends mainly on demographic fluctuations and not on economic cycles.
- The findings are limited to systems where apprenticeships are offered across almost all economic sectors and a wide range of occupations; this diversity increases the robustness during downturns.
 - In countries where apprenticeships are concentrated in particular industries and occupations, the overall impact of economic cycles on the provision of apprenticeships might be much stronger.

The Federation of Small Businesses (FSB) Scotland published [Modern Apprenticeships and Small Businesses](#), highlighting the key role of small businesses in the labour and apprenticeship markets.

- To maintain the success of the apprenticeship system and meet Scottish Government targets, the pool of employers taking on apprentices will need to expand by including more small businesses.
- Only 12% of FSB members had Modern Apprentices in 2015 (fluctuating between 8% in 2013 and 17% in 2009).
 - The barriers small businesses face to recruiting apprentices include costs, time, a perceived lack of relevance and age restrictions on funding.
 - Those that hire apprentices think it is a cost-effective way to address skills and labour shortages.
- Recommendations include:
 - Making a business with no employees eligible to take on an apprentice.
 - Publishing apprentice statistics by business size with targets set for training providers to involve more SMEs.
 - Providing an online advisory service for SMEs on recruiting and managing apprentices.
 - Providing more financial support for apprentices aged 25+.

The Timewise Foundation and Learning & Work Institute published [Exploring models for part-time and flexible apprenticeships](#) in partnership with the Young Women's Trust and Trust for London.

- The aim was to understand the challenges in developing part-time and flexible apprenticeships, and explore models that will tackle inequalities and increase diversity.
- The critical success factors include:
 - Working with employers to understand workforce needs and where part-time and flexible apprenticeships may be beneficial.
 - Communicating the opportunities and demand for part-time and flexible apprenticeships, and policymakers to demystify part-time apprenticeships by raising their profile for employers.
 - Focusing on sectors and occupations where some degree of part-time or flexible working is already established.
 - Ensuring the level of apprenticeships offered is appropriate, of a high quality, and offers real progression opportunities and wage returns.
 - Ensuring that these apprentices are paid at least the Living Wage.
 - Exploring blended learning programmes that make better use of online and distance learning, while retaining the benefits of face-to-face and peer group learning.
 - Involving employer and employee representatives in the design of the pilot to ensure part-time models of delivery meet the needs of both.

The Learning & Work Institute published [Understanding the under-representation of women in engineering apprenticeships](#); the focus is on England, but the analysis is more widely applicable.

- Just 9% of the current engineering workforce is female, and in 2014/15 fewer than 3.5% (600) of the 17,500 engineering and manufacturing technology (EMT) new apprentices were female.
- In 2015 and early 2016, 3.7% of female apprenticeship applicants were in the EMT sector, compared with 34.6% of male applicants, and only 6.7% (140) of successful EMT applicants were female.
 - EMT is one of the few sectors where there is no gender imbalance in success rates.
- 40% of female applicants applied only to EMT, compared with 56% of men; many applied to a wide range of often unrelated sectors, such as 'business, administration & law' or 'retail and commercial enterprise'.
- Female applicants were more likely to be unsuccessful due to being 'not eligible' or because the training provider had been unable to contact them; male applicants were more likely to have met the requirements but been unsuccessful, or to have withdrawn their application.
- 25% of unsuccessful women made further applications to the sector, compared with 43% of men.

Education & Employers published [Teenage apprenticeships: Converting awareness to recruitment](#).

- It explores the particular characteristics of schools/colleges in England that guide significant numbers of pupils into apprenticeships, and of teenagers who go into apprenticeships.
- Employers identify the perceptions and influence of parents as the main barrier to ensuring a greater number of apprenticeship starts among school/college leavers; schools and colleges support this conclusion.
 - Schools and colleges surveyed that had high levels of leavers going into apprenticeships run specific events to engage parents, whereas none of the 'lower performing' schools/colleges did.
- Lack of quality apprenticeship advice and guidance from school staff was an issue, with employers reporting that some teachers believe that apprenticeships are only suited to lower achievers.
 - This is unsurprising given that very few teachers will have any personal experience of apprenticeships.
- Only one school surveyed carried out specific activities to challenge gender stereotypes, and teenagers – particularly boys – tend to hold 'entrenched' opinions in this area.
- Young people who had never thought about an apprenticeship had 7% fewer employer contacts than those who had successfully applied for one.
 - Schools/colleges with more leavers taking up apprenticeships frequently invited current or ex apprentices to speak to their students, making it more likely that the young people valued the event.
- 'Higher performing' schools also gave advice at a younger age, giving students time to consider options before making decisions.
- Although schools/colleges often gave students job-seeking and recruitment skills support, it rarely covered assessment centres, which are used by an increasing number of employers.
 - Schools/colleges need to do more to help young people present their skills and achievements verbally and in written form in a succinct and convincing manner.

SKILLS POLICY

New think tank the Centre for Progressive Policy published [The Data Deficit: Why a lack of information undermines the UK skills system](#); the focus is on England, but the analysis is more widely applicable.

- For decades, the fragmented array of institutions, funding arrangements, incentives and accountability mechanisms have failed to provide learners with the skills they need to access highly paid jobs, or businesses with the workers they need to grow.
 - The system suffers from comprehensive market failure, seemingly unable to bring together supply and demand for skills.

- In the policy community, 'skills' is a term that quickly narrows to institutional structures, qualifications and funding mechanisms.
- Underneath this managerial understanding are broader ideas and identities, including class, culture and sense of self-agency, that are intrinsically bound to the efficacy of programmes and policies.
- Policymakers puzzle as to how to solve the productivity problem in the face of a skills market characterised by three types of failure:
 - Market failure – the system's incapacity to effectively bring together the supply of skills flowing from FE colleges and other providers with employer demand.
 - Policy failure – policymakers, despite successive attempts at reform, have been unable to drive a significant shift in outcomes, destabilising the system for few discernible gains.
 - Information failure – a lack of information on a range of aspects of the system, from course quality to expected salary outcomes, prevents optimal decisions from being made by learners, providers and policymakers.
- Four key insights can ease chronic information failures and drive improved outcomes across the system:
 - The wage differentials myth – evidence that debunks the myth that HE is the sole route to high earnings.
 - The considerable potential for significant increases in incomes as a result of access to high quality technical education.
 - The persistent technical skills shortages caused by successive governments boosting the numbers of graduates.
 - The importance of place-based skills policy, which could better align provision with local needs and opportunities through regional skills commissioning.

