

Contents

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 growing focus on 'fair work' and 'good jobs', particularly in supporting young people into work, reducing in-work poverty and creating a stronger economy and society.
- How universities interact with business generally and their role in boosting regional economies in particular.
- Improving the experience of international students as the UK seeks to maintain its status as a destination of choice.
- Green skills: how they interact with wider employability and digital skills and how – like digital skills – they are already being seen as both technical and transversal.

** 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.*

| | |
|------------------------------------------------------------|-----------|
| Preparing Young People for Work | 1 |
| 16–19 EDUCATION | 1 |
| SCIENCE, TECHNOLOGY, ENGINEERING & MATHS (STEM) | 2 |
| EMPLOYABILITY & CAREERS | 3 |
| The Institutional Landscape | 5 |
| THE FURTHER EDUCATION & SKILLS SECTOR | 5 |
| HIGHER EDUCATION (HE): WIDENING PARTICIPATION | 7 |
| HE: THE STUDENT EXPERIENCE | 8 |
| HE: INTERNATIONAL STUDENTS | 9 |
| GRADUATES & GRADUATE EMPLOYMENT | 10 |
| HE: TEACHING, RESEARCH & INSTITUTIONS | 12 |
| WORKFORCE ISSUES | 15 |
| The Workplace | 15 |
| RECRUITMENT | 15 |
| SKILLS GAPS & SHORTAGES | 17 |
| TRAINING & DEVELOPMENT | 18 |
| AUTOMATION & AI: IMPACT ON WORK | 19 |
| SKILLS POLICY | 20 |
| ADULT & LIFELONG LEARNING | 24 |
| THE CHANGING NATURE OF WORK | 26 |
| EMPLOYMENT: RIGHTS, RESPONSIBILITIES & WAGES | 28 |
| EMPLOYMENT: GENDER INEQUALITY | 32 |
| International Comparisons | 35 |
| Government | 36 |
| NORTHERN IRELAND | 36 |
| ENGLAND | 37 |
| SCOTLAND | 39 |
| WALES | 40 |
| REPUBLIC OF IRELAND (ROI) | 40 |
| EUROPE | 40 |
| Sources | 41 |

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

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16–19 EDUCATION

The Education Policy Institute published [COVID-19 and Disadvantage Gaps in England 2020](#), including data on 16–19 education, where qualifications are structured differently than at Key Stage 4.

- In 2020, disadvantaged students aged 16–19 were on average 3.1 grades behind their non-disadvantaged peers over their best three qualifications, compared to 2.9 grades in 2019 (+0.2ppt).
 - For persistently disadvantaged students – i.e. disadvantaged for at least 80% of their school lifetimes – the gap was 4.0 grades in 2020 compared to 3.7 in 2019 (+0.3ppt).
- ‘Best three’ average grades for female students rose by a quarter of a grade more than for male students.
 - The grades of students with special educational needs (SEN) rose by a third of a grade less than for non-SEN.
 - There was almost no change for students in general further education (FE) colleges, whereas those in state school sixth forms saw an increase of over a grade.
- Following the changes to assessments in 2020, A level grades were around half a grade higher per qualification.
 - Conversely, non-academic Applied General grades only increased by the equivalent of a quarter of an A level grade per qualification, and for other non-academic Level 3 (L3) qualifications there was little increase at all.
 - 47% of non-disadvantaged L3 students entered only A levels, compared to 32% of their disadvantaged peers; conversely, 34% of non-disadvantaged L3 students entered non-academic L3 qualifications only, compared to 53% of disadvantaged students.
- Across their best three qualifications, students completing Applied General qualifications fell one grade behind their otherwise similar peers taking A levels.
 - This may have put them at a relative disadvantage when competing for higher education (HE) places; 35% of UCAS applications included at least one non-academic qualification in 2020.

The increase in the disadvantage gap in 2020 therefore appears to have been largely driven by the fact that disadvantaged students were less likely to take the qualifications that saw the biggest increases in grades.

Pearson published [Qualified to succeed: Building a 14–19 education system of choice, diversity and opportunity](#), the report of its year-long programme of research into the future of qualifications and assessment in England.

- A good qualifications and assessment system for 14–19 year-olds should:
 - equip individuals with the tools they need to thrive, facilitating access to work and engaging in life beyond school
 - be progressive, promoting choice, and contain a broad and inclusive curriculum that exposes students to a variety of experiences to support their development of knowledge and skills
 - be a system where attributing failure is never a consequence of recognising achievement and should optimise technology in doing so.
- Standardised national qualifications and assessment offers two key benefits:
 - Useful external benchmarking of ability, signposting how a learner may develop further
 - External certification of achievement – a valuable commodity for those without the social capital to enable progression into different education institutions and employment.
- However, the current system is too restrictive, with too many rules specifying how qualifications and assessment need to be structured.
 - This has squeezed out the appetite for innovation, preventing the system from keeping pace with the modern, evolving world.
 - The curriculum also needs to reflect the diversity of the 2m learners in this phase of education and their future employment opportunities.

- Four guiding principles for reform – empowerment, coherence, adaptability and innovation – were identified in the first phase of the research and tested in the second.
- Recommendations include:
 - Set out a coherent curriculum framework linking expected outcomes to students' 'learning journey'.
 - Shift wholesale curriculum and qualification reform to a model of continuous, evidence-based improvement.
 - Create greater diversity and representation in curriculum that reflects young people's lives, to better engage them in learning.
 - Assess the right skills in the right way, enabling learners to highlight their strengths and successes.
 - Provide more incentives for employers to engage with educators and strengthen teachers' capacity to bring work themes into the classroom; careers should inspire young people.
 - Accelerate digital transformation, bringing all parts of the system together to realise the opportunities that technology can bring to the education experience.

SCIENCE, TECHNOLOGY, ENGINEERING & MATHS (STEM)

The Sutton Trust and the Bridge Group published [*Bridging the Gap: Socio-economic diversity in the engineering sector: Access, pay and progression*](#).

- People in professional engineering roles are more diverse by socioeconomic background (SEB) than those in most comparable sectors, due to factors including the geographical spread of roles, labour market demands and individual perceptions of the profession.
 - However, there are numerous barriers to entry and progression, including the split between 'vocational' and 'academic' routes, which has created a two-tier system closely aligned with socioeconomic divides; students from lower SEBs are more likely to take a vocational route, with fewer opportunities for progression.
- While the 'class pay gap' is smaller compared with most other sectors, those from higher SEBs are much more likely to progress to higher managerial and professional roles.
- Although engineering's association with 'hand' rather than 'head' makes it relatively open to people from lower SEBs, it is highly likely that early educational advantage along with the ability to develop networks and benefit from informal sponsorship is unevenly distributed.
 - This results in a complex situation, exacerbated by the diversity of engineering as a sector, with a variety of job roles and entry routes and a workforce shaped by highly specific historical and geographical factors as much as by recruitment or promotion practices.
- Despite positive effects on social mobility following graduation, many engineering courses at competitive universities lack diversity by SEB.
 - Factors contributing to this include disparities in GCSE attainment, as well as limited access to triple science at GCSE and the decline of design & technology, both of which are more acute in disadvantaged areas in England.
 - A level subjects such as physics, design & technology and further maths are more available among independent schools and state schools in more affluent areas.

Engineering UK published [*Women in engineering: Trends in women in the engineering workforce between 2010 and 2021*](#).

- Although engineering remains a male-dominated field, since 2010:
 - the proportion of women working in engineering roles has increased from 10.5% to 16.5%
 - the number of women working in engineering roles has increased from 562k to 936k
 - rates of change (in terms of gender balance) are higher at the associate and technical professional levels than at managerial, director and senior official level.
- In 2021, just 15.2% of those working in 'core' engineering roles were women, compared with 19.0% of those working in 'related engineering' roles.
 - Core roles are primarily engineering based and require the consistent application of engineering knowledge and skills, e.g. civil engineers, mechanical engineers and machine operatives.

- Related roles require a mixed application of engineering knowledge and skills and other skills sets that are often of greater importance, e.g. quantity surveyors, architects and web designers.
- There were also differences by sector, with women making up only 12.5% of those working in engineering jobs within the engineering sector, compared to 24.4% outside of the engineering sector.
 - This suggests that industries not traditionally associated with engineering may be more successful at attracting female engineers into the workforce.

EMPLOYABILITY & CAREERS

The Centre for Educational Sociology (CES), University of Edinburgh, published [CES Briefing: Young people's transitions to an uncertain labour market](#), based on a lecture given by Prof Ewart Keep of Oxford University in November 2021.

- Young people face major challenges as they move from education into the labour market, with longer, more complex and risky transitions and a prolonged, discontinuous process of finding a job.
 - The youth labour market has shrunk and the security and stability of work has decreased.
 - Challenges for young people include greater use of informal recruitment methods and reliance on prior experience; such practices are likely to reinforce social class, ethnicity and gender inequalities.
- Many of the problems reflect a defective, casualised and dysfunctional labour market in the UK that needs to change – and policymakers do not always recognise how profoundly the labour market has changed.
- The quality and scope of some courses and qualifications/standards is low; too many apprenticeships, especially in England, are short, have limited skills content and don't equip individuals to progress in the labour market.
- Employers' demand for skills and their provision of training has declined despite government encouragement and subsidies; this decline has most affected those in low-end work.
- Steps to improvement include governments adopting a 'fair work' agenda and making job quality a political goal at national level.
 - A 'fair work' policy provides the basis for other strategies: aligning skills supply and demand; better labour market information and careers guidance; a transition service; and a curriculum to equip young people for life and work in a rapidly changing economy and society.
 - Better quality jobs, better management of the employment relationship and better recruitment and selection practices are needed.

The Health Foundation published [Good Quality Work: Youth voices from across the UK: Findings from the young people consultations](#) with the Institute for Employment Studies (IES), based on interviews with 70 12–25 year-olds across the UK.

- Young people's suggestions to improve access to good quality youth employment and training include:
 - Improved information, advice and guidance (IAG)
 - More careers fairs and networking opportunities
 - Accessible online information and job search
 - Increased investment in work experience, particularly for 16–18 year-olds
 - Better access to vocational routes, particularly apprenticeships and traineeships
 - Expanded access to government support
 - Better regulation and monitoring of employers.

Skills Development Scotland (SDS) published [Careers by Design: Report of the Career Review Programme Board](#) following a 'comprehensive end-to-end review of Scotland's career services' for young people.

- Five design principles for future career services:
 - Meet the dynamic aspirations and different needs of all young people.
 - Build agency and equip young people with the skills to thrive in a changing world.
 - Enable young people to expand their knowledge and experience of fair work.

- Integrate career experiences into curricula, practice and culture of the education system.
- An 'ecosystem' of assets deliver coherent and impactful career services.
- There are ten recommendations, all accepted by the Scottish Government:
 - Establish a simple career development model to bring definition to the variety of services.
 - Design career education and services to develop, recognise and accredit the skills and habits essential for the future world of work.
 - Create person-centred career services.
 - Dedicate curriculum time for experiential work-related learning in all settings.
 - Provide community-based services, aligned to social justice values.
 - Provide a range of meaningful opportunities to experience work and understand fair work.
 - Develop enhanced digital services and online tools that are inspiring and accurate.
 - Have clear roles for the delivery of career services.
 - Strengthen evaluation and continuous improvement of the whole career system.
 - Create a career services coalition to oversee the review implementation, with young people, practitioners, employers and stakeholders.

Cedefop (the European Centre for the Development of Vocational Training) published [*Bridging lifelong guidance and validation of non-formal and informal learning through ICT \[information and communications technology\] operationalisation.*](#)

- Lifelong guidance has become increasingly valued in education and training, with expected impacts including: the development of career management skills; effective management of transitions; social inclusion; increased employability; and increased participation in education and training.
 - Validation of non-formal and informal learning is connected to similar impacts and objectives.
 - Both have an important role in supporting individuals through a growing number of transitions between education, employment and unemployment.
- High-quality lifelong guidance services that use digital means may help increase the attractiveness of vocational education and training (VET) by providing clear and user-friendly information on learning and careers, as well as on validation opportunities.
 - Validation is also needed to create flexible and progressive personalised VET programmes.
 - However, the provision of services in both areas remains fragmented and in most cases they remain separate services.
- The paper highlights 12 national practices that are examples of the interaction of validation and guidance, providing different forms of coordination between the two services.
 - Eight main categories of ICT function are identified and the paper examines in what way these might contribute to the coordination of validation and guidance by improving their comprehensiveness, coherence and quality.

Cedefop published [*Towards European standards for monitoring and evaluation of lifelong guidance systems and services \(Vol. I\).*](#)

- Six research papers provide insights into the current situation, focusing on a range of existing and proposed methodological options and in-depth reviews of previous work, identifying gaps and considering solutions.
 - It is framed within a larger project to explore the feasibility of achieving an integrated vision of the results of guidance interventions and establishing minimum standards for monitoring and evaluation.

THE FURTHER EDUCATION & SKILLS SECTOR

Covid-related research

College Development Network and Colleges Scotland published [Pathways from Poverty: Current challenges and the role of colleges](#), exploring the 'huge response' of FE colleges to the pandemic.

- Colleges responded by e.g. providing students with digital devices, access to learning spaces for vulnerable students and additional student support funding.
- Reform of the college sector and refocusing of its priorities is now needed to enable it to contribute to the future recovery of the economy and society.
- Two key enhancement themes are identified, with practical ideas and suggestions to tackle poverty and financial insecurity:
 - Preventing poverty through access to college – transitioning people's potential
 - Preventing poverty post-qualification – driving change in the economy.

Other research

The Centre for Vocational Education Research (CVER) published [Do Management Practices Matter in Further Education?](#), drawing on a survey of UK colleges matched to longitudinal data on over 40k students.