The OECD published [How returns to skills depend on formal qualifications](#), an Education Working Paper.

- It uses data from the Programme for the International Assessment of Adult Competencies (PIAAC) for 21 countries, and focuses on comparisons between less-educated adults (below upper secondary) and their intermediate-educated peers (at upper secondary level).
- Findings include:
 - Higher formal qualifications are associated with higher cognitive skills, but both educational groups also exhibit considerable internal heterogeneity.
 - The relationship between formal qualifications and skills differs across countries, both in terms of the skills differential between less- and intermediate-educated adults and in terms of their internal homogeneity.
 - The signalling value or 'skills transparency' of educational credentials varies systematically across countries.
 - Accounting for differences in literacy and numeracy skills partly explains the occupational attainment gap in all countries and also reduces cross-national variation, but country differences remain even after accounting for cognitive skills and other key observables.
 - The remaining variability is related to the skill transparency of educational degrees; the disadvantage of less-educated adults grows as the gap in occupational attainment between less- and intermediate-educated adults increases and as these groups become more homogeneous with respect to cognitive skills.
 - The labour market disadvantage is larger in countries with a stronger vocational orientation.
 - Returns to numeracy skills are smaller for less-educated adults than intermediate-educated adults.
 - In countries where skill transparency is high, it may not be enough to improve the skills of less-educated adults; it may also be crucial that skill improvements are certified according to clear and transparent standards, and that less-educated adults perhaps even attain higher educational degrees.
 - Less-educated workers with relatively high levels of skills appear to have the most to gain from attaining higher formal qualifications.
 - The labour market prospects of skilled adults with low formal qualifications might also be improved by measures that reduce the weight of formal qualifications in selection procedures, particularly

when selection procedures incorporate instruments that allow them to demonstrate their abilities during the early stages of the hiring process.

Cedefop published [National qualifications framework developments in European countries: Analysis and overview 2015–16](#), its sixth such monitoring report, covering 39 countries.

- Political commitment and technical advancement have continued, and, by mid-2017, 32 countries had linked their national qualification framework (NQF) to the European Qualifications Framework (EQF) levels.
 - NQFs play a key role in improving transparency and comparability of qualifications nationally and internationally.
- NQFs trigger reform because they cover all levels and types of qualification and focus on learning outcomes, and there is increased cooperation and coordination between stakeholders across education subsystems and between education and the labour market.
- Countries have implemented – or are planning – procedures to include qualifications awarded outside formal education, and comprehensive frameworks have helped identify gaps, e.g. at EQF Level 5.
 - NQFs are at the heart of supporting lifelong learning and working ‘pathways’, but there has been limited use by labour market actors.
- NQFs are mainly used as tools for communication and dialogue between education and training rather than for change and reform in those spheres.
- Most see their key objective as bridging complex and sometimes fragmented qualification systems.
 - This is an innovative function that can potentially help address the increasingly complex world of qualifications as education and training adjust to the possibilities offered by the internet and the needs of global technologies and markets.

More detail is provided in [Overview of national qualifications framework: Developments in Europe 2017](#), which includes the frameworks of individual countries.

The European Commission (EC) published [The European Qualifications Framework: Supporting learning, work and cross-border mobility](#), ten years since the EQF was set up as a common reference framework, expressed as learning outcomes at increasing levels of proficiency.

- 34 countries (26 EU member states and eight non-member states) have referenced their national QFs or systems to the EQF, establishing a clear link between national and European levels.
 - 23 of these countries display EQF levels on certificates, diplomas or Europass supplements, while 17 display EQF levels in qualifications databases or registers.
 - A number of countries are working to connect their databases to the [Learning Opportunities and Qualifications in Europe](#) portal.
- The EQF has had a major impact on the development of NQFs in Europe; 43 NQFs have been established, up from three before the first EQF Recommendation in 2008.
- Most countries have introduced eight-level frameworks, although e.g. the French framework has five levels, the Irish ten and the Scottish 12.
- Most NQFs cover qualifications offered within formal education and training, however there is a growing trend to open up frameworks to qualifications awarded outside the formal system.

The OECD published [Skills for the 21st century: Findings and policy lessons from the OECD survey of adult skills](#), an Education Working Paper.

- It presents a brief recap of PIAAC and its two predecessor international skills surveys, outlines the main themes investigated to date using PIAAC data, and highlights findings and policy lessons drawn from the survey.
- PIAAC has helped to improve our understanding of issues such as: the transition from school to work; the returns to skills; skills mismatch; skill use in the workplace; changing comparative advantage and Global Value Chains; the ‘Fourth Industrial Revolution’; lifelong learning; ageing and productivity; inequality; and wellbeing.
- Via the Survey of Adult Skills – the ‘jewel in the crown’ of PIAAC – the programme is well on its way to fulfilling its goal of providing reliable information for countries to benchmark levels and distributions of key skills in their adult populations and identify effective policy levers.
 - Planning now underway for the second PIAAC cycle will lead to further improvements.

OECD published [Improving productivity and job quality of low-skilled workers in the United Kingdom](#).

- It considers how competencies can be strengthened through education and training, and how low-skilled workers can be made more productive by reducing skill mismatches and improving labour mobility.
- There are a number of ways of defining 'low skilled', including lower assessed proficiency, lower educational attainment, or occupational/industry classifications.
 - More than a quarter of workers in England and Northern Ireland have low basic numeracy and literacy skills as measured by the OECD PIAAC – more than most other OECD countries.
 - In the UK, almost 30% of 16–24 year-olds have low basic skills – three times higher than in the best performing countries; unlike most countries, young UK adults have lower basic skills than in the generation approaching retirement.
- Those with low literacy skill levels are generally about twice as likely to be unemployed, thereby reducing opportunities to develop skills on the job; low-skilled workers often have jobs of low quality and relatively low earnings.
- In the UK, low-skilled workers are estimated to have made a negative contribution to UK productivity growth in the three decades ending in 2007; and the UK is one of the weakest performers in intergenerational social mobility.
- Improving basic skills needs to be a continuous process, requiring action throughout the system.
- The paper summarises the current UK position in terms of early childhood education, attainment gaps at secondary, the vocational education and training system, adult education, employer involvement, skills mismatches and the quality of work.
- It identifies policies being introduced that may help to address the situation [*although in many cases those policies are England-only*]; policies that evidence suggest could bring about further improvement include:
 - Increasing take-up of early childhood education among two year-olds, and improving staff training to deal with increased cultural diversity.
 - Addressing the continuing attainment gap at secondary and increasing post-16 participation among those with poor basic skills.
 - Increasing the involvement of employers in vocational education and training (VET).
 - Providing more support for adult learning, and improving the alignment with local economic priorities and productivity challenges.
 - Subsidising training initiatives that promote choice in participating in lifelong learning and other training.
 - Increasing expenditure on active labour market policies (ALMP), particularly for young people.
 - Addressing high levels of skills mismatch by increasing labour mobility through better information, housing and transport.
 - Improving the quality of 'non-standard' work and the opportunities for those, such as the self-employed, who find it difficult to invest in their own skills.

CESifo published [The Effect of Attitudes toward Migrants on Migrant Skill Composition](#) – one of the first papers to address the subject.

- It finds empirical support for the hypothesis that general anti-immigrant sentiment reduces the average skill composition of migrants.
 - An increase of 1ppt in the fraction of natives who have positive attitudes toward migrants leads to at least a 6% increase in the ratio of the high- to low-skilled emigration rate.
 - The highly skilled are more mobile and have better outside options; at the same time, since fixed migration costs depend on skill transferability across countries, migrants become more sensitive to negative attitudes.
 - Assuming skill transferability will increase over time due to globalism, migrants might become even more sensitive to negative attitudes in the future.
- Supporting anti-immigrant sentiment may be counterproductive for policymakers seeking to reduce low-skilled and attract only highly skilled migrants.

- Strategies aiming to attract the highly skilled should also involve improving attitudes toward immigrants.

SOLAS (Further Education & Training Authority) and Education & Training Boards Ireland (ETBI) published [English language provision and language assessment for low-skilled and unemployed migrants: Recommendations for good practice at NFQ \[National Framework of Qualifications\] levels 1–3 in ETBs.](#)

- Integration policies at European and RoI levels stress the importance of language tuition for migrants.
 - Publicly funded ESOL (English for Speakers of Other Languages) provision in the RoI has developed in the absence of any overall national strategy or policy initiative.
- Many countries have national ESOL strategies, including subsidised or free language tuition for specific target groups.
 - Nations that provide free tuition do this as a general rule to at least A2 or B1 level on the [Common European Framework of Reference for Languages](#) (CEFR).
 - A number of jurisdictions have developed language frameworks for second language acquisition to underpin assessment, curriculum and accreditation systems.
 - A number of EU member states have mandatory language policies for non-EU migrants or migrants applying for citizenship, with links between language courses and the integration of migrants into the workplace.
- Teacher expertise is the most important resource for effective ESOL practice.

SKILLS GAPS, SHORTAGES & MISMATCH

The Migration Advisory Committee (MAC) published [EEA-workers in the UK labour market: Interim Update](#), summarising views submitted to its investigation into the impact of European Economic Area (EEA) migration into the UK.

- The vast majority of employers do not deliberately seek to fill vacancies with migrant workers; when an EEA migrant worker gets a job, it is because they are the best – sometimes the only – qualified applicant.
- The difference in skills within the population of both migrants and the UK-born is far larger than any difference between the groups; it is misleading to think of them as distinct but homogenous groups.
 - However, there are differences on average that account for EEA migrants being more likely to be employed in some sectors than others.
- Many employers say that EEA migrants are more motivated and flexible, and show a greater willingness to work longer and unsociable hours and a consistently strong work ethic.
 - It is hard to assess this objectively, although, on average, EEA migrant workers report lower absenteeism and fewer health problems, are slightly more likely to work less appealing hours, and are better educated within occupations.
- Many EEA workers are in jobs requiring a high level of skill, but some of the claims about necessary skill levels seem to the MAC to be exaggerated.
 - Skills shortages in lower-level jobs could be alleviated more quickly with shorter training times, though this may require government as well as employer action.
- Training UK-born workers to fill skills shortages may be a strategy in the longer term, but employers say that in the short term they needed EEA migrants to fill the gap.
 - They emphasise that the availability of EEA migrants has not reduced the training opportunities to the UK-born.
 - Many of the reported skills shortages and problems have persisted for decades; it is unlikely that solving skill shortages can be left to individual employers – support from government is needed.
- Some employers think that wages are irrelevant to the ability to recruit and retain UK workers – the MAC does not think this is credible.
- Many businesses do not seem well-prepared for a changing and tighter labour market; still fewer seem to be making provisions for change due to the sense of pervasive uncertainty.
- ONS projections suggest that if EU net migration was zero, the population in Scotland, Wales and Northern Ireland would stop growing and even fall in the next 20 years.

- In terms of the ageing population, a fall in migration will have a very small effect on dependency ratios, since working-age migrants eventually become old themselves.

Cedefop published [Insights into skill shortages and skill mismatch: Learning from Cedefop's European skills and jobs survey \(ESJS\)](#).