- Structured management practices appear to matter as a predictor of learner achievement, even after controlling for prior achievement and demographic information.
 - These effects are stronger for higher levels of educational achievement and suggest that an increase in management scores is associated with an increase in the probability of achieving L3 qualifications or being enrolled at a university at age 20.
- At lower levels of achievement (i.e. outcomes at L2/3), good management practices appear to matter more for learners from disadvantaged backgrounds, suggesting that improving management practices may play a role in improving labour market outcomes and hence social mobility.
 - As 'good management' is a slow-changing technology, such an effect would apply to multiple cohorts of disadvantaged students and potentially have a profound effect on social mobility over time.
 - Students from disadvantaged backgrounds are much less likely to enter colleges with a sufficient level of preparation to advance to HE by age 20, yet well-managed FE colleges are likely to help students who enter with a good level of academic achievement by the time they leave school.
- The institutions in the analysis perform well on average in terms of their management practice scores and seem to be representative of the sector as a whole, except for being larger.
 - There is no evidence of large-scale underperformance in this sector, possibly because the sector operates within a strong accountability framework and has been under sustained pressure for several reasons including government-initiated funding cuts.
- There is some evidence that better management practices reflect more effective principals, but management practices do not appear to simply reflect more effective leadership.

The Independent Commission on the College of the Future and Sheffield Hallam University published [Going further and higher: How collaboration between colleges and universities can transform lives and places](#) on behalf of the Civic University Network, following consultation with education leaders and policymakers across the UK.

- There are barriers to strong college–university relationships:
 - **Inequity in funding** levels and approaches: discrete funding models and the shift to a more market-driven approach; decades of underfunding in FE; a lack of funding stability driving a defensive approach; divergent and inequitable approaches to student finance
 - **Disjointed oversight** and accountability, including: a lack of clarity on each sector's desired outcomes; opportunities for innovation and collaboration curtailed by accountability mechanisms; underdeveloped skills infrastructure and leadership at local and regional levels

- **Limited levels of trust** and long-term commitment to collaboration: too often, colleges and universities have been pitted against each other in policy debate; an over-reliance on personal relationships weakens partnership agreements
- **Uneven and unwieldy system architecture** and advocacy: historically narrow and compartmentalised views of education trajectories; limited experience of studying in college among policymakers; confusing progression routes between institutions and levels of study
- **A disjointed and short-term approach to policymaking**, with incentives to collaborate often poorly funded and involving competitive and one-off bidding processes
- **Insufficient institutional headspace** and resources to focus on partnerships.
- However, there are also opportunities:
 - A shared mission for the public good
 - Driving positive change through response to societal and demographic change
 - Increasingly joined-up and place-based policy trends
 - Building on increased resource and knowledge sharing.

Underlying many of the report's recommendations is the need for the two sectors to nurture 'place-based networks' that make sense for any given locality. The report was published before England's Department for Education's [response to the Post-18 Review of Education & Funding](#) (the 'Augar Review').

ILM (part of the City & Guilds Group) and the Association of Colleges (AoC) published [Attracting, sustaining and developing middle leaders in English further education](#), a report of research carried out with the University of Nottingham.

- Insights were gained through a survey and interviews involving 235 middle leaders and senior experts from national bodies.
- The aims included:
 - identifying current levels of support, development and investment into middle management in the college sector
 - determining the effectiveness of existing initiatives in ensuring staff have the skills needed to manage teams and have access to opportunities for progression
 - developing a clear insight into: the attraction and ambitions of middle leadership; the sustaining of interest and commitment to the middle manager role and to the employer; role expectations – people leadership, resource management and professional development.
- 12 recommendations include:
 - Policymakers and the college sector should establish a leadership qualification framework for the middle tier with progression in mind, preferably with cost-effective accreditation provided.
 - Formalised mentoring and coaching should form part of this framework, with senior staff in all colleges trained to undertake such roles within their own college and/or other colleges.
 - Give equal focus to the strategic and operational elements of middle leadership, monitoring the balance of duties and responsibilities undertaken by middle leaders.
 - Senior leaders should increase their delegation of leadership to the middle tier, along with the resources and authority, to encourage strategic behaviours and engagement in change processes.
 - Support middle leaders to engage with a wide range of internal and external stakeholders.
 - Design leadership development with reference to the priorities of education inspection.
 - Provide specific support and development to management information systems (MIS) team leaders, due to the key contribution the MIS team plays in the effective running of colleges.
 - Review and recognise the career path, training and terms & conditions for middle leaders of learner services.

The Edge Foundation published [Polytechnics](#), a 'Learning from the Past' paper looking at the history of those institutions in England and Wales.

- 30 polytechnics were designated between 1969 and 1973 to help meet increased demand for HE; they were formed from existing technical and other colleges but were expected to concentrate wholly or largely on HE courses at all levels.
- The polytechnic era ended in 1992, when they became degree-granting universities.

- Polytechnic has remained a 'preserved word' in government regulations, but current policy is 'not to approve its use'.

HIGHER EDUCATION (HE): WIDENING PARTICIPATION

England's Office for Students (OfS) published [Fourth independent review of impact evaluation evidence submitted by Uni Connect partnerships: A summary of the local impact evidence to date](#) by CFE Research.

- Uni Connect is a national outreach programme aiming to reduce the gap in HE participation between the most and least represented groups.
- Among the findings:
 - There is evidence that online mentoring and multi-interventions have a positive impact on the number of applications to HE.
 - New causal evidence also indicates that a higher level of engagement in a multi-intervention programme is associated with a higher probability that a learner will be accepted onto an HE programme.
 - There is mixed evidence of impact on medium-term outcomes, such as intentions to apply to HE: IAG and workshops/masterclasses appear to be most effective, particularly when the intervention is tailored to career interests.
 - All types of intervention to provide impartial IAG on the benefits and realities of HE contribute to increased knowledge; in particular, IAG is shown to increase learner confidence to make informed choices and well-informed decisions.
 - Strong empirical evidence challenges a previous assumption that online mentoring is less beneficial than face-to-face mentoring and demonstrates that it has a positive impact across all outcomes measured.
 - One of the underpinning assumptions of the 'theory of change' for Uni Connect is that supporting under-represented groups to develop their subject knowledge, interpersonal skills and attributes, and self-belief will lead to higher rates of progression.
 - The evidence suggests that some interventions, particularly summer schools and masterclasses/workshops, can have a positive impact on these outcomes and are effective ways to develop confidence, motivation and resilience.
 - Evidence on the impact of other types of intervention is mixed and less conclusive.

The OfS also published a series of [Learning Digests](#) by Ipsos Mori based on interviews and a workshop with Uni Connect partnership leads, providing learning points for partnerships.

The Nuffield Foundation published [Educational choices at 16–19 and university outcomes](#), by Oxford Brookes Business School, focusing on English students entering HE.

- Nearly 25% of English students now enter HE with just BTECs or a mixture of BTECs and A levels.
 - This flexibility is seen as important for widening participation: 40% of the least privileged quintile of recent cohorts entered with BTECs, compared with less than 10% of the most privileged.
- English first degree students at UK universities have largely successful outcomes; however, compared with a similar student with just A levels, those with just BTEC qualifications are:
 - almost twice as likely to drop out (11.4% vs 6.0%)
 - around 1.7 times as likely to repeat the first year (5.9% vs 3.4%)
 - around 1.4 times as likely to graduate below a 2:1 (24.9% vs 17.7%).
- The differences in outcomes can be almost entirely explained by differences in performance throughout their university career rather than non-academic reasons.
 - More work is needed to establish the reasons for these patterns, e.g. by examining differences in assessment methods and whether recently increased use of external assessment in BTECs will make a difference.
- Further support for BTEC students and further joint working between schools, colleges, universities and awarding organisations seem appropriate responses.

The report also examines the impact of holding: A levels in subjects 'preferred' and 'non-preferred' for HE entry; an A level or BTEC in a non-required entry subject in the same subject as the university course.

The Higher Education Policy Institute (HEPI) published [First-in-Family \[FiF\] students](#), exploring the value of FiF as an indicator and the challenges of being an FiF student.

- The term 'first-generation' is often used as a proxy for low income; however, it doesn't accurately capture individual-level socioeconomic status.
 - It also applies disproportionately to those from Black and minority ethnic backgrounds, who attend HE at higher rates compared with young people whose ethnicity is white British.
- When it comes to support, parental education is likely to be a useful indicator for lower stakes policy interventions, but it is less appropriate for higher stakes activities such as contextual offers, when other factors also need to be taken into account.
- Policies that could be usefully adopted to provide more support include:
 - Demystifying contextual admissions at highly selective institutions
 - Providing more outreach engagement for the parents of groups that are under represented
 - More mentoring of FiF students by continuing undergraduates
 - Accommodation allocation schemes that give priority to students from groups most vulnerable to non-completion
 - Easier routes to re-entry and providing base-level qualifications for those who leave their course early.

The Edge Foundation published [Access to Higher Education Courses](#), a 'Learning from the Past' paper.

- First offered in 1978, courses leading to the Access to HE Diploma provide an entry route for learners lacking the 'traditional' qualifications required.
 - The one-year course combines academic subject knowledge and preparation for independent learning and university study.
- The aim is to increase access and widen participation among mature and/or disadvantaged adults and those wanting to upskill or move into new occupations.

HE: THE STUDENT EXPERIENCE

Unite Students published [Living Black at University: Research into the experiences of Black students in UK student accommodation](#) based on research undertaken May–August 2021.

- 43% of Black students surveyed felt a sense of belonging in their accommodation, compared with 61% of white students.
 - Black students reported feeling that they were seen as out of place and that white peers appeared to have a right to speak and act in a racially discriminatory way; there was little support available for students who felt distressed about these issues.
- 54% had been the victim of racism in their accommodation and 64% of all respondents had witnessed acts of racism, including from staff.
 - However, 50% of all respondents had seen staff confronting racism and 66% had seen students doing the same.
- Ten recommendations for universities and accommodation providers include improving acclimatisation and integration for new students and providing meaningful race training for student peers and staff.

The National Union of Students (NUS) Scotland published [Broke: How Scotland is failing its students](#), based on a survey of 3,528 FE and HE students, postgraduate students and apprentices from 34 institutions carried out from October to December 2021.

- 35% of all students have considered dropping out due to financial difficulties; 12% have experienced homelessness since starting their studies.
 - 65% of those who applied for discretionary funding received no/not enough support.
 - 64% have experienced mental ill-health as a result of financial pressures.
- 18 recommendations include government introducing year-round grants-based financial support for all students in FE and HE.

CESifo published [Tutoring in \(Online\) Higher Education: Experimental evidence](#).

- A randomised controlled trial offered remote peer tutoring in micro- and macroeconomics at a German university during the pandemic.
 - First-year students met in small groups in alternating weeks, with and without a more senior student tutor.
- Findings include:
 - The tutoring programme improved the students' study behaviour and increased contact to other students; self-reported mental health was not affected.
 - As a result, tutored students achieved around 30% more credits and a one grade level better grade point average across treated subjects.
 - The magnitude of these effects is similar to the effectiveness of pre-HE tutoring interventions.
- Remote tutoring can reduce outcome inequality among students, and slightly larger groups work as well as smaller groups.

The Centre for Economic Performance (CEP) published [Tuition fees and educational attainment](#), a study of whether charging fees has an impact on attainment.

- The paper examines policy changes that led to the introduction of fees at over 50% of Germany's public universities in the mid-2000s, and their staggered abolition until 2015.
- Findings include:
 - Fees *decrease* first-time university enrolment among high school leavers but *increase* study effort and degree completion among enrolled university students.
 - These effects roughly offset each other, however, and therefore tuition fees do not have much impact on educational attainment.
- In countries that currently charge tuition fees, completely abolishing fees might not lead to large gains in educational attainment.
 - In contrast, countries in which HE is currently free of charge might find that moving away from the zero fee increases educational attainment.

CESifo published [The Education–Innovation Gap](#), documenting differences across US HE courses in the coverage of 'frontier' – i.e. recently produced – knowledge.

- The researchers constructed a new measure by applying natural language processing techniques to a novel data set containing the full text of 1.7m syllabi and 20m academic publications.
- Four key findings:
 - HE courses differ greatly in their coverage of frontier knowledge, even when taking into account discipline and course level.
 - More selective and better funded institutions offer courses with lower gaps; they also enrol fewer disadvantaged students, which implies that access to frontier knowledge is highly unequal.
 - Instructors play a big role in shaping the content of their courses and research-active instructors teach more frontier knowledge, suggesting complementarities between teaching and research activities.
 - The dissemination of frontier knowledge through HE courses is strongly and positively related to students' labour market outcomes and their ability to innovate in the future.

The Institute of Labor Economics (IZA) published [The Effect of Foreign Students on Native Students' Outcomes in Higher Education](#), exploring the role of immigration in shaping educational and labour market outcomes.

- The paper is based on Higher Education Statistics Agency (HESA) data for four cohorts of foreign undergraduate students.
- Foreign students were found to have zero to mild impact on their native peers' educational outcomes, e.g. their graduation probability and degree classification, and little impact on their early labour market outcomes.

HE: INTERNATIONAL STUDENTS

UCAS published [Where Next? The experience of international students connecting to UK higher education](#), drawing on findings from surveys conducted in 2020 and 2021.

- 88% of international students see the UK as a positive or very positive place to study.
 - The UK fulfils key criteria, e.g.: strong academic reputation (77%); diverse, multicultural experience (53%); prestigious institutions (47%); a desire to live in the country (45%); and teaching quality (43%).
 - However, the US, Canada, the Netherlands, the Republic of Ireland (RoI) and Australia are also top destinations of interest.
- There are also signs that younger age groups, and applicants from Europe, are feeling less positive about the UK.
 - 11% of applicants aged 17/18 think the UK is a worse option compared to the other countries they are considering.
 - The UK is seen as a better option for 77% of applicants from Africa and 73% from the Americas, but only 52% from Central and Eastern Europe and 53% from Western Europe.
 - 69% identified high tuition fees and living costs as a top deterrent, particularly among those from Central and Eastern Europe (80%) and Western Europe (72%).
- 50% of potential students say they need more information on funding, accommodation and post-study employment options.
 - 72% – the same as for domestic applicants – wanted more information about what their year would look like and how the pandemic would impact it.
 - In 2021, only 44% of international applicants felt completely ready for the new academic year.
 - At least 30% across all routes found choosing accommodation and seeking funding advice to be challenging.

The UPP Foundation published [International Student Futures: Developing a world class experience from application to onward career](#), a report to its Student Futures Commission from the International Students Sub-commission.

- The report sets out three high-level ambitions:
 - International Students seeking to study in the UK feel welcomed, supported and reassured from day one of the application process.
 - International students benefit from the full university experience in its widest sense, with tailored support where appropriate to recognise the additional challenges of studying in a different country.
 - The Graduate [visa] route is backed up by a rich array of options for international students, with proactive and ongoing support as their early career develops.
- Components of a 'world-leading' experience include:
 - **Pre-arrival:** a responsive communications culture, attuned to individual concerns and anxiety; early careers and employability support; a 'no surprises' approach on the likely financial pressures and a national scholarship brand.
 - **University:** work experience and internships are integral; social and cultural interaction and exchange are actively supported; students can access the full range of support available to their domestic peers, with additional targeted support where appropriate.
 - **Post-study:** an increased range of UK graduate employment opportunities; detailed knowledge of international graduate destinations and career trajectories; sector collaboration to provide insight into labour markets in regions and sectors across the world.

Each component is supported by recommendations for universities, government and supporting organisations.

England's OfS published an Insight brief: [Learning more about international students](#) alongside a [call for evidence](#) in order to help it identify effective practice in supporting their integration into UK HE.

GRADUATES & GRADUATE EMPLOYMENT

Covid-related research

Prospects and the Association of Graduate Careers Advisory Services (AGCAS) published [What do graduates do? 2021/22: Insights and analysis from the UK's largest higher education survey](#), providing data on graduates who left university the summer before the pandemic.

- The report is based on responses from 198,875 UK graduates to HESA's Graduate Outcomes 2018/19 survey, 15 months after graduation.
- Findings include:
 - While 26% of the UK workforce was furloughed at some point during the pandemic, graduates were the least likely group to have been on furlough; the proportion of 2018/19 graduates employed after 15 months was only slightly lower than the previous year.
 - 66.7% were employed (69.8% in 2017/18) – 55.3% full time, 11.4% part time; 7.7% were unemployed (5.1%); 8.8% were in further study (8.4%); 10.7% were working and studying (9.5%).
 - 4.3% were self-employed/freelancing (3.1%); education, graphic design, photography and audio-visual, artist and arts officer, producer and director were the most common occupations, despite the arts sector being one of the worst hit by the pandemic.
 - 72.4% of those employed were in professional-level employment – a very modest fall on the previous year.
 - Much the largest rises in non-graduate employment were in key worker roles in social care and in supermarket retail.
 - Nursing continued to be the most common role for 2018/19 graduates; IT was second and rose marginally; primary school teaching was third, although numbers fell; marketing was still fourth, despite numbers falling by 15.5%; medicine was fifth and continued to rise.
 - The impact of artificial intelligence (AI) on jobs is a concern: around 7% face a 70%+ probability of automation over the next five years, rising to just under 30% after 20 years; most of the additional employment won't be in high-tech areas, but mostly in hard-to-automate services.
 - Overall, demand for graduates is expected to increase, with a 10% increase due to AI.
- A degree was the best insulation against sustained career disruption during the pandemic.

Separate chapters cover: business & administrative studies; creative arts; technology, engineering & maths; humanities; science; social sciences; and careers expert insights.

High Fliers Research published [The Graduate Market in 2022: Annual review of graduate vacancies & starting salaries at the UK's leading employers](#), based on a survey of 100 graduate employers in January 2022.

- Firms increased their graduate recruitment by 9.4% in 2021 compared with 2020, and expect it to rise a further 15.7% in 2022, the largest rise in over 15 years.
 - Graduate recruitment increased in nine of the 15 most sought-after sectors.
 - The number of graduate vacancies is now 11% higher than the pre-pandemic peak in 2019.
 - Accounting and professional services are expected to be the largest graduate recruiters, with 7,400 entry-level vacancies available.
- Due to Covid-19, many employers continued to use virtual events and promote graduate vacancies online rather than on-campus.
- 60% had received fewer graduate job applications compared to 2020.
 - 40% said 'considerably fewer students' had taken part in their events and promotions.
 - 50% said they had received fewer applications for their work experience placements, internships and taster courses.
- 75% hope to be able to deliver in-person vacation placements and internships in summer 2022.
- Employers have increased the number of universities they actively target; 17% have stopped targeting individual universities.

Other research

The University of Birmingham published [Graduate pathways: Identifying patterns of regional retention and attraction](#) following increasing interest in the mechanisms that influence inter-regional mobility given the UK Government's ambitions to 'level up'.

- While an average of 58.3% of university graduates are employed in their region of study 15 months after graduation, there are substantial regional differences in the likelihood of staying regionally or relocating for work.

- For example, of 21,995 new workers who graduated from a West Midlands university in 2018/19, 50.8% remained in the same region for work.
- However, retention rates vary from 40.1% in the East Midlands to 88.3% in Northern Ireland and 80.6% in Scotland, probably driven by a high proportion of 'home-grown' students who don't leave for study or employment.
- Attraction rates range from 8.8% in Scotland and 18.8% in Northern Ireland to 61.9% in the East of England.
- Proximity to destination regions also drives mobility behaviour: e.g. 10.3% of graduates from universities in Yorkshire & the Humber moved to the North West for work, 7.1% to the East Midlands and 2.6% to the North East.
- Average regional retention rates are lower among Russell Group university graduates (49.9%), those with a first-class or upper-second degree (52.9%) and those in managerial/professional occupations (57.4%).
 - Rates are also lower for graduate workers aged 29 and under – 55.3% on average compared to 67.0% for those aged 30+.
- On average, Bangladeshi (73.5%) and Pakistani (67.6%) graduates exhibit the highest retention rates, whereas Indian (50.6%) and Chinese (51.6%) graduates have the lowest.
 - Black graduates have retention rates ranging from 23.4% in the North East to 82.9% in London.
- Public administration, education & health demonstrates the highest graduate retention rate (64.9%), whereas the attraction rates are more pronounced among graduates working in manufacturing (51.5%) and transport & communication (50.7%).
- The figures raise questions about the extent to which Scotland and Northern Ireland meet rapidly increasing labour market demand for high-level qualifications, particularly for STEM-related subjects.

CESifo published [The Effects of Professor Gender on the Post-Graduation Outcomes of Female Students](#), focusing on STEM studies and drawing on career trajectory data for US Air Force Academy (USAFA) students who graduated between 2004 and 2008.

- One of the advantages of the USAFA data is that students are quasi-randomly assigned to first-year maths and science classes.
- Findings:
 - Among high-ability female students, being assigned female professors increases the likelihood of working in STEM and increases the likelihood of receiving a STEM master's degree.
 - By contrast, being assigned female professors decreases the likelihood that high-ability male students work in STEM and decreases the likelihood that they receive a STEM master's degree.
- This pattern of results suggests that a policy aimed at increasing the supply of female STEM workers could have the unintended effect of discouraging male students from entering STEM.

HE: TEACHING, RESEARCH & INSTITUTIONS

Jisc and EmERGE Education published [Enhancing student engagement using technological solutions](#) exploring opportunities for universities to change and improve their approaches.

- The report examines how the rise of personalisation, AI, learning analytics and student preferences for mobile and cloud service offer opportunities for universities to improve their approaches to student engagement.
- It suggests five steps that university leaders can take to exploit the benefits of technology:
 - Introduce a digital strategy, integrating it into the core university strategy.
 - Invest in technically capable staff and skills at all levels, ensuring all staff have sufficient time to innovate, be creative and develop their practice in a culture that recognises and rewards them.
 - Share experiences and good practice, with sector bodies providing opportunities to discuss, collate and support communities of practice.
 - Coordinate approaches to finding solutions where there are currently none.
 - Empower student experts, recognising skills and recruiting them to support staff.

Advance HE published [Flexible learning: A literature review 2016–2021](#) based on studies from HE in 28 countries as part of a six-month longitudinal project. [The full report is available to members only.]

- The review identifies flexible learning trends in HE, exploring the issues and impact, and in particular 'what works' in its design, development and implementation.
 - Specific areas of focus include: the contextual framing of flexible learning (e.g. situational factors from an institution or national perspective); technological developments and their application; and pedagogical developments.
- Two central 'interventions' were identified: **technological configurations**, with the sub-themes: digitalising the classroom, gamification and interactivity, learning analytics, personal learning environments, selective deployment of technologies and intuitive technologies for educators; and **explorative approach to pedagogies**.
 - From a technological perspective, the utility, functionality and cost can both facilitate and limit flexible learning.
 - From a pedagogical perspective, the educators' role is critical: educators adopt approaches that have a degree of validation either from their own experience and/or the profession – their creativity, inventiveness and improvisation in combining and integrating technologies and pedagogies is the only limit.
- Two main 'outcomes' themes were: student impact (including learning, and behaviours in learning) and organisational learning (including learning from trial-and-error and advancing socially orientated aims).
 - Flexible learning contributes to students' learning of the curriculum and to shaping their attitudes towards learning and their sense of self-efficacy.
 - It can also have unintended negative consequences if adopted purely from an instrumental perspective.
- Implementing flexible learning in some subjects may be more straightforward than others; it is also context-sensitive, which significantly influences the acceptability, feasibility and overall effectiveness of flexibility based initiatives.

Advance HE published [A brief history of the Professional Standards Framework \(PSF\) for teaching and supporting learning in higher education: Stages of development](#); the UK PSF was launched in 2006 and revised in 2011.

The National Centre for Universities & Business (NCUB) published [The Changing State of Business–University Interactions in the UK 2005 to 2021](#) with the Centre for Business Research, University of Cambridge.

- Findings, including from a survey of 3,823 UK companies in 2020–2021, include:
 - 60% of businesses interact with universities for technology based, innovation-related factors; 51% interact because of business operations and management factors.
 - Over 80% said that interactions met or exceeded their expectations.
 - 45% reported people-based interactions; 30% problem-solving interactions; 24% interacted for commercialisation; 23% had been involved in community-based interaction.
 - Interaction increases with business size: 63% of large and 35% of small businesses had people-based interactions; 38% of large and 18% of small businesses had commercialisation interactions.
 - SMEs significantly increased people and problem-solving interactions between 2009 and 2021.
 - No single part of the UK has significantly more business interaction than others.
 - Businesses interact with their regional, national and overseas universities.
 - Barriers to interaction include resources (51%) and difficulty identifying a partner (46%).
 - 34% said Covid-19 had impacted on their interactions with universities; 42% said it had made it hard to form new interactions.

NCUB also published [Modes and Motivations for Business–University Interaction: Discussion report](#), on the implications of findings of the above paper for policymakers, universities and companies.

- The report draws 11 conclusions:
 - Ambitions to strengthen business–university ties require focus to achieve policy goals.

- Aims to increase mobility between academia and industry are unmet, and additional action is needed to build the highly skilled workforce necessary to support an advanced knowledge economy.
- Gaps remain in capturing the breadth of business–university interactions – a more systematic approach is needed.
- Regional growth initiatives should recognise that proximity is not always a determining factor for collaboration.
- The diversity of the UK’s university system is a commercial as well as a social asset.
- Personal connections continue to matter and should receive appropriate corporate support.
- Further action is needed to ensure that business–university interactions are guided by clear, shared objectives.
- Businesses’ perception that they do not have sufficient resources to interact with universities requires further examination.
- Despite considerable attention, the university sector remains difficult to navigate for business.
- There is scope for more businesses to engage with universities as a source of knowledge for innovation.
- The long-term impact of the pandemic on business–university interaction requires monitoring, with specific support for SMEs probably needed to prevent extended disengagement.

Policy Connect published [Empowering Innovation: The role of universities in boosting regional economies](#), the report of its cross-party Higher Education Commission.

- Recommendations include:
 - The Government should extend the geographical spread of existing Catapults to lower R&D intensive areas and be ready to set up new sector-specific Catapults to take advantage of emerging technological and industrial opportunities; promoting innovation capabilities in economically lagging regions should be added to the Catapult Network’s formal mission.
 - To increase pan-national collaboration, Research England should work with the devolved nations’ funding councils to expand the Connecting Capability Fund throughout the UK.
 - Universities should work together to develop investment companies and research pooling initiatives that can attract greater private investment in innovation activity.
 - The British Business Bank should establish new programmes to promote SME innovation loans and the financing of university spin-outs as part of its new Regional Investment Funds.
 - To boost productivity through knowledge exchange, Innovate UK should expand its Knowledge Transfer Partnership programme in number and geographical spread.
 - UK Research & Innovation should improve the accessibility of its funding streams to non-STEM innovation projects, with a particular focus on promoting STEAM (STEM plus arts) initiatives; HMRC should consider expanding the R&D Tax Credits scheme to include innovation emerging from non-STEM sectors.
 - The Government should establish new regional innovation support services and enhance the existing R&D Tax Credit Scheme to foster SME and university innovation activity, and implement a Quality Research premium to build university research capacity.
 - Universities should aim to build better partnerships with FE colleges and Catapults on skills support; short courses should be more widely available to help prepare an innovation-focused labour force.
 - Universities should support more transitions between academia and industry through industrial fellowships, ICASE (industrial Cooperative Awards in Science & Technology) studentships, industrial secondments and doctorate opportunities; career flexibility should be increased for academics and PhD students.

The British Council published [Gender equality in higher education: Maximising impacts, analysis of how gender inequality is reflected, reinforced and challenged in HE worldwide](#).

- Individuals benefit directly and significantly through investment in tertiary education where the rates of return from HE are generally higher for women than for men, across both low- and high-income countries.
- The creation of HE institutions (HEIs) and systems where norms for gender equality are practised and modelled and where the voices and ideas of women are valued and raised up, are some of the most powerful tools available for accelerating progress towards equality.

- However, the evidence shows that HEIs also reproduce discrimination against women, often 'by default rather than design'.
 - While women tend to outnumber men at entry, as they progress through the ranks of academia, the senior positions are disproportionately held by men.
 - Throughout their careers, men receive more opportunities and higher discretionary payments and are also more inclined to cite other men in journal articles.
 - Men are awarded prizes, especially prestigious ones, at considerably higher rates than would be expected.
 - The curriculum content often constructs men and boys as the default subject and the default holder of knowledge and reinforces gender stereotypes.
- STEM is the field with the most global and persistent issues of under-representation and marginalisation of women, and in which gender bias in favour of men in academic research appears to be particularly acute.
- HEIs are also high-risk environments for violence against women, with students being more at risk than those in the general population.
 - This is also a core concern for many women managing their decisions to enter, remain or progress in HE environments as teachers, researchers or learners.