- Analysis of skill mismatch is complex, and some degree of mismatch is a given; but excessive mismatch has adverse economic and social consequences.
 - Evidence suggests that there is substantial scope to improve skill matching in European labour markets, but it is not an easy task to ascertain the most important policy implications.
- Facts about the occurrence, cost and determinants of different forms of mismatch affecting EU workers include:
 - 43% of adult employees have recently experienced changes in the technologies they use at work; 47% saw changes in their working methods or practices; around 20% consider it very likely that several of their skills will become outdated in the next five years.
 - In the face of rapid advances in the digital era, some groups (older, lower-educated, unemployed or inactive workers, females and those employed in low-skill jobs) are at risk of being left behind.
 - Those who return to the job market after an extended period in unemployment have greater skill gaps.
 - Those who will survive and thrive are those who possess good digital skills plus a healthy mix of cognitive skills (problem-solving, creativity, learning to learn) and socio-emotional skills (communication, collaboration).
 - Skills shortages affect Europe's most innovative, international, competitive and dynamically growing enterprises, posing productivity and growth constraints; but skill shortages are multifaceted, and can be the result of unattractive job offers, poor HR practices and limited labour market mobility.
- A considerable share of the working population already possesses the skills needed by their jobs, despite being underqualified, reflecting the fact that people continue to build human capital within workplaces.
 - Not only is there a large 'invisible' stock of skills, but many employees find themselves in jobs that don't fully utilise their potential.
 - Contrary to assumptions, over-educated/over-skilled workers don't necessarily move on to more suitable jobs, but have a high chance of remaining over-skilled after several years of tenure.
- Jobs that entail informal learning have more impact on skills development than structured training courses.
 - Those who enter a job with a skill gap usually benefit from non-formal and informal learning, whereas over-skilled employees are inhibited in their further skill development on the job.
- Policymakers should adopt a different mindset: rather than focusing solely on employer difficulties, they should take stock of the potentially large volume of existing unrecognised and underutilised skills, as well as poor job offers, HR management and other market rigidities.
 - Policymakers must distinguish the part of shortages that may be mediated by adapting vocational education and training (VET) systems, from that which can best be tackled by wider labour market and other policy reforms.
 - Helping specific vulnerable population groups and the need for placement in good, stable jobs are important.
 - Good career guidance and counselling to graduates and job-seekers is key, in order to prevent over-skilling at early career stages from which it is difficult to escape.

[Skills mismatch: Concepts, measurement and policy approaches](#) by Economic & Social Research Institute (ESRI) researchers was published in the *Journal of Economic Surveys* [payment is required to access the full article].

- An overview is provided of each form of 'skills mismatch' – forms of labour market friction – including vertical mismatch, skill gaps, skill shortages, field of study (horizontal) mismatch and skill obsolescence.
 - The measurement and inter-relatedness of different forms of mismatch is discussed and current literature is analysed.
 - Areas that are relatively underdeveloped and may warrant further research are highlighted.

- The incidence of various combinations of skills mismatch across the EU and the EC's country-specific recommendations are assessed.
- Underutilised human capital in the form of over-education and skills underutilisation receives little policy attention.
- In cases where skills mismatch forms part of policy recommendations, the policy advice is either vague or addresses the areas of mismatch for which there is the least available evidence.

Cedefop published [Skill needs anticipation: Systems and approaches](#), analysis of a survey carried out with the International Labour Organization, the OECD and the European Training Foundation.

- The survey was addressed to ministries of labour and education, trade unions and employer organisations in 61 countries.
- A wide range of approaches is used to collate and summarise LMI to analyse skills shortages and labour market imbalances.
- Frequency ranges from multiple analyses of existing statistics every year, to once every five years for approaches repeated in a consistent way.
 - However, many countries report that all or most of their assessments are revised or updated infrequently, showing a lack of structural approach to skill anticipation.
 - There is also variation of level – national, sub-national or sectoral – and there is no common blueprint to the way institutions and frameworks are developed to generate, use, disseminate and inform decisions.
- Common problems include skills measurement where qualifications and occupations have to serve as proxies for skills, frequency and level of detail of data, and reliability of data.
- Many countries use forward-looking methods to assist them in formulating policy responses to skills mismatch, although such approaches are usually grounded in an assessment of the current situation.
- Collaboration among stakeholders, lack of institutional and expert capacities, and lack of funding all pose challenges in analysing and using LMI, validating its outcomes and translating it into adequate policy responses.
- The inclusion of social partners and stakeholders seems to be instrumental in ensuring the full breadth of opinions on skills needs and policy options.
 - Social dialogue among stakeholders is a key means of steering the training relevance, the acceptance of results and the distribution and discussion of key outcomes.
 - Technical expertise is needed in both the organisations providing elements of the skills assessment and the ministries and other stakeholders involved in policy formulation and implementation.

In collaboration with The Boston Consulting Group, the World Economic Forum published [Towards a Reskilling Revolution: A Future of Jobs for All](#).

- Current discussions of the future of work have often emphasised the urgency of reskilling and life-long learning, but few approaches exist to help identify productive ways of planning job transitions that can minimise strain on – among other things – public finances and social safety nets.
- The report introduces a new approach to identifying reskilling and job transition opportunities, using big data analysis of online job postings, in order to help governments and others prioritise their actions and investments.
- Translating reskilling into viable and desirable jobs will require new thinking around workforce planning, along with a need for agile social protection and insurance mechanisms.
 - Wide-spread adoption of micro-credentials and new methods of education and training delivery that combine online and offline models will be necessary for creating new opportunities for workers.
- The data-driven approach described helps to quantify the gains in aggregate income of an economy that will result from redeploying workers to emerging positions that otherwise might have gone unfilled.
 - It helps highlight the viability of a new vision and build the economic and business case for planning, delivering and financing reskilling and job transitions.

Academics from UCL Institute of Education and Cambridge University published [The financial skills of adults across the world. New estimates from PIAAC](#).

- They analysed data from 8,797 16–65 year-olds in England and Northern Ireland and 30 other countries who completed the OECD PIAAC test in 2011.
- Adults in England and Northern Ireland performed worse on everyday financial numeracy tasks than adults in many other developed countries, even when using a calculator.
 - 33% could not work out the correct change from a shopping trip, while 40% could not correctly apply a simple discount to an everyday household product.
 - Over 50% were unable to interpret a graph containing basic financial information.
- In most countries, men have slightly stronger financial skills than women, while the over-55s were typically the worst performing age group.
- 16–24 year-olds in England and Northern Ireland performed particularly poorly on the financial test, compared to young people of the same age in other developed countries.