WORKFORCE ISSUES

IZA published [Gender Differences in Reference Letters: Evidence from the economics job market](#), a study of applications for entry-level faculty positions in a research-intensive UK university.

- Academia, particularly economics, faces increased scrutiny because of gender imbalance.
- 9k reference letters written between 2017 and 2020 in support of almost 3k candidates were analysed for differences in the language used depending on the gender of the candidate being recommended.
- Findings include:
 - Women are systematically more likely to be described using 'grindstone' terms and less likely to be praised for their ability.
 - Women are more often described with terms praising their 'diligence' or 'dedication' than men.
 - There is evidence of a lower emphasis on ability, especially when comparing individuals within the same institution or for those sharing the same referee.
 - Given the time and effort referees devote to supporting their students, this gender stereotyping is probably due to unconscious biases.

The Workplace

RECRUITMENT

The Chartered Management Institute (CMI) published [Socio-Economic Background in the Workplace](#), based on surveys of its members' recruitment and promotion practices.

- 53% of those in management roles are from a high socioeconomic background, compared to 38% from a low socioeconomic background.
- 33% believe socioeconomic background is a barrier to progression to executive level, and 31% to a middle management role within their organisation.
- Only 14% said their organisation targets school leavers as part of their recruitment process.
 - There is little knowledge or take-up of government schemes that help firms recruit school leavers: only 3% said their organisation uses the Restart programme, 14% Kickstart and 18% government traineeship schemes.
 - In contrast, 45% run graduate schemes.
- Recommendations for fairer recruitment and promotion processes include:

- Government should introduce mandatory employee socioeconomic data collection by large firms; currently almost 70% of organisations do not collect socioeconomic data on their employees.
- Employers should review their recruitment processes to ensure they are broad and fair, and they should publish action plans on how they propose to ensure they remain so.
- Training for those involved in recruitment should include guidance on consideration of socioeconomic factors of applicants; 90% were unaware of any such training in their organisation.
- Recruitment and promotion practices must be fully transparent; posts must be advertised and not offered through informal networks.

The Construction Industry Training Board (CITB) published [New perspectives on recruitment to the construction industry](#), a report by the IES based on research between December 2020 and February 2021.

- Those outside the construction sector see it as physically demanding and masculine, involving working outside and manual work.
- Those working inside the sector ('insiders') value its stability, security, generous pay, progression, learning opportunities and the variety of roles and work environments.
- The report makes six recommendations:
 - **Increase the visibility and awareness of construction:** focus recruitment messaging on information gaps identified by the research; provide better, more accessible information for potential recruits; use a range of channels to promote the opportunities and benefits available in the industry; and offer more work experience opportunities.
 - **Emphasise the strengths of the industry:** raise the visibility of career pathways illustrated with real examples and personal stories; and help individuals to see the relevance of their skills and qualifications for construction and how they can fit in.
 - **Target recruitment,** including on: those who previously worked in construction and those most open to career change; those from under-represented groups and those with skills the industry lacks.
 - **Try different attraction approaches:** trial values-based recruitment drawing on the motivators of different groups and tailoring recruitment messages to align with their values and desired outcomes; indicate how the industry can deliver on these values and provide concrete examples; widen access to informal networks and provide information about work experience and job opportunities.
 - **Work to change perceptions:** equip 'insiders' to act as ambassadors for the industry by supporting them to have wider perspectives and how to signpost to sources of additional information; and help those from diverse backgrounds to act as visible, vocal role models.
 - **Adjust employment practices and the changing pervasive macho culture:** offer support to younger unskilled entrants; articulate the type of flexibility the industry currently offers; set out a commitment to support an inclusive culture and tackle discrimination.

The IES published [Supporting refugees into work: What can we do better?](#), a briefing drawing on research studies with refugee communities carried out in England in 2020 and 2021.

- Work challenges faced by refugee populations include:
 - Having qualifications and work experience from another country that are not recognised by some employers
 - Lacking knowledge of local job-seeking practices and social support
 - Clashes between a work-first welfare system and a need to learn English.
- Employers could consider:
 - Working to understand the prior qualifications and experience of refugees and how this translates to the roles they offer, refugees' legal status and eligibility to work
 - Providing work experience and work tasters to enable employers and refugees to assess suitability for a role; local work experience will also enhance refugees' CVs
 - Providing training tailored to work preferences; e.g. this would enable individuals to learn and practice the specific language and vocabulary relevant to the job or sector.

The IES published [Using interactive, video learning with AI to improve soft skills acquisition: Evaluation report](#), providing evidence from the development and piloting of a new training tool.

- The aim of the new resource is to help learners better understand the importance of soft skills and how they are demonstrated during the job interview process, by using interactive video to enable feedback to be gained using AI.
- The resource was well received by learners and tutors, with both seeing the benefit of using this technology.
 - Small signs of positive effects were found, including significant differences in attention and positivity.
 - Learners who lack confidence on screen felt uncomfortable using the simulator; however, there is a clear rationale for trying to build this confidence among low-skilled learners given employers' increasing use of technology and AI in recruitment.

SKILLS GAPS & SHORTAGES

Covid-related

As part of its Covid-19 analysis, CEP published [Real-time updates on the UK economy: Trends, expectations and implications from business survey data](#), based on data from the CBI, including findings on labour shortages.

- Firms providing consumer and personal services continue to be more likely to experience downward trends in business volume and employment.
- Firms in all sectors report 'labour shortages' at the pay rates that they are offering, with at least 50% of all businesses in each sector experiencing a shortage of workers.
 - Approximately 50% of firms report difficulty recruiting new workers; around 20% report issues retaining existing staff; and 10% report that the UK's point-based immigration regime is causing labour shortages.
- Policies to incentivise human capital investments will support job transitions across sectors, occupations and firms.
 - Migration policy could be helpful for localised labour shortages in the short term; in the long term, both migration and trade policy should be incorporated into a broader economic strategy.

Other research

City & Guilds Group published [Great Jobs: Recognising the essential jobs that keep the UK working](#), based on an Opinium survey of 10k working-age adults in the UK and economic analysis by Emsi Burning Glass UK.

- 3.1m key worker vacancies (including 340k new jobs) are expected in the next five years – 50% of all job openings.
- However, only 25% of working-age adults would consider working in social care, 26% in healthcare, 23% in transport & logistics and 22% in food production, agriculture or animal care, and only 17% – 9% of women – would consider working in construction.
 - The main reasons include: poor reputation; low pay expectations; unsociable hours; and a lack of relevant skills, experience or qualifications.
- 73% of essential workers are proud of their roles; however 87% call for improvements to the reputation of their role – 53% say better pay would improve it (74% in social care).
- Recommendations include:
 - More flexible working practices and a better work–life balance for all UK citizens
 - Better access to skills development, training and qualifications throughout working life
 - Drive up levels of respect and recognition for essential worker roles, in monetary terms and from their teams, managers and wider society
 - Develop horizontal skills threads (e.g. digital, numeracy, literacy, green, leadership) that can help people to move between sectors.

City & Guilds is running a 12-month [Great Jobs campaign](#) to highlight essential/key worker jobs.

LinkedIn Economic Graph published [UK Green Skills Report](#), using its data to highlight insights that are crucial to achieving a successful green transition.

Globally:

- In 2019, green workers were hired at a higher rate than non-green workers for the first time.
- The number of jobs requiring green skills has grown 31% over the past five years, while green talent has grown by 21%.
- The share of green talent in both high-income and upper middle-income countries is more than double that of low-income countries, risking further exacerbation of existing national divides.

The UK:

- The UK is a world leader in green skills and has high green skill penetration across the economy relative to global competitors.
 - However, it isn't uniform across sectors and more can be done to improve the position of certain very high polluting sectors, such as transportation & logistics.
- The fastest growing green jobs are energy auditors, wind turbine technicians and sustainability managers, demonstrating the impact policy has on job growth.
- There has been rapid growth in green hiring since 2019, with the change in the share of green hires almost double the global average.
 - However, the low starting base means the total share of hiring aligns with the global average.

The Edge Foundation published [Skills shortages in the UK economy 2022: Evidence summary](#), drawing together findings from its regular Skills Shortages Bulletins.

- It includes sector summaries covering: engineering, digital, creative, hospitality, health & social care, construction, logistics and 'green'.

TRAINING & DEVELOPMENT

IZA published [Managers' Risk Preferences and Firm Training Investments](#), a study of decisions about employment-related training allocations, based on a survey of firms in Germany.

- Two underlying sources of risk were considered: while the costs of training are known, managers are uncertain about the profitability of training because there is a risk that:
 - training will not be productive
 - trained workers will quit before the firm recoups its training investment.
- Managers with a low tolerance for risk are expected to be particularly focused on directing training opportunities to those workers for whom training has a relatively low risk of being unproductive.
- All managers, irrespective of their risk preferences:
 - are sensitive to the investment risk associated with training and avoid training that is more costly or that targets those with less occupational expertise or are nearing retirement
 - are more willing to provide training to young workers and those with more occupational expertise
 - have a slight preference for training women – which is counter to the traditional argument that women's greater tendency to leave reduces the returns to providing them with specific training.
- Risk-tolerant and risk-averse decision-makers have significantly different training preferences.
 - Managers who are risk-averse offer significantly less general training and, in some cases, are more reluctant to train workers with a history of job mobility.
 - Managers, especially those who are risk-averse, strongly prefer training that is usable only in their firm – they are ~30% less likely to send a worker for training that is completely transferable to other firms.
- Overall, the risks of training are primarily due to the risk that trained workers will leave the firm (turnover risk) rather than that the benefits of training do not outweigh the costs (investment risk).

The IES published [Evaluation of the Construction Skills Fund \[CSF\]: Onsite training hubs](#).

- The CSF was part of England's National Retraining Scheme.
 - It supported the development of 23 mobile hubs providing entry-level construction skills training, enabling trainees to learn and apply their knowledge on site.
 - The programme aimed to support at least 13k participants and for 30% of these to achieve a sustained job of three months duration.

- The hubs mainly provided screening, IAG, training, job brokerage and in-work support.
- The hubs need the following to work effectively:
 - To be employer-led
 - Good working relationships with a broad range of partner organisations who understand the programme and refer a diverse range of suitable participants
 - Effective and robust screening to ensure the potential job-readiness of participants with one to two weeks training and motivation to work in construction
 - A flexible training programme, adaptable to changing requirements and tailored to the needs of participants and the employer.
- Hubs also need to: engage with recruiting employers in programme design and delivery; provide mentoring and advice after the programme to support job search and ensure sustainment or to facilitate changes to other job roles; and seek to secure quality employment for participants.

AUTOMATION & AI: IMPACT ON WORK

The UK Department for Digital, Culture, Media & Sport published [*AI Activity in UK Businesses: An assessment of the scale of AI activity in UK businesses and scenarios for growth over the next twenty years.*](#)

- Current usage of AI technologies is limited to a minority of businesses, however it is more prevalent in certain sectors and larger businesses.
 - ~15% of all businesses (432k) have adopted at least one AI technology; ~2% (62k) are currently piloting AI; 10% (292k) plan to adopt at least one AI technology in the future.
 - 68% of large, 34% of medium and 15% of small companies have adopted at least one AI technology.
 - AI solutions for data management and analysis are most prevalent (9%), followed by natural language processing and generation (8%), machine learning (7%), AI hardware (5%), computer vision and image processing and generation (5%).
 - The IT and telecoms and legal sectors currently have the highest rate of adoption (~29%), while hospitality, health and retail have the lowest (~11%).
 - Around 480 large (20%), 1,500 medium (8%) and 49,300 small firms (3%) are currently using four or five AI technologies to assist in their business activities.
- 40% of businesses (172k) that have adopted AI primarily develop it in-house and 40% purchase 'off-the-shelf' solutions; 20% outsourced the development of AI applications to external providers.
 - 49% of medium firms developed it in-house, compared to 40% of large and 34% of small firms.
- The scope for increased adoption is large if conditions are right; in the central scenario:
 - the adoption rate increases from 15.1% in 2020 to 22.7% in 2025, with an additional 267k businesses using AI in their operations; the increase for small firms is 7.6ppt, 9.7ppt in medium and 11.2ppt in large
 - by 2040, the overall adoption rate will reach 34.8%, with 1.3m businesses using AI.
- Future spending on AI is set to increase, but has a wide range of possible trajectories.
 - In 2020, the companies that had already adopted AI spent £16.7b, with an average spend of £9,500 per small, £380k per medium and £1.6m per large business.
 - Expenditure could increase to £27.2b–£35.6b by 2025, at annual growth rates of roughly 10% and 16% respectively.
 - In the central scenario, expenditure rises to £30.3b at an annual rate of 12.6%; overall, expenditure on AI technologies increases to £83.5b in 2040 at an annual rate of 8.4%.
 - In the downside scenario, expenditure increases to £50.4b by 2040 at a rate of 5.7%, and in the upside scenario it increases to £127b at a rate of 10.7%.
- Spending on labour related to AI will need to increase to support AI technologies' rising prevalence.
 - In 2020, the 432k companies that had already adopted AI spent £46b on associated labour, with an average spend of £24,400 per small, £1.7m per medium and £3.1m per large business.
 - Expenditure on AI-related labour could increase to £80.2b–£103.2b by 2025, at annual rates of 11.7% and 17.5% respectively.

- In the central scenario, expenditure rises to £88.7b at a rate of 14%; labour-related expenditure increases to £304.2b in 2040.
- In the downside scenario, labour expenditure increases to £185.2b by 2040 and in the upside scenario to £456.0b.

The Organisation for Economic Cooperation & Development (OECD) published [OECD framework for the classification of AI systems](#) to enable policymakers, regulators, legislators and others to characterise AI systems for specific projects and contexts.

- AI changes how people learn, work, play, interact and live; as it spreads across sectors, different types of AI systems offer different benefits, risks and policy and regulatory challenges.
 - The framework provides a baseline to: promote a common understanding of AI; inform registries or inventories; support sector-specific frameworks; and support risk assessment and risk management.
- The framework classifies systems and applications along the following dimensions:
 - **People & planet:** the potential to promote human-centric, trustworthy AI, looking at users and impacted stakeholders, optionality and its impact on human rights, the environment, wellbeing, society and the world of work
 - **Economic context:** the sector in which the system is deployed (e.g. healthcare, finance, manufacturing); its business function and model; its critical (or non-critical) nature; its deployment, impact and scale; and its technological maturity
 - **Data & input:** the data and/or expert input with which an AI model builds a representation of the environment, including the provenance of data and inputs, machine and/or human collection method, data structure and format and data properties
 - **AI model:** a computational representation of all or part of the external environment of an AI system, encompassing e.g. processes, objects, ideas, people and/or interactions that take place in that environment
 - **Task & output:** the tasks the system performs, e.g. personalisation, recognition, forecasting or goal-driven optimisation; its outputs; and the resulting action(s) that influence the overall context.

IZA published [Automation and the Changing Nature of Work](#), exploring the attributes of a job that predict the likelihood that it is automatable, based on EU labour force survey data.

- The study examines three aspects: the abilities and skills required on the job; how these link to automatability; and the extent to which the job involves **people** (interactions), **'brains'** (non-linear abstract thinking) and **'brawn'** (physicality).
- Findings include:
 - Jobs involving skills and abilities that relate to 'brains' are safest from automation.
 - Jobs that require 'people' and 'brains' are also less likely to be automated; these jobs also usually require soft skills.
 - Jobs that require 'brawn' (e.g. creating objects manually) are most likely to be automated, unless they involve interactions with brains and/or people.

SKILLS POLICY

The National Foundation for Educational Research (NFER) published [The Skills Imperative 2035: What does the literature tell us about essential skills most needed for work?](#), exploring what the changing world of work will mean for essential employment skills by 2035.

- Universally acknowledged megatrends include: technological (digitisation, automation, AI); demographic (ageing); growing labour market inequalities; environmental changes/green agenda.
 - In addition, Covid-19 has had a profound impact on life and work globally, while the UK is adjusting to new economic conditions following its departure from the EU.
- By 2035, the sectors most likely to:
 - **grow:** health, social & personal care; education; professional services; sales/business development; creative, digital & design; green economy; information & communication; and natural & applied sciences
 - **decline:** administrative/secretarial; manufacturing/production; retail/cashier work; agricultural; and business administration/finance.

- There is consensus on the essential employment skills expected to be most in demand in addition to literacy, numeracy and technical and digital skills; the most frequently mentioned are:
 - **Analytical/creative:** problem solving/decision-making; critical thinking/analysis; creativity/innovation
 - **Interpersonal:** communication; collaboration/cooperation
 - **Self-management:** self-motivation/learning orientation; flexibility/adaptability; resilience/optimism
 - **Emotional intelligence:** empathy/social perceptiveness
 - **Leadership/management** – a cross-cutting skill.
- A number of strategies help school and FE students develop essential employment skills, including:
 - Frameworks, e.g. Skills Builder [see below]
 - Curriculum, pedagogic and assessment approaches, e.g. the OECD’s Learning Compass
 - Real-world learning and experience approaches, e.g. the Edge Foundation’s Future Learning.
- However, although 80% of the 2030 workforce is already in the workplace, there are fewer initiatives to develop essential employment skills in the working-age population.
 - Initiatives to reskill adults tend to focus on accessibility, flexibility, removing barriers to participation and instilling the value of lifelong learning, rather than on specific essential employment skills.
- Other findings include:
 - Workers with low levels of education or in low-skilled/routine tasks continue to be at greatest risk from automation, particularly in areas such as production, manufacturing and administration; however, AI will also impact higher skilled jobs.
 - Human reasoning and interaction will be as important in expected growth areas – e.g. health, social care and education – as they will in areas more typically associated with the future, e.g. digital, technological and green industries.
 - Urgent action is needed to ensure future skills supply and employability, given that around 1.5% of the manufacturing workforce in the EU has already been displaced by technology and 22% of current workforce activities across the EU could be automated by 2030.
 - The pandemic has accelerated the pace of digitisation, automation and AI and exacerbated labour market inequalities, again underlining the need for action.

This is the first report in a five-year research programme, [The Skills Imperative 2035: Essential skills for tomorrow’s workforce](#), funded by the Nuffield Foundation.

The Skills Builder Partnership published its inaugural [Essential Skills Tracker](#), based on a survey of 2,262 18–65 year-olds in the UK.

- Survey responses are mapped to the eight essential skills of the [Skills Builder Universal Framework](#): listening, speaking, problem solving, creativity, staying positive, aiming high, leadership and teamwork.
- Among the findings:
 - Essential skills are associated with increased wellbeing and an average wage premium of £3,900–£5,900; developing them means you’re 52% less likely to be out of work or education.
 - 89% of individuals believe essential skills to be important for employment and career progression; 71% believe they are important for academic performance.
 - Demand for essential skills development opportunities (83%) far outstrips supply (14%).
 - There is an endemic ‘skills trap’: young people from less advantaged backgrounds have fewer opportunities to build essential skills; leave school with lower average skill levels then have less desire to build essential skills; go into lower skilled, lower paid jobs with fewer opportunities to build essential skills; earn less and are likely to have lower levels of life satisfaction and income.

The Edge Foundation, SKOPE and the Environmental Change Institute published [Greening Construction: A complex challenge for jobs, skills, and training](#).

- UK policy attention is turning to the concept of a Green New Deal to drive economic recovery, at the heart of which lies localised job creation through investment in: sustainable, low-energy buildings and high-quality homes; renewable and affordable energy; and low-carbon transport infrastructure.

- The construction sector – particularly building – is, therefore, crucial to the drive towards net zero, the greener economy and a greener future.
- Emerging technologies related to energy, heat and building materials are frequently positioned as a key part of greening construction, leading to a focus on STEM or technical skills linked with specific emerging technologies.
 - However, good communication, leadership skills, professional integrity and general business and administrative skills are also required, as are key skills that support continuing professional development (CPD).
- Education and training in the construction sector appears to be unsystematic and fragmented.
 - Skills at L3–4 were already in low supply before the pandemic and engagement with greener building practices was patchy and often confined to a small range of innovative providers.
 - The complexity of the system is heightened by the minimally regulated nature of a sector dominated by SMEs, microbusinesses and self-employed contractors, all taking different approaches to initial and ongoing education and training.
- There is a tension between:
 - a narrow techno-economic view that available technologies will be installed at scale and work well with only small-scale investment to prime markets
 - a broader view in which skills formation, industry practice and culture are key elements of successful technology deployment.
- Key findings:
 - To capture the demands of complex building sites and the need for greener construction and business practices, education and training programmes need a broad framework, comprising: technical and employability skills; and sustainability orientated and CPD-orientated dispositions.
 - Ongoing CPD for everyone involved in the sector is critical, particularly training that goes beyond simple ‘bacon butty briefs’.
 - Such CPD is challenging and costly, as it requires time away from site; meaningful incentives are needed, potentially compensation and education and training structured around times that will fit with standard working days.
 - Those providing the training must receive adequate CPD to stay up to date in relation to technical developments as well as to support broader employability skills and the necessary dispositions.
 - There is a need for greater strategic coordination between providers and industry in order to enable an agile response to emerging skills needs as well as drastically simplified pathways through initial training and CPD.
 - Closer regulation would both ensure skills demands are being met and contribute to driving the changes in culture and practice needed for a more sustainable future.

Cedefop published [An ally in the green transition](#), a briefing note on the important role of VET, especially apprenticeships, in shaping and providing the skills needed for greening jobs.

- With no broadly accepted green skills taxonomy in place, different approaches have been used in EU member states to define skills for the green transition.
 - Real-time green skills intelligence will be crucial to understanding emerging labour market trends and clearing the way for swift adaptation of VET.
 - Cedefop is exploring the possibility of using data from online job adverts feeding into its [Skills-OVATE](#) tool to lay the groundwork for a classification of green skills.
- Many of the skills needed for the transition to green economies and societies concern the smart use of clean technologies.
 - Digital skills have become so important that they are increasingly considered both technical and transversal, depending on how advanced they are, hence the European Commission labelling the digital and green transitions as ‘twin transitions’.
- With its current skills foresight studies on smart and green cities and waste management, Cedefop is also looking into how VET can respond locally to future developments in skill needs and occupations.
 - Preliminary findings point to the importance of digital skills in greening economies; e.g. ICT professionals involved in the monitoring and analysis of data in cities regarding smart and greener transportation or waste management.

- Apprentices can relay green innovation from colleges to companies and vice versa in their daily learning and work activities, on account of their double identity as employees and learners and the frequent collaboration between VET teachers and in-company trainers.
- Apprenticeships can also be used as a tool for upskilling and reskilling workers, such as supporting their transition from declining to growing sectors or occupations and so contributing to the green transformation of regions.
 - The fact that an apprenticeship is built on a contract and remuneration makes it an attractive option for adults who want (or need) to obtain a green qualification.

Cedefop also published [Championing the skills revolution](#), a briefing note on how it is stepping up its skills intelligence work in order to know what skills are needed in the green and digital transition.

Skillnet Ireland published [Talent for Ireland's Green Economy 2022: Examining skill needs to support enterprise innovation and Ireland's transition to a low-carbon economy](#), with the Economic & Social Research Institute.

- Evidence is provided on: business awareness of and exposure to climate change challenges; skill needs in the medium term; existing upskilling programmes; and future training needs.
- Developing talent and skills is the top challenge associated with the implementation of RoI's Climate Action Plan.
 - The top green skills needed for all enterprise groups are: waste management skills (78%), corporate sustainability strategy skills (75%) and carbon management skills (67%).
 - The top skill sets needed in the medium term are: climate change and sustainability strategy skills (84%); marketing skills (70%); and financial skills relating to investment and access to finance (67%).
 - It is also important to have the right digital talent to harness digital technologies and big data to enhance firms' capacity to achieve better sustainable performance.
- Key recommendations include designing training programmes that:
 - guide businesses through the legislation, policy objectives and targets
 - are developed and provided on a continuous basis given the uncertainty and dynamics of climate change challenges and related policy and legislation
 - focus on developing skill sets in high demand and low supply, including in: climate change and corporate sustainability strategy; energy efficiency design; and green procurement
 - are tailored to each sector/enterprise group and at different stages in the transition
 - train in-house leaders/experts to lead a company's transition
 - enhance collaboration and coordination of different initiatives and are integrated across government departments and agencies to ease accessibility and reduce duplication.

Skillnet Ireland, Green Tech Skillnet and Wind Energy Ireland published [Hydrogen and Wind Energy: The role of green hydrogen in Ireland's energy transition](#), a report by Gavin & Doherty Geosolutions, including research into the associated future talent and skills requirements.

- The analysis focused mainly on the period pre-2030 and included the assessment of potential green hydrogen end users and a stakeholder survey.
- Currently, talent gaps and employment opportunities linked to green hydrogen are primarily related to energy systems modelling, planning and the analysis of energy/carbon regulations.
- As the industry develops, significant employment opportunities will be created in construction and skilled technical roles.
 - Long-term employment opportunities will be found in the operation of facilities and the provision of services and expertise to the global green hydrogen industry.

CMI published [Levelling Up: Mind the productivity gap](#), suggesting that investing in management and leadership skills will be critical to the UK's economic recovery from the pandemic.

- Management and leadership skills are critical to helping businesses and public sector organisations to grow and thrive.
- In 2019, only 13% of the UK's SMEs offered training to develop management skills and capabilities – from 8% of microbusinesses to 47% of medium-sized businesses.

- SMEs are often unaware they have a training need, lack an awareness of the opportunities available in the training system, or might not have the means and capacity to invest in leadership development.
- Government needs to invest in core management and leadership skills or it will not be possible to 'level up' all parts of the UK.

Cedefop published the 2022 results of its [European Skills Index \(ESI\)](#), including [JRC \[Joint Research Centre\] Statistical Audit of the European Skills Index 2022](#) and a [Technical Report](#).

- The ESI assesses the performance of skills systems and the improvements over time and highlights the areas where further attention is needed.
- The ESI is built on three pillars of investigation: skills development; skills activation; skills matching.
 - Each pillar is divided into six sub-pillars and then into 15 measurable indicators that are closely related to policy monitoring and questions.
 - The performance of the overall skills system is summarised by the ESI score.
- The UK ranks 22nd (unchanged since 2020), placing it in the 'middle-achieving' countries group; it has wide differences in scores for each of the three pillars.
 - **Skills development** (20th): its poorest performance is for the indicator 'pre-primary pupil-to-teacher ratio' (29th); it performs better for 'high digital skills' (5th).
 - **Skills activation** (12th): it has high '20–24 activity rate' (4th) and scores well for 'recent graduates in employment' (12th); it performs relatively poorly in 'early leavers from training' (22nd) and '25–54 activity rate' (17th).
 - **Skills matching** (26th): it has low scores for all indicators (lower than 20th) except for 'long-term unemployment' (4th).

ADULT & LIFELONG LEARNING

FutureLearn published [The Future of Learning Report 2022](#) based on a survey of 2k people and 500 employers in the UK.

- It explores the key trends in education, focusing on how people learn, post-pandemic learning and skills for the future.
 - 81% of people who changed career path said an online course helped them.
 - 33% would choose online platforms to learn new skills as they can learn at a pace that suits them (23%) and/or at home (22%).
 - 51% cite passion as a motivation to learn; 32% learn to get a promotion or pay rise.
 - 36% expect their leaders to have equality and diversity training; 44% expect them to have mental health training.
 - 76% say access to ongoing development is important in a prospective employer.
- The key skills employers seek include: critical thinking; strategic team planning; creativity; interpersonal, e.g. empathy; and basic digital skills.

ResPublica published [Learning Ecosystems: A new model for levelling up skills in Doncaster](#) by the Lifelong Education Commission, exploring how a place-based approach can transform lifelong learning.