The Open University published [What can we learn from India about bridging the IT skills gap?](#).

- It is one of the publications from a two-year [research project](#) on gender, skilled migration and IT, and looks at why, compared with the UK, the Indian IT industry manages to attract such a high proportion of women into highly-skilled roles.
- It finds that India:
 - has achieved comparative advantage to other sectors by offering career support; high status, reward and security; and visible equality policies that attract women
 - effectively recruits into the sector through targeted high profile campaigns and campus recruitment; 50% of the companies recruit directly through universities providing a safe pipeline from study to work
 - enables career progression, as 50% of the companies offer in-house leadership and management programmes; this has contributed to 30% of companies doubling the proportion of senior women between 2012 and 2017
 - invests in skills development to retain staff and keep a competitive edge.

Eurydice published [Teaching Careers in Europe: Access, Progression and Support](#), comparing and analysing policies in 43 European school systems including in Northern Ireland.

- The main themes include forward planning and challenges in supply and demand; entry to the profession and mobility; CPD and support; career development; and appraisal.
- Teacher shortages are a challenge for over 50% of systems.
 - Northern Ireland is one of seven nations (the others are Cyprus, Poland, Portugal, Slovenia, Republic of Macedonia and Serbia) where there are no shortages and the main challenge is oversupply.
 - Despite the challenges of supply, using incentives to attract students into teaching is rare.
- An ageing teacher population is a challenge for almost 50% of systems.
- In Northern Ireland, the ageing teacher population and oversupply are two elements of the same challenge.
 - The median age of teachers in the workforce is increasing each year and the proportion of teachers aged under 30 is decreasing.
 - Recently qualified teachers have struggled to gain permanent employment.
- Career guidance specifically for serving teachers is rare.

THE IMPACT OF AUTOMATION

The OECD published [Automation, skills use and training](#), drawing on analysis of PIAAC.

- Across 32 countries covered by the study, close to 50% of jobs are likely to be significantly affected by automation, based on the tasks they involve, but the degree of risk varies.
 - About 14% of jobs are highly automatable (i.e. the probability of automation is over 70%) – this is equivalent to over 66m workers in the 32 countries.

- 32% of jobs have a risk of 50–70% pointing to the possibility of significant change in the way these jobs are carried out as a result of automation.
- Jobs in Anglo-Saxon and Nordic countries and the Netherlands are less automatable than jobs in Eastern and South European countries, Germany, Chile and Japan.
- About 30% of the variance is explained by differences in the structure of economic sectors, and 70% by the fact that, within these sectors, countries employ different occupational mixes.
- Automation is found to mainly affect jobs in manufacturing and agriculture, although a number of service sectors – such as postal and courier services, land transport and food services – are also highly automatable.
- The occupations with the highest estimated ‘automatability’ typically only require basic to low-level education, while the least automatable occupations almost all require professional training and/or tertiary education.
- The risk of automation is highest among jobs of teenagers than among senior workers, making automation much more likely to result in youth unemployment than in early retirements.
 - However, in most countries, young people are better skilled than their older counterparts so they may find it easier to adapt to new jobs, including those created due to new technologies.
 - This unequal distribution of risk raises the stakes involved in policies to prepare workers for the new job requirements.
- Adult learning is a crucial policy instrument for the retraining and upskilling of workers whose jobs are being affected by technology; however, evidence suggests that a lot needs to be done to facilitate participation by the groups most affected.
 - Workers in fully automatable jobs are over three times less likely to have participated in on-the-job training over a 12-month period than workers in non-automatable jobs.
 - Workers with the highest risk of automation are about twice less likely to participate in formal education and 3.5 times less likely to take part in distance learning.

Connect published [2017 Knowledge Economy Report](#), with research by Ulster University Economic Policy Centre.

- Northern Ireland is the second fastest growing knowledge economy out of 12 UK regions for the fourth consecutive year, however the rate is slowing.
 - In a knowledge economy growth is dependent on the quantity, quality and accessibility of the information available, rather than the means of production.
 - Northern Ireland’s knowledge economy activity remains 20% below the UK average.
 - Up to 423,000 jobs will be impacted by automation in the next ten years (potentially 50% of jobs in Northern Ireland).
- To address the significant future economic and technological challenges, the education system needs to be radically overhauled.
 - The skills which support future employment include complex problem solving, fluency of ideas, critical thinking and resilience.
 - A dynamic coalition of government, public sector, business, FE and HE needs to work together to deliver practical solutions to economic and technology challenges.

The Scottish Council for Development & Industry published [Automatic... For the people? How Scotland can harness the technologies of the Fourth Industrial Revolution to increase economic and social prosperity](#), in partnership with BT Scotland, ScotlandIS and the Royal Society of Edinburgh.

- There are three great trends for the ‘digital revolution’ era, which are major challenges for workers, businesses and policymakers:
 - Rapidly increasing and diversifying capabilities of machines and data-driven decision-making
 - Disruption of incumbent business models by asset-light, digital platform-based businesses
 - Global digital interconnection enabling collaboration in decentralised online communities.
- 12 recommendations on economic development, education and employment include:
 - Redesigning education, skills, training, lifelong learning and employment for the new world of work, to equip children from early years onwards and to re-equip the current workforce.

- Education, skills, industry and social partners need to work together to influence changes.
- As a society, we should view education and skills development as an ongoing activity throughout a working life.

It includes extracts from a forthcoming Skills Development Scotland report, [Skills 4.0](#), proposing a model of future skills.

TRAINING & DEVELOPMENT

The Chartered Institute of Personnel & Development (CIPD) published its latest quarterly [Labour Market Outlook](#), based on a survey of 2,066 HR professionals and senior decision-makers across the UK.