- Doncaster has transitioned from unskilled and labour-intensive employment in heavy industry to low- and intermediary-skilled jobs in retail, warehousing and logistics.
 - The region as a whole has struggled to adjust to the structural changes in the UK and global economy.
- Doncaster has already begun to transform its education system, starting by implementing all the recommendations of the One Doncaster Independent Commission.
 - Educational attainment in schools has improved significantly, narrowing the gap with the national average; it has innovated pathways from schools into FE and HE, developing a hybrid approach to academic and technical learning as well as a deeper collaboration with local employers.
- It is now seeking to establish a coherent local 'Talent and Innovation Ecosystem' (TIE) in order to level up deep-seated inequalities, improve social mobility, address poor health outcomes, boost

productive growth and include all individuals and communities in the benefits of a more prosperous economy.

- The TIE will shift the focus from a traditional academic-centred model of learning to a more diverse and inclusive borough-wide learning community that is vocationally and socially relevant.
- It will draw on international best practice to bring together learners and employers, community partners and educators to co-design and apply learning to real-world problems.
- Recommendations for government relate to policy in England, but include some that are more widely relevant:
 - A statutory right to retrain regardless of prior attainment; all benefits-related restrictions removed
 - Enable a 'big data' approach to skills planning by allowing anonymised learner data to be freely accessed and analysed at the local level
 - Introduce high-quality career development hubs in priority areas for levelling up
 - Introduce levy flexibilities and tax incentives in high-skilled 'cold spots' to address skill gaps in exportable growth sectors
 - Trial place-based budgeting, giving local leaders full flexibility and accountability for integrated spending and investment across economic and social policy, with a focus on education and skills.

The Campaign for Learning published [Post-16 Education and Skills: Levelling up everyone, everywhere](#), a collection of 18 essays by a range of experts.

- The five parts cover levelling up and: national and place-based strategies; young people; lifelong training; lifelong learning; and post-16 providers.
- A final section provides an assessment on the levelling up white paper and post-16 education and skills policy and a series of recommendations to take the agenda forward.

PASCAL International Observatory and the Centre for Research & Development in Adult & Lifelong Learning, University of Glasgow, published a briefing paper on [Learning with and from refugees: Adult education to strengthen inclusive societies](#).

- Education is one of the top priorities for adults in conflict-affected areas, yet it is not a priority of the humanitarian aid sector.
- Challenges affecting the provision of refugee adult education include: language barriers; gender issues, particularly women's participation in education; the recognition of credentials; and inaccessible fees to access HE.
- Professional regulation bodies (e.g. the General Medical Council) should work proactively with refugees with professional backgrounds so they can take up meaningful work and help address shortages.

Cedefop published [High Esteem but Low Participation](#), a briefing note on findings from its pan-European survey of 40,466 adults aged 25+ exploring adult learning and continuing VET (CVET).

- Employed and unemployed men and women of all ages, education and skill levels, regard adult learning and CVET as important for finding, performing and progressing in jobs and careers.
 - They also expect adult learning and CVET to become more important in the future and believe that governments should prioritise investment in them.
 - Adults aged 65+ and retired adults are just as positive about adult learning and CVET as 25–64 year-olds.
- Adults believe there are many opportunities to learn and welcome measures to encourage participation in learning, e.g. financial incentives, support with childcare and flexible working hours.
 - 88% of all age groups say that they need to keep their skills up to date constantly to do their job, however participation in learning is relatively low overall, ranging from 33% of 55–64 year-olds to 57% of 25–34 year-olds.
- Those least likely to participate – older workers and those with a low-level education or working in elementary occupations – are also most likely to agree that they lack general and technical skills to carry out their job.
 - Despite positive attitudes, opportunities and support, the main reason adults give for not participating in adult learning and CVET is because they see no personal need.

- Participation in adult learning and CVET is often about potential, not guaranteed benefits – promotion, a new job or better pay are usually in the hands of employers rather than participants.
- A more 'learner-centric' approach is needed – one that is a partnership with the learner at the centre and where responsibility for learning, and its benefits, are shared.
 - The premise of learning is not to react to a new skill need that has arisen, but a continual process that supports adaptation to changing circumstances and which encourages anticipation and innovation.
 - It addresses individuals' learning and circumstantial needs and helps them manage the labour market transitions that are particular to them.

THE CHANGING NATURE OF WORK

Covid-related

The University of Southampton published [Work After Lockdown: No going back: What we have learned working from home through the COVID-19 pandemic](#), including research by the IES and Half the Sky, based on insights from waves of data collection.

- The themes explored relate to: leading organisational change; employee health and wellbeing; managing performance and productivity in remote teams; learning and development; promoting inclusion through new working practices; and preferences for flexible and hybrid working.
- The following changes have emerged:
 - New working practices that have enhanced organisations' operations, including working in paperless format, digital teamworking, improved time management and organising workload around more flexible working hours
 - A new set of management skills around remote working that have been refined and now form a valued part of professionalisation.
- Success implementing hybrid working requires organisations to:
 - engage with staff preferences
 - consider flexibility in working hours as well as location
 - deal with resistance
 - devote more managerial time to implementing hybrid working
 - equip staff with effective technology to support inclusive hybrid meetings
 - assess individual jobs for office presence needs
 - implement clear and careful messaging of expectations
 - assess training needs
 - consider health and wellbeing factors that limit office presence
 - share experiences and learn from other organisations implementing hybrid working.

The Office for National Statistics (ONS) published [Reasons for workers aged over 50 years leaving employment since the start of the coronavirus pandemic](#), covering workers in GB.

- Main points include:
 - 77% of 50–59 year-olds said they had left their previous job sooner than expected compared with 57% of adults aged 60+: 28% left due to retirement (56% aged 60+); 19% due to stress or mental health (5%); 14% due to a change in lifestyle (7%).
 - 58% of 50–59 year-olds were considering returning to work (31% aged 60+); 15% wanted to return to full-time work (3%); 54% said that a job that suited their skills and experience was an important consideration (38%).
 - Of those who would consider returning to work, flexible working was the most important aspect of choosing a new job (36%), followed by working from home (18%) and fitting around caring responsibilities (16%).
 - 69% of those currently looking for paid work would like to return on a part-time basis; 21% part time or full time; 9% full time.

The ONS separately published the [findings](#) from semi-structured interviews.

The International Labour Organization (ILO) published its flagship report: [World Employment and Social Outlook: Trends 2022](#).

- Three sections cover:
 - (Re)building a resilient world of work after the pandemic
 - Employment and social trends by region
 - Temporary workers and Covid-19: currents below a calm sea.
- Among the headlines:
 - Pandemic disruptions, structural deficiencies and new risks reduce the potential for decent work to be created: the asymmetric global recovery has started to cause long-term knock-on effects, with persistent uncertainty and instability that could derail the recovery.
 - Many of those who left the labour force have not come back, so the level of unemployment still underestimates the full impact of the crisis; economic changes could become structural, with enduring implications for labour markets.
 - Temporary work is acting as a buffer during economic uncertainty: it had been increasing even before the pandemic, although not uniformly across sectors and countries – rates in low- and middle-income countries are twice as high as in high-income countries.
 - Achieving a human-centred recovery will require the successful implementation of four equally important pillars: inclusive economic growth; protection of all workers; universal social protection; and social dialogue.
 - Extending and ensuring the protection of all workers entails guaranteeing fundamental rights at work, health and safety in the workplace and a transformative agenda for gender equality.

Other research

The Resolution Foundation and CEP published [Changing jobs? Change in the UK labour market and the role of worker mobility](#), as part of their [Economy 2030 Inquiry](#) funded by the Nuffield Foundation.

- Three key facts are highlighted about the UK's recent experience of economic change:
 - Structural change (the reallocation of labour across different sectors) has been slowing down in recent years; the rate at which workers move between jobs and sectors has also slowed down.
 - Sectors can decline through older workers leaving and fewer younger workers joining, and through mid-career workers being forced out.
 - In contrast to some other countries, occupational change has tended to involve 'upgrading' (the growth of higher paid occupations) more than it has 'polarisation' (the growth of high- and low-paid jobs), especially for women.
- The popular conception that the UK labour market has been in rapid, accelerating flux – with robots replacing jobs, and gig economy jobs replacing factory work – is very wide of the mark.
- Instead, the pace of structural change – the rate at which different job sectors grow and shrink – has been falling consistently since the 1980s and fell to its lowest level in a century in the 2010s.
 - Even at the height of the pandemic in 2021, changes in the structure of the labour market represented just 7% of total employment – 66% below the level of change in the late 1980s.
 - The biggest structural changes in the 2010s were in manufacturing (down 9% and 280k jobs) and professional services (up 40% and 912k jobs).
- Periods of major labour market change can lead to involuntary job losses, as sectors decline and jobs disappear; only 50% of those affected were able to return to work within six months, and received lower hourly pay (down 1.1%) when they did return.
- Declining change in the labour market in recent decades:
 - has reduced these risks, with the number of involuntary job losses down from 0.8% of workers per quarter in 1991 to 0.4% in 2019
 - has been associated with falling job mobility, with the proportion of workers moving jobs per quarter down 25% from 3.2% in 2000 to 2.4% in 2019, while the proportion moving sectors has fallen by 35%.
- But major labour market change also creates new opportunities with more frequent job moves, typically resulting in a 'mover's pay bonus' of 4ppt compared to those who stay in the same job.

- Decades of declining job churn, which has meant fewer risks and opportunities for workers, is likely to be reversed in the next decade due to Covid-19, Brexit and the transition to a net zero economy.

The Chartered Institute of Personnel & Development (CIPD) published [Understanding Older Workers: Analysis and recommendations to support longer and more fulfilling working lives, drawing on data from the current cohort of those aged 50+](#).

- 32.6% of the UK workforce (10.4m) is aged 50+, of whom 1.2m are over 65; the figure has been and will continue to grow.
 - Although younger workers are more likely to be unemployed, when older workers experience a spell of unemployment it is more likely to persist for longer.
 - An estimated 1m over-50s want to work but aren't currently working.
- The age profiles of different UK industries vary markedly: agriculture has an average age of 48, with 52% of its workforce aged 50+; hospitality has an average age of 35, with only 20.5% aged 50+.
- Older workers are even more likely to value flexibility than younger colleagues and have higher rates of homeworking, part-time working and self-employment; they are also much more likely to have caring responsibilities.
 - 32.1% of 50–64 year-olds would like to work fewer hours, and that age group has the highest levels of dissatisfaction with its working hours.
- Over 50% of workers have a long-term health condition by the time they reach 60 and 33% are affected by some form of disability.
 - Only 25% of over-60s say their health limits the type or amount of work they can do, but too many leave employment because of poor health.
- Older workers are most likely to disagree that there are good opportunities for progression in their role and are also less likely to take part in formal off-the-job training.
 - The impact of technology and demand for upskilling/reskilling will be compounded by more people working into their late 60s and early 70s.
- The default age range of 16–64 for labour market statistics is no longer appropriate as people increasingly work into their late 60s and early 70s.

EMPLOYMENT: RIGHTS, RESPONSIBILITIES & WAGES

CIPD published [How do companies report on their 'most important asset': An analysis of workforce reporting in the FTSE 100 and recommendations for action.](#)

- There is significant variation in both quantity and quality of disclosure on the seven themes in the CIPD framework: workforce cost and composition; employee relations and wellbeing; reward; voice; skills, capabilities and recruitment; response to Covid-19; and overall approach to recruiting.
- There is more space dedicated to workforce matters in annual reports than in previous years.
 - There are also high levels of inclusion of workforce matters in key performance indicators and principal risks, indicating that companies are giving more strategic importance to their workforces.
- A small number of workforce metrics have seen marked improvement, although starting from a low base, e.g. ethnic composition and discussion of worker voice in relation to trade unions.
 - Some look likely to see greater improvement in coming years, such as ethnicity pay gap reporting.
- However, the quality of reporting is still low in many cases: while every theme was discussed by most companies in narrative terms, the use of data was more piecemeal.
 - There are huge gaps in reporting, including on contingent workers, on which most companies provide virtually no information despite the fact that the pay and working conditions of contingent workers are areas of significant risk.
 - There is also a lack of reporting on the important topic – to investors and employees – of pay and benefits, as well as the exclusion of this information from the 'people' section of the annual report.
- Five recommendations:
 - High-quality corporate reporting should be combined with robust employee voice mechanisms and diverse boards that are focused on employment practices.
 - Investors, policymakers, regulators and civil society must work together to push companies to provide better disclosure on their workforces.

- The Financial Reporting Council should work with other stakeholders – including representatives of investors, companies and people professionals – to establish a framework for workforce reporting that sets out a baseline of minimum standards.
- Workforce reporting would be improved by enhanced oversight of the ‘comply or explain’ corporate governance regime by the Audit, Reporting & Governance Authority once it is established, through the publication of a regular, published annual audit of company reports.
- The Companies Act 2006 should be amended to replace the term ‘employees’ with ‘workforce’ to require companies to report equally on workers under all contract types, rather than just their direct employees.

The report includes detailed data on each of the seven themes.

The Institute for Public Policy Research published [A healthy labour market: Creating a post-pandemic world of healthier work](#).

- Governments and businesses have historically focused on expanding occupational health services to improve the health of workers.
 - While important, it is an approach that reflects a common assumption that healthcare services are the most effective policy instrument to improve health outcomes.
 - Evidence indicates this assumption is weak: policymakers have overlooked how the nature and quality of work, modifiable via labour market regulations and workplace policies, determine health.
- The broader range of policy tools to make jobs healthier includes:
 - **Raising pay floors:** the national living wage should be permanently fixed to the real living wage, and statutory sick pay increased to 80% of previous earning with the lower earnings limit abolished.
 - **More secure work:** with an estimated 5.5m people in insecure work in the UK, the Government should introduce legislation to give employees more control over their working hours and better contractual stability.
 - **Shorter working time:** the Government in England should follow examples in countries such as Spain, Iceland and Scotland to pilot a shorter working week scheme.
 - **Worker-in-control flexibility:** where possible, all employees should have a right to flexible working hours, while those who work shift patterns should have access to self-rostering.
- Structural economic policy and labour institutions shape the health of working-age adults through both the conditions of work and broader economic- and population-level effects, including:
 - **Healthier macroeconomic policy:** a labour market in or near full employment would reduce the number of people in long-term unemployment and help those in insecure work to bargain for better working conditions.
 - **Trade unions as public health institutions:** a 2019 World Health Organisation report observed that working conditions tend to be healthier, and poverty rates and sickness absence rates lower in European countries with higher collective bargaining coverage rates.
 - **Rethinking back-to-work:** active, well-designed labour market programmes can mitigate the negative health effects of losing employment; however, conditionality and sanctions associated with welfare-to-work policies have detrimental health impacts on people with mental health problems.

The Work Foundation published [Digital Boundaries and Disconnection at Work: A guide for employers with Prospect Union](#).

- Increased remote working as a result of the pandemic is positively impacting the lives of many workers, with reductions in commuting time and cost, and the ability to spend more time with family.
- However, an ‘always on’ working culture can be a major trigger and accelerator for mental and physical ill health.
- The ‘right to disconnect’ is emerging as one solution to help create rules or limits to help employers and employees manage digital boundaries between work and home.
 - Other approaches include making digital boundaries part of the wellbeing agenda or flexible/hybrid working arrangements.

Acas published [Addressing inequalities: The role of staff race networks](#), reflecting increasing recognition of the importance of employee network groups in helping employers act on equality issues in the workplace.

- In most of the organisations participating in the research, the murder of George Floyd and the Black Lives Matter movement was the catalyst for the formation or re-launching of staff race networks; the impact of the pandemic on ethnic minority communities was also cited.
 - Most had senior manager sponsors or champions who were acting as a catalyst for promoting organisational change.
- A recurring reason for joining a network was the perception of ethnic inequalities and the desire to make a difference; members voiced concerns about racist harassment and bullying, cultural insensitivity and micro-aggressions in organisational cultures.
- Network leaders spoke of their passion for making a difference and wanting to fulfil the potential to foster organisational change.
 - Their role also allowed them to build leadership skills and experience that could be deployed in other roles in their organisation; members involved in executive committees, steering groups or boards were also reported to grow in confidence through their network activity.
- Network leaders and members outlined a variety of strategies and tactics for pursuing their aims, including:
 - Sharing common or lived experiences helped them to feel less isolated, while building and expressing solidarity.
 - Sharing their experiences with other organisational actors enabled them to act as a critical friend to their organisation: ‘speaking truth to power’.
 - Inviting senior managers to network meetings provided a means of sharing their work experiences and concerns and helped in building relationships and fostering commitment to change.
 - Collaboration with other identity networks enabled them to develop dialogue and activities with intersectional sensitivity in recognition of the multiple and fluid identities of members.
 - Working in partnership with trade unions.
 - Being outward looking and engaging with wider society, channelling their skills, expertise and interests to engage with race equity beyond the workplace.
- Challenges included:
 - Resources, particularly when the time invested in network activities wasn’t visible; work overload and fatigue among activists
 - Some managers/parts of the organisation buying into the agenda more than others and some managers being more supportive than others in giving staff time for network activities; those in lower paid front-line jobs particularly bore the brunt of unsupportive management
 - Stereotypes, in terms of anger at social injustice being construed as aggression.
- Enablers included:
 - Senior leadership support and senior managers taking responsibility for making progress
 - Relationship building at all levels
 - Strong network leadership and sufficient resources to support them
 - Building confidence in talking about race through the experience of race conversations.

The Institute for Fiscal Studies (IFS) published [Labour market inequality](#) for the IFS Deaton Review of Inequalities.

- Earnings inequality is considerably higher in the UK than it was 40 years ago – by 2019 it was one of the higher earnings inequality countries in the developed world.
 - In the 1980s, earnings inequality rose sharply at all points in the distribution; in the 1990s and 2000s, upper-tail inequality rose significantly but lower-tail inequality grew less; the 2010s saw a modest narrowing of upper-tail earnings inequality and a bigger reduction of lower-tail earnings inequality.
 - The long-run structural trend of rising earnings inequality was driven by technical changes that benefitted skilled workers doing more complex tasks; the minimum wage introduced in April 1999 helped to stop and reverse the upward trend of lower-tail earnings inequality.
 - In the past 10–15 years real earnings growth of most workers has slowed and stagnated, giving the labour market more inequality plus little or no earnings improvement in real terms.

- The nature of work has changed dramatically over the past 40 years – higher earnings inequality, with low real earnings growth, and a very different labour market have placed the world of work in a much more unequal and divisive place.
 - Traditional work patterns have become less delineated in the face of big compositional shifts in who works and the definition and structure of modern jobs.
 - Worker power has fallen in the light of rapid union decline and increased employer power in pay determination.
 - Two related significant shifts have been the rise in solo self-employment and the emergence of new informality via the gig economy, radically changing the jobs landscape and how people work.
 - Between 1999 and 2019 the share of the lowest earning quintile who are self-employed increased from 15% to 23% (+8ppt).
- To halt or reverse this trend requires significant attention to restoring and reinvigorating real earnings growth and to generating decent jobs with good career opportunities in an inclusive way.

The Living Wage Foundation published [The Living Hours Index](#), providing a new perspective on insecure work, based on polling of 2,036 UK workers.

- 8% receive less than 24 hours' notice for shifts, hours or work schedules, rising to 14% when excluding those whose hours do not vary.
 - 32%/55% receive less than a week's notice; 49%/86% receive less than four weeks' notice.
 - 50%/66% of below living wage workers have less than a week's notice compared with 28%/52% for those paid at or above the living wage.
- 21%/28% of employees in the UK have had their shifts cancelled unexpectedly.
 - When employees experience unexpected shift cancellations, 88% don't receive their regular pay, including 23% who receive no payment at all.
 - 33%/40% of below living wage workers have experienced unexpected cancellations of shifts, compared with 18%/25% for those paid at or above the living wage.
 - 72% of low-paid workers receive less than 50% of their wage when shifts are cancelled, compared to 63% of those earning at or above the living wage.

L&W published [Good jobs in Scotland](#), a report for the Poverty & Inequality Commission Scotland about reducing in-work poverty.

- 'Good jobs' are defined as providing: secure and meaningful work with fair pay and conditions; adequate options around flexibility; and opportunities for progression that can effectively contribute to reducing child poverty.
- Headline findings:
 - Despite strong employment growth, Scotland has seen weak pay growth, which – combined with benefits cuts – has affected household incomes, particularly those at the bottom of the distribution.
 - There has been a relative improvement in pay, and trade union membership remained stable between 2011 and 2019; however, underemployment, employer investment in development opportunities and overemployment have worsened.
 - Underemployment fell in the decade prior to the pandemic but rose from 9.5% in 2019 to 11% in 2021.
 - Those with the lowest qualifications, young people, women and disabled people are most likely to be on low pay.
 - Child poverty is higher in urban areas, with low pay and underemployment being higher in some cities, e.g. Glasgow, and parts of the Highlands & Islands.
 - Global economic change, an ageing population, automation and digitalisation are likely to impact the quality of employment and access to 'good jobs', with occupational polarisation set to increase, especially for women.
 - Public procurement, voluntary charters and higher public sector pay were found to be the main government levers available to support job quality, although there is a general lack of evidence on what works to support the creation of good jobs.

Eurofound published [Overtime in Europe: Regulation and practice](#), a comparative overview of how overtime is regulated in the EU member states, the UK and Norway, including its definition, limits on its use and compensation received.

- Many workers continue to work beyond their normal hours, despite known adverse effects on health, wellbeing and performance.
 - The report examines the potential consequences for workers and firms, and summarises current issues, e.g. uncompensated working hours, structural overtime and monitoring of working hours.
- Key findings include:
 - All member states have a framework to set rules for maximum working time; in some countries, working overtime is viewed as a normal part of employees' duties, while in others it is seen as exceptional, to be authorised only under specific circumstances.
 - Overtime and long working days have harmful effects on a worker's physical and mental health – the greater the exposure, the greater the risk; they can also impact on employees' working time preferences and work-life balance.
 - Sectors consistently showing a high prevalence and/or extent of overtime include: healthcare, social work, mining & quarrying, manufacturing, transport & storage, construction and education.
 - Men, workers aged 25–55 and workers with higher levels of education are more likely to report working overtime and to report longer overtime hours than others.
 - The pandemic may have accentuated the associated risks, as workers were encouraged to work overtime to compensate for potential losses of productivity.
 - With the growth of remote working, the way working hours are recorded is also changing and additional hours often constitute invisible 'grey overtime'; provisions for the 'right to disconnect' being introduced in some countries will be an important way to address this challenge.
 - Although workers are usually compensated for overtime, unpaid overtime is still pervasive in the EU, generally resulting from pressure exerted on workers; discussions around unpaid overtime are taking place in large sectors in which social dialogue has an established role, e.g. metalwork, logistics and healthcare, the game development industry and academia.

IZA published [Educational and Skills Mismatches: Unravelling their effects on wages across Europe](#), an investigation of the impact of overeducation and over-skilling on wages.

- The report uses data from Cedefop's European Skills and Jobs survey covering 28 countries in 2014.
- Findings include:
 - There is a wage penalty associated with overeducation, with the highest wage penalty for workers that are both overeducated and over-skilled.
 - Improving the quality of worker matches is a key challenge not only from a worker's perspective but also for the economy at large.
 - Reducing the number of genuinely overeducated workers could improve overall productivity significantly.

EMPLOYMENT: GENDER INEQUALITY

IZA published [The Gender Gap in Top Jobs: The role of overconfidence](#).

- The study used British Cohort Study 1970 data, which followed 17k men and women born in the UK in a specific week in 1970 from childhood into the labour market in mid-career.
- There is a large gender gap in the probability of being in a top job – one with high earnings, job security and strong career prospects and trajectories.
 - The gap emerges in the late 20s and remains relatively stable throughout mid-career.
 - Some of the gap may be attributable to women not 'leaning in' while men are more overconfident in their abilities.
- Overconfident individuals have an overblown sense of self relative to their actual ability; underconfident individuals have a downward-biased assessment of their actual ability.
- Findings include:
 - Men are more overconfident than women, and this explains 5–11% of the gender gap in top job employment; although small in magnitude it is statistically significant.

- Overconfidence is particularly relevant for top jobs in law, economics and management.
- However, although overconfidence matters for gender inequality and has implications for how firms recruit and promote workers, other individual, structural and societal factors play a larger role.
- Overconfidence does not appear to matter when the sample only includes those without a partner or without children.
- Other factors, including previous educational channels and university subject studied (especially STEM), matter more.
- Employers should consider inaccurate self-assessments – over- or underconfidence – when recruiting, interviewing and promoting employees.
 - Application test scores and self-assessed ability measures could be used to uncover and screen for such traits, to ensure overconfidence is not rewarded and underconfidence does not hurt suitable candidates.

CMI published [#BreakTheBias](#), a discussion paper based on analysis of managers’ attitudes to gender, gender identity and sexual orientation in UK businesses.

- CMI surveyed 1,183 managers and analysed Labour Force Survey data from January–March 2021.
- Women comprise 48% of the UK working population, yet hold only 41% of management roles and 38% of senior business positions.
- Findings include:
 - Only 33% of respondents’ firms have programmes in place that are known to close gender gaps.
 - Gender inequality is still more of an issue around decision-making: 61% of respondents said managers or senior leaders ensured that women and men received an equal voice in meetings and decision-making.
 - 49% said managers/senior leaders were actively and visibly championing gender equality initiatives.
 - 34% said they had mentoring and sponsorship programmes in place to champion the progression of women.
 - 14% of female compared to 27% of male respondents said managers/senior leaders proactively sought out and advocated women for key projects, roles and promotions.
 - 89% said their organisation now offered flexible arrangements, compared to 58% before the pandemic.
- Government and employers are encouraged to:
 - commit to an impact assessment of how women’s position in the workplace has been affected by the pandemic and implement recommended actions
 - make action plans a requirement as part of reporting and bring medium-sized firms into scope.
- Employers are encouraged to:
 - ensure company-wide training is provided to embed inclusive practice and an awareness of equity
 - use proactive action to ensure women are equitably represented on shortlists for recruitment and promotion
 - provide two-way workplace flexibility that takes account of employee, not just business, needs.

The Centre for Progressive Policy published [What Women Want: Tackling gender inequalities in unpaid care and the workplace](#), part of its Women in the Labour Market programme, based on findings from a Yonder online survey of 2k UK adults aged 16–64 in March 2022.

- While similar proportions of women and men provide unpaid care, women do so with much greater intensity than men.
 - 47% of working-age women provided regular unpaid care for a child in the last six months, compared with 40% of men; on average, women provided 45 hours/week while men provided 22.
 - 22% of women and 25% of men provided regular unpaid care for a sick, disabled or elderly adult in the last six months; women provided 20 hours/week while men provided 17.
 - Women spend almost 450m hours/week providing childcare (23.2b hours) worth an estimated £382b per annum (pa); they spend over 90 hours/week providing care to an adult (4.7b hours) worth an estimated £50b pa.

- Men spend 186m hours/week providing childcare (9.7b hours pa) worth an estimated £160b; they spend 87m hours/week providing care for an adult (4.5b hours pa) worth an estimated £48b pa.
- Unpaid care has significant opportunity costs that have disproportionately impacted female participation in the labour market.
 - 26% of women who provided regular unpaid care for a child in the last six months had reduced their hours at work; 20% had been prevented from working more hours despite wanting to.
 - 20% of women who provided regular unpaid care for an adult in the last six months had reduced their hours at work; 17% of women who cared for an adult said they had been prevented from taking on more hours.
 - An estimated 5m women would be willing to work more if they had access to flexible work, generating £28.4b in earnings for women and £60.8b in wider productivity gains.
- When asked to rank the institutions and individuals they felt were most responsible for supporting those with caring responsibilities to take on paid work:
 - 71% of women included the government in their top three options, with 40% ranking it top
 - 59% included partners; 53% included friends and family
 - 55% included employers.
- Recommendations include:
 - Create a default of flexible working on all new job adverts; set a national target to ensure that 70% of non-emergency roles are advertised as flexible by 2025.
 - Expand access to training and development for management and leadership teams to help them understand how to positively respond to flexible working requests and foster a culture where flexible working is normalised.
 - Distribute unpaid care responsibilities more fairly by reforming parental leave, including by: preserving existing maternity rights; offering an adequate, non-transferable leave offer to fathers and co-parents; and boosting the level of statutory pay.