- Among the findings:
 - The volume of training has remained broadly unchanged over the past year, with 72% of employers having a dedicated training budget (+2ppt on autumn 2015).
 - Training budgets are more likely in the public (89%) and voluntary (88%) sectors than in the private sector (65%); they are most prevalent in education (90%) and public administration (89%), and least likely in hospitality (57%) and retail (59%).
 - Organisations that employ EU nationals are more likely to have a training budget (84%) than those that don't employ EU nationals (45%), and are more likely to have increased their investment in skills.
 - Around one in seven employers (13%) that have recruitment difficulties do not have a training budget.
 - 20% of employers expect training expenditure to increase in the next year, but 54% expect it to stay the same, while 16% expect it to decrease.

Kineo (part of the City & Guilds Group) published [Learning Insights 2018: This time it's personal](#), a survey of 200 learning and development (L&D) professionals.

- The main new trends are personalisation for the learner, social learning and mobile learning.
- The biggest L&D themes for 2018 are:
 - Power to the learner – 57% of L&D professionals say they need information from learners about their learning needs to be able to meet L&D goals (up from 43% in 2017).
 - Re-imagining learning platforms – using the learning platform to encourage conversation around learning topics, as a continuation of face-to-face sessions, an addition to curated content, or as a discussion forum.
 - Supporting performance and providing information or tools for a specific need at a particular time.
 - Digital transformation – developing a more agile, future-focused culture, ready for changes as they arise, by upskilling employees who will be using new technology.
 - Challenges of globalisation, including with communication, budgeting, resourcing and trust.
 - Being a consultant for internal clients – projects are generally more successful when there is stronger collaboration between the L&D team and the rest of a business.
- The modern L&D professional needs the skills and styles of a business consultant, market researcher, digital producer, curator, translator and educator.

EMPLOYMENT: RIGHTS, RESPONSIBILITIES & WAGES

The UK Department for Business, Energy & Industrial Strategy (BEIS) published [The Characteristics of those in the Gig Economy](#) based on a panel survey covering Great Britain [*i.e. excluding Northern Ireland*].

- The 'gig economy' was defined as involving 'the exchange of labour for money between individuals or companies via digital platforms that actively facilitate matching between providers and customers, on a short-term and payment-by-task basis'.
- 4.4% of the population had worked in the gig economy in the 12 months leading up to August 2017.
 - 56% were aged 18–34, compared to 27% of the sample; education levels were similar.
- 42% had provided courier services; 37% had performed other jobs; 28% had provided transport services; 21% food delivery services.

- 18% had provided services through Uber, 12% PeoplePerHour and 12% Deliveroo.
- 38% had first got involved in the last six months; 24% had been involved for six months to two years; 14% for more than two years.
 - 55% were involved at least once a month, 9% daily; 14% 1–3 times a year; 14% one-off.
- 25% had earned less than £7.50 an hour (the national minimum wage at the time).
 - 41% had earned less than £250 over 12 months; 87% had earned less than £10,000.
 - Only 9% earned more than 90% of their income in the gig economy.
- 53% were very or fairly satisfied with their gig economy experience overall.
 - 58% were satisfied with the independence and 56% with the flexibility; only 25% were satisfied with work-related benefits and level of income.
 - Those for whom the income from the gig economy was important were likely to be more satisfied with all aspects; those for whom it was their main source of income were particularly satisfied.
- 41% said they planned to continue in the next 12 months, while 39% said they didn't.

Following the UK Government's review of modern working practices, the RSA (Royal Society for the Encouragement of Arts, Manufactures & Commerce) published [Thriving, striving, or just about surviving? Seven portraits of economic security and modern work in the UK](#), the first report from its new Future of Work Centre.

- Contract type and employment status are not adequate measures of whether someone is economically secure or in poor quality work.
 - While some people in the 'gig economy' may struggle to make ends meet as they go from job to job, others are satisfied with the hours they work and their degree of autonomy.
 - There are many workers in seemingly secure jobs who are just managing to scrape by but are overlooked when contract types or employment status are used as proxies for precarity.
- 26% of workers do not feel like they earn enough to maintain a decent standard of living, while 34% would consider themselves to be 'just about managing'.
 - 43% don't have anyone in their household who they could depend on to support them financially in the event of hardship.
- With regard to the quality of work, 28% of workers feel less secure in their jobs than they did five years ago.
 - 32% work excessive hours, and 47% often find work stressful.
 - Only 40% feel that they have good opportunities for career progression.
- The portraits of modern workers reflect a more nuanced analysis of these issues, and suggest that conventional jobs are no panacea: people's feelings, perceptions and lived experiences matter alongside objective measures of economic security.
 - In exchange for offering workers greater flexibility, businesses shouldn't relinquish their sense of responsibility for ensuring that they are also able to maintain a decent living: some workers have both flexibility and security in work.
- No single reform will improve economic security and employment experiences, but suggested interventions, ranging from local enforcement of the minimum wage to personalised training accounts, are a starting point.

CESifo published [How Much Does Others' Protection Matter? Employment Protection, Future Labour Market Prospects and Well-Being](#).

- Employment protection legislation (EPL) is an important determinant of workers' perceived future labour market prospects as well as their subjective well-being.
- This paper argues that workers on permanent and fixed-term contracts are affected not only by their own group's level of protection, but also by the level of protection offered to the other group.
- Policies intended to increase permanent workers' job security end up reducing fixed-term workers' perceived job security without increasing the perceived job security of permanent workers.
 - When designing employment protection policies, policymakers should be aware that the group of workers affected consists not only of the group primarily targeted.

The Institute for Public Policy Research (IPPR) published [Emotional Health at Work: Why it matters and how you can support it](#).

- A proposed emotional health framework outlines seven social and emotional competencies or 'assets' that can be cultivated within the workplace by individuals and organisations.
 - They are: self-beliefs, self-awareness, self-regulation, self-agency, beliefs about others, social awareness, relationship skills.
 - While each asset is important in its own right, it is the collective interaction between them that forms our emotional health.
- Findings from the European Social Survey (ESS) suggest that key priorities for the UK workforce are:
 - Supporting self-beliefs: a fifth report low self-beliefs.
 - Developing self-regulation: only a third feel that they deal well with important problems in life; over a fifth find that after something goes wrong it takes them a long time to get back to normal.
 - Building workplace relationships and relationship skills: half report that their working relationships are not supportive.
- ESS findings also suggest a correlation between the emotional health assets and psychosocial aspects of the working environment – e.g. autonomy, type of work, and having opportunities for learning and development.
- There is also a link between emotional health assets and other key workplace outcomes, including: performance; staff turnover and reduced absence; improved team relationships and reduced conflict; creativity and innovation.
 - This suggests a strong business case for cultivating good emotional health within the workplace.

European Programmes

The EC published [ESF \[European Social Fund\] Contribution to the New Skills Agenda: Thematic Report](#).

- The New Skills Agenda (NSA) launched in June 2016 is the EC's flagship initiative to strengthen the development of people in the EU by increasing employment and competitiveness.
 - Its three pillars are: improving the quality and relevance of skills formation; making skills and qualifications more visible and comparable; and improving skills intelligence and information for better career choices.
 - It aims to ensure that the right training, skills and support are available; to make better use of the skills that are available; and to equip people with the new skills that are needed.
- An estimated 10m participants with a low level of skills will take part in ESF interventions by 2023, particularly in Italy, Spain, the UK and France, followed by the RoI, Poland and Romania.
- The ESF is well-suited to delivering programmes that will help to achieve the NSA's goals.

The EC published [Mid-term evaluation of the Erasmus+ programme \(2014–2020\)](#).

- The current Erasmus+ programme, with a budget of €16.45b, aims to:
 - provide over 4m people with the opportunity to gain competences, personal, socio-educational and professional development through studies, training, work experience or volunteering abroad worldwide
 - foster quality improvements, innovation, excellence and internationalisation of organisations active in education and training, youth and sport
 - help European countries modernise and improve their education and training systems and youth and sport policies.
- So far, 1.8m people have taken part in mobility activities and over 240k organisations have been involved in cooperation projects.
 - Erasmus+ is highly valued by stakeholders and the public with over 90% satisfaction rates.
 - For learners, the evaluated programmes have a positive effect on the acquisition of skills and competences, increasing employability and entrepreneurship and shortening the transition from education to employment (13% higher than for those who did not take part in Erasmus+).

- Erasmus+ fosters willingness to work or study abroad (+31%) and the development of foreign language skills (7% higher in tested proficiency); influences individuals' positive view of the value of learning for professional and personal development (+8%); and improves students' completion rates (+2%).
- For practitioners, participation provides professional development, mainly wider networking options (+22ppt) and greater use of digital resources (+5ppt), plus a stronger attachment to Europe (+6ppt).
- More needs to be done to reach out to the more vulnerable in society and to facilitate the participation of smaller organisations.
- A stronger investment in education and training is needed in future, with a new emphasis on the younger generations and the most vulnerable groups.

The Scottish Parliament Culture, Tourism, Europe & External Relations Committee published [Erasmus+ – although a report of its inquiry into Scotland's participation in the EU's Erasmus+ programme, it has wider implications.](#)

- Erasmus+ is the most significant source of funding in Scotland for cultural exchange and embedding an international outlook in young people.
 - It plays an important role in developing the skills and experience of volunteers and professionals who support young people, such as youth workers, teachers and staff in FE and HE.
- There are concerns that these benefits may be severely affected by any risk of the UK being unable to participate in Erasmus+ following Brexit.
 - The UK Government should work to ensure that the UK can participate in all aspects of the programme and maintain as much influence as possible over the programme's design and implementation, including beyond 2020.

The EC published a [Study on the impact of EPALE \[Electronic Platform for Adult Learning in Europe\] in its first two years of operation and its potential future impact.](#)

- EPALE is an online portal for teachers, trainers, researchers, academics and policymakers working in the adult learning sector across Europe, launched in 2015.
 - It makes it easier for professionals to share knowledge and good practice and supports the building of a transnational community of adult educators.
 - The user base is highly diverse and includes stakeholders with different expectations and needs.
 - It is unique in Europe and overlaps only to a minor extent with national initiatives in the field.
 - There is a perceived lack of clarity and awareness of its objectives and insufficient visibility of the platform.
 - The themes and content are generally relevant in meeting the needs of users but further streamlining, personalising and content checking is needed.
 - It has so far had a limited impact on building a fully-fledged transnational community of adult educators but it has contributed to building a landscape of adult learning and training communities.
 - It is unclear as yet whether the costs of running EPALE match its benefits; action needs to be taken to increase its added value.

Government

NORTHERN IRELAND

The Northern Ireland Department for the Economy (DfE) published [Northern Ireland Migration, Labour and Skills](#), summarising and signposting a range of evidence.

- Historically characterised by out-migration, between 2001 and 2016 Northern Ireland experienced net inward migration in 12 of the 16 years.
- Inward migration is mainly economically-based and by 16–39 year-olds, most commonly for work (40.5%), family (25.6%) and education (14.5%).
- Uniquely within the UK, RoI-born NI residents account for around 2% of the population (compared to 0.6% for the UK).

- 'Frontier workers' who reside in the RoI but work in NI account for 1% of NI employee jobs.
- The top ten countries of migrant registration (72% of all registrations) were, apart from India, all European, with 44.2% from access countries; around 20% were from the RoI.
- The economic contribution of inward migration has, particularly in recent times, been significant, with employment recovery and growth between 2008 and 2016 driven by EU-born migrants.
- RoI-born and rest-of-the-world-born workers had much higher rates of Level 4+ qualifications than NI-born residents, and higher rates of employment in professional occupations.
 - EU (26)-born workers had much higher rates of 'other' qualifications, and higher rates of employment in elementary occupations, process plant and machine operation occupations and also in skilled trades.
- NI relied on EU (26) employment particularly among businesses in the manufacturing of food products, waste collection, other manufacturing, accommodation and services to buildings and landscape activities.
 - Sectoral dependence on RoI-born workers was much more evenly spread, but membership organisations, architecture and engineering, computer programming, accommodation, human health, and insurance had higher dependence levels.
 - Businesses particularly dependent on workers born in the rest of the world included residential care, food and beverage service, computer programming, human health and accommodation.

A separate detailed [analysis](#) of the migrant workers from the 2011 Census was also published.

ENGLAND

The Department for Education in England published [Characteristics of young people who are long-term NEET](#).

- It looks at young people in England who were NEET for a year, three years after completing Key Stage 4 (KS4) in 2010/11.
 - Looked-after children (LAC) were most likely to be NEET (37%), followed by those who attended a pupil referral unit and those permanently excluded at KS3.
 - Those without any A*-C GCSEs at the end of KS4 were the most over-represented in the group, accounting for two-thirds of those NEET for the year, but only 19% of the cohort.
 - LAC or those referred to social care from age 14 accounted for 51% of those NEET for the year, but just 11% of the cohort; they were also, on average, NEET for longer than their peers.
 - The LAC NEET rate was consistently high, regardless of how long they had been looked after; in contrast, the NEET rate rose with each year that a child was referred to social care.
 - Those who attended 'Outstanding' or 'Good' institutions at the end of KS4 were less likely to be NEET for the year compared to those attending institutions rated 'Requires Improvement' or 'Inadequate'.

The UK Department for Business, Energy & Industrial Strategy (BEIS) published [Good Work: A response to the Taylor Review of Modern Working Practices](#).

- The [Taylor Review](#) (published in July 2017) made 53 recommendations designed to deliver the ambition that all work in the UK economy should be fair and decent with realistic scope for development and fulfilment.
- The response includes proposals to take further action to ensure unpaid interns are not doing the job of a worker.

SCOTLAND

The Scottish Government published [Learning and Skills Action Plan for Cyber Resilience 2018–20](#), following publication of a [cyber resilience strategy](#) in 2015.

- It includes 37 detailed, key actions for education, business and the public sector, aiming to:
 - Increase cyber resilience through awareness raising and engagement.
 - Embed cyber resilience throughout the education and lifelong learning curricula.
 - Embed cyber resilience in workplace learning.

- Develop specialist skills and upskill the cyber security workforce, ensuring skills supply meets demand.
- Build research capability and capacity in cyber resilience.

Skills Development Scotland published the first [Skills Investment Plan for Scotland's Early Learning & Childcare \[ELC\] sector](#).

- An extra 11,000 jobs are estimated for the sector by 2020, mainly for practitioners, to cover the expansion of free provision committed by the Scottish Government.
 - There will also be increased demand for relevant graduates to meet a government commitment for graduates to be employed in nurseries in deprived communities.
 - Staff in 'day care of children' services need to be registered with e.g. the Scottish Social Services Council or General Teaching Council for Scotland.
- Skills challenges include problems filling day care vacancies due to a shortage of skilled or qualified applicants, and recruiting and training staff in rural and remote areas.
- A detailed action plan focuses on key challenges and priorities, including diversifying the workforce and gender imbalance; education and training; and leadership skills.

WALES

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

REPUBLIC OF IRELAND (RoI)

ESRI published [Evaluation of PLC \[Post-Leaving Certificate\] programme provision, commissioned by SOLAS](#).

- Approximately 32,000 learners are currently enrolled in PLC courses, the largest component of full-time further education and training in the RoI.
- PLC courses enhance employment chances and progression to HE for learners.
 - They provide VET for young people, second-chance education for older adults, and a progression route into HE.
 - Provision tends to create opportunities for a socially diverse group, including those from less educated backgrounds, older students with children, and those with special educational needs
- PLC courses could be made more responsive to a changing labour market.
 - A stronger distinction is required between programmes focused on preparing students for immediate entry to the labour market and those focused on progression to HE.
 - The types of PLC courses offered have not changed markedly over time even though there has been a dramatic shift in the kinds of jobs available in the labour market.
- Not all PLC learners feel prepared for the world of work.
 - Over 20% have not taken part in work experience during their studies; almost 33% felt their learning did not contribute to their employability; and 25% felt they had not acquired job-related knowledge and skills.

SOLAS and ETBI published [Initial and Ongoing Assessment of Adult Literacy and Numeracy at NFQ levels 1–3: Guidelines, Toolkit and Research Report](#), examining the process leading up to the production of National Guidelines for assessment of adult literacy and numeracy.

- A fully realised nationwide approach to adult literacy and numeracy assessment, in all contexts, will support learners to maximise their personal and social potential and enhance their lives as citizens.
- The report includes a review of international best practice, including:
 - an examination of the purpose and scope of initial and formative assessment
 - assessment content – namely technical skills and knowledge in reading, writing and use of number (including Northern Ireland's Essential Skills)
 - assessment methods and processes
 - resources and support for assessment.

SOLAS published *Integrating Literacy & Numeracy: Final Report*, by ICF Consulting Services, examining the delivery of integrated literacy and numeracy (ILN) in further education and training (FET) in the RoI.

- The purpose of the study was to explore the benefits and challenges associated with integrated approaches, the extent of existing practice and evidence of impact.
- Education & Training Boards (ETBs) view ILN as a key priority, and are aware that it could also help providers increase learners' retention and success rates.
- The most common approach to ILN was to deliver standalone classes alongside FET programmes.
- Most ETBs and stakeholders said many tutors provided additional one-to-one support to learners they believed were struggling.
- Strong leadership and drive was essential in ensuring effective integration of literacy and numeracy.
- The delivery of ILN often requires significant up-front investment and changes to delivery.
- Providers employed a wide variety of formal and informal approaches to screen learner abilities in literacy and numeracy – this was one of the most striking findings from the research.
- In all cases of ILN, the literacy and numeracy training did not lead to a formal qualification.
 - Monitoring of learner progress was mostly conducted by subject tutors.
 - There was qualitative evidence of increased learner confidence and progression as a result.
 - However, there is little quantitative evidence of the impact of ILN on employment or productivity.
- ILN was supported by: co-location of specialist literacy tutors within FET providers; collaboration between literacy/numeracy and subject tutors; senior manager buy-in; awareness-raising of the benefits of ILN in supporting general achievement and retention.

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