The ILO published [Care at work: Investing in care leave and services for a more gender equal world of work](#), based on a survey of 185 countries.

- The report provides a global overview of national laws and practices regarding care policies: maternity protection; paternity; parental and other care-related leave policies; childcare; and long-term care services.

CEPS (Centre for European Policy Studies) published [Can the \[European Commission's\] Pay Transparency Directive Close the Gender Pay Gap?](#)

- Despite recent progress, women in the EU are still paid less than men for equal work of equal value; in 2018, the gap was on average 14%, and it is likely to have increased during the pandemic.
 - In March 2021 the Commission published a proposal for a Directive to strengthen the application of the principle of equal pay for equal work or work of equal value between men and women through pay transparency and enforcement mechanisms.
- Pay transparency is important to closing the pay gap.
 - Over time, women have been closing gaps in education, labour market participation and attitude – areas that typically (used to) explain the gap – yet pay differences persist.
 - New research points to within-company dynamics as one of the most significant contributors to the pay gap; the directive proposes to address it through transparency and information sharing.
- As women tend to extract a lower share of the surplus in high wage premium firms (the bargaining effect), one can expect this to change as employees learn about their colleagues' average wages.
 - The knowledge of existing inequalities could empower and incentivise women to negotiate for wage increases and might force employers to review and adjust their pay scale.
 - Public access to wage data and exchange of information between employees of different companies could influence between-firm wage dispersions; a worker learning about better wage prospects in a competing firm could ask for a pay raise or try to switch to firms offering higher wages for the same type of work.
- The gap is expected to close by 1–5ppt across member states, though variation is quite high along the wage distribution.

- The population at risk of poverty would decrease by around 1.7ppt, mostly due to positive effects on single mothers with children.
- Finally, it is important to note that several member states have already implemented pay transparency measures, which often go beyond the measures outlined in the proposed Directive.
 - Although there is an undeniable benefit in harmonising such rules, more substantial effects should be expected only in countries that don't yet have pay transparency legislation.

PwC published [Women in Work Index 2022: Building an inclusive workplace in a net zero world](#), covering 33 OECD countries.

- The UK was in 9th place in the index, up seven places (the biggest climber) from 16th in 2019, putting it in first position among G7 economies for the first time in the history of the index.
 - Lower performing parts of the UK showed greater improvement in 2020 than those ranked at the top, helping to narrow the gap between the best and worst performing nations and regions.
 - New Zealand was in 1st place for the first time; Luxembourg and Slovenia were 2nd and 3rd.
- In the UK in Q3 2021, the unemployment rate for ethnic minority women was higher than the unemployment rate experienced by white women a decade ago and 2.6 times higher than their current unemployment rate.
- The next decade of the index will be shaped by the transition of global economies to net zero, the corresponding green jobs created and the demand for associated green skills.
 - Women are currently at a disadvantage: previously slow progress towards equality was set even further back by the pandemic and the transition to net zero will further perpetuate inequalities unless there is targeted intervention.

The results can be explored at country level using an [interactive data tool](#).

International Comparisons

The OECD published [Trends Shaping Education 2022](#), examining major economic, political, social and technological trends affecting education from early childhood to lifelong learning.

- Chapters, each first examining the impact of Covid-19, cover the following:
 - **Growth:** growing prosperity; investment in intangible assets; demographic pressures; the shift towards renewable energy; the growing space economy
 - **Living & working:** trends in working hours; non-standard forms of work; digital tracking and relationships; changing family structures; personal safety and housing
 - **Knowledge & power:** the expansion of knowledge production, distribution and use; AI and data-driven decision-making; emerging forms of scientific production and dissemination; the expansion of research and how governments shape and promote it; speaking truth to power: the role of expert and lay knowledge
 - **Identity & belonging:** the decline of traditional institutions and rise of individualism; diversification and multilateral cooperation; changing patterns of civic and political engagement; evolving LGBTI+ and disability rights and opportunities; the role of digital platforms in identity and community formation
 - **Our changing nature:** unsustainability; efforts to protect natural ecosystems; food production and consumption; progress in medicine and human enhancement; the growth of digital communication and reality.

The European Commission published [Towards Equity and Inclusion in Higher Education in Europe: Eurydice report](#), analysis of the level of alignment of HE in 38 education systems across 36 European countries in 2020/2021.

- The report uses the ten 'Principles & Guidelines' agreed by all European Higher Education Area countries as a blueprint for the commitment to improve the social dimension.
 - Ten chapters, one for each principle, explain how each relates to equity, the methodological challenges addressed and the choice of the indicators.
 - The data presented in map form provide a picture of the current level of attention to equity and inclusion in HE in European systems.

Government

The UK Government published [Levelling Up the United Kingdom](#), setting out 12 national missions including one to significantly increase high-quality skills training; many of the measures announced relate to England.

- New 16–19 free schools to help ensure that talented disadvantaged children have access to an institution with a track record of progress to leading universities.
- Eight new 16–19 maths schools, at least one in each English region (in addition to three already open).
- Institutes of Technology to be the pre-eminent organisations for technical STEM education.
 - They will be able to apply for a Royal Charter, which will secure their 'long-term position as anchor institutions' within their region and place them on the same level as UK universities.
- Creation of a new Unit for Future Skills that will bring together skills data and information held across government for use by central and local government and by providers and the general public.
 - The unit will produce information on local skills demand, future skills needs of businesses, the skills available in an area and the pathways between training and good jobs.
- Three 'pathfinder areas' where local employment and skills services will be more closely aligned.

The UK Government published [National Cyber Strategy 2022: Pioneering a cyber future with the whole of the UK](#).

- Pillar 1 (of five) is: **Strengthening the UK cyber ecosystem**, investing in people and skills and deepening the partnership between government, academia and industry.
 - Its objectives include: enhancing and expanding the nation's cyber skills at every level, including through a world-class and diverse cyber profession that inspires and equips future talent.
- Pillar 1's outcomes by 2025 include:
 - A significant increase in the number of people who have the skills they need to enter the cyber workforce, e.g. via expanding post-16 training programmes.
 - A higher quality and more established, recognised and structured cyber security profession, established by the UK Cyber Security Council.
 - A more diverse cyber workforce, with under-represented groups and those from disadvantaged communities given more effective support to enter into and flourish in a career in cyber.
 - A steady and diverse flow of highly skilled people coming through the education system, including an increased uptake and diversity of candidates taking computer science at school, FE, in apprenticeships and HE.
 - Government is better able to identify, recruit, train and retain the cyber professionals it needs.

While most areas of cyber policy relate to reserved matters (e.g. national security, telecoms, consumer protection), implementation of Pillar 1 will rely on coordination and cooperation across the four nations.

NORTHERN IRELAND

The Department for the Economy (DfE) published [Transforming careers support for young people and adults in Northern Ireland](#), an independent review by DMH Associates.

- 15 detailed recommendations include the following:
 - High-quality career-related learning in a new rebranded, all-age national careers portal supporting parents in career conversations with their children; content co-created by the DfE with education, employers and community strategic partners.
 - Establish new 'test and learn' career guidance pilots in selected Area Learning Communities to provide an 'enhanced offer' embedded within the curriculum; simplify and synchronise working links between post-primary schools, STEM, employability and enterprise hubs.
 - Build on the success of the DfE's Careers & Occupational Information Unit, its economists, Ulster University's Economic Policy Centre, FE Curriculum Hubs and 10X Economy strategic partnerships to co-produce more economy-driven careers information and labour market information bulletins.

- Integrate specialist careers advisers within multiagency one-stop-shop arrangements working deep in local communities alongside Health & Social Care Trusts and other public, private and third sector organisations that have established close working links.
- Re-introduce specialist careers advisers bringing more focused expertise, specialist knowledge and agility to respond to the 10X Economy goals, employer, education, other local community provider and digital requirements; further upskill and train careers advisers in use of digital technology, e.g. the metaverse, virtual reality, gamification, chat bots, social media, etc.

Policy and operational decision relating to the review will have to await a new Executive.

The DfE published [Skills Strategy for Northern Ireland: Skills for a 10X Economy](#).

- Three strategic goals:
 - Increasing the proportion of individuals leaving Northern Ireland HEIs with first degrees and postgraduate qualifications in narrow STEM subjects
 - Increasing the proportion of the working-age population with qualifications at L2+
 - Increasing the proportion of the working-age population with qualifications at L3+.
- Three major policy commitments:
 - Addressing skills imbalances, driving economic growth**
 - Supporting economic inclusion by working with local government, community and voluntary stakeholders, FE and trade unions to connect those with low or no qualifications to opportunities to engage or re-engage with the labour market.
 - Supporting social and economic development by significantly uplifting the number of people taking mid-level professional and technical qualifications, including through a new L3 Advanced Technical Award, an expanded apprenticeships programme, boosting 'HE in FE' and a review of vocational education provision.
 - Driving growth and innovation by increasing participation in economically relevant 'narrow STEM' subjects, particularly among women.
 - Creating a culture of lifelong learning**
 - Addressing low participation in adult learning (18.2%, compared with the UK average of 25.3%, which itself is below many OECD averages), by creating an Action Plan for Lifelong Learning to increase awareness of and improve access to the broad range of provision in this area.
 - Enhancing digital skills, developing a 'Digital Spine'**
 - Developing a new digital action plan covering: the advanced skills needed by globally competitive knowledge-based sectors; supporting individuals to gain the skills needed for social and economic inclusion.
- Revised government structures will bring together senior representatives from central government departments, local government, business, trade unions, the students' union and the voluntary and community sector.
 - The new Northern Ireland Skills Council will support implementation and provide key connections.
 - Its Skills, Equality, Diversity & Inclusion sub-committee will focus on maximising inclusion and opportunity in education and skills.
 - A Civil Service Management Board will drive better policy cohesion and minimise duplication.

ENGLAND

The Department for Education published [National Skills Fund \[NSF\]: Free Courses for Jobs](#), research by L&W exploring how adults can be effectively engaged in the offer.

- As part of England's Lifetime Skills Guarantee and Plan for Jobs, all adults who don't have A levels or equivalent can now take their first L3 qualification for free, funded through the NSF.
- Despite evidence on the benefits of learning, the UK has seen a recent decline in the number of adults participating in learning and skills training; those who could most benefit are least likely to participate.
 - For the NSF to be effective, these entrenched inequalities in participation need to be addressed.
- Key findings include:

- In the next 1–2 years, 25% plan to take part in learning or training; 34% said they were considering finding a new job; 15% said they would consider changing sectors or careers.
- 52% said they were very/fairly likely to take up learning or training in the next 12 months to improve their career prospects.
- Factors that would motivate them to do so, include: prospective or current employers; parenting responsibilities; interests; goals; recent learning experiences; and the pandemic.
- 61% said they would be very/quite interested in taking up the offer, particularly: 24–35 year-olds; full-time workers; those who had been furloughed; those interested in taking up learning in the next 12 months; those currently learning or having done so in the last three years; adults with parenting responsibilities.
- 64% were attracted to the opportunity because it was free; 57% to gain a qualification; 49% to being able to improve their job prospects; 37% to increase earnings.
- Survey respondents were most likely to be interested in accounting & finance courses (24%), followed by health & social care (21%).
- The most common factor that could prevent respondents from taking up the offer was not wanting to go back into learning (16%) and not looking to change their job or career (15%) – both dispositional barriers.
- Situational barriers related to time or work commitments, with 12% saying they didn't have time to study and 12% indicating they would have difficulty continuing with their current paid work.
- Respondents said they would be more likely to take up the offer if they had access to information on the jobs they could apply for and potential earnings (23%); 20% cited employer encouragement; 20% a guaranteed interview at the end of the course.

The Department for Education published [Extended and more flexible traineeships: A process evaluation](#), focusing on changes made as part of the 2020 Plan for Jobs.

- The following changes aimed to broaden the reach of the programme to more young people and employers and to enable providers to adapt to the labour market challenges created by Covid-19:
 - A longer programme
 - Eligibility extended to include young people with prior qualifications at L3
 - An employer incentive
 - A lower minimum duration for work placements (to 70 hours)
 - The inclusion of digital skills.
- Among the findings:
 - The flexibilities were well received, with each one helpful in specific circumstances; together they helped to maintain and broaden training and recruitment opportunities during the pandemic.
 - Shorter work placements helped to improve engagement of young people and employers at a difficult time; however, some providers felt that a longer placement was ultimately of greater value and some employers also felt that 70 hours was too short.
 - The employer incentive seems to have been effective in attracting SMEs and enhancing the quality of placements provided; however, the processes involved deterred some employers.
 - Some larger employers didn't see the benefit of the traineeship programme and were not motivated by the financial incentive; more should be made of the role of traineeships in supporting corporate social responsibility agendas and diversifying the workforce.
 - There could be a case for eligibility to continue to include young people with a prior L3 qualification but not yet ready for an apprenticeship, helping them to make the transition.
 - Providers, trainees and employers had different expectations about the relevance of digital skills, and the distinction needed to be made between essential and occupationally specific digital skills.
 - Remote work placements might be a useful continuing feature in order to offer opportunities in areas with fewer opportunities.
 - Other potential improvements included: more communication and support for employers during the work placement; ensuring work placements include a variety of tasks and that they are clearly developmental; providing better support for trainees when the planned progression route doesn't materialise.

SCOTLAND

Education Scotland published [Foundation Apprenticeship \[FA\] Provision in Scotland: Review, based on interviews and observations by HM Inspectors from March 2020 to November 2021.](#)

- FAs are part-time, work-based programmes developed by SDS for senior phase students in (secondary) S4–S6 (age 15–18).
 - The review of local authorities, colleges and training providers aimed: to identify what is working well and what needs further development; and to inform future arrangements.
- Findings relate to: equality, equity and inclusion; programme delivery; and learner progress and outcomes.
 - Uptake of places has increased over time due to better promotion and enhanced partnership working between national bodies; almost all providers have developed open and inclusive recruitment strategies to support equity of access.
 - Some providers operate positive discrimination approaches to support female learners to access STEM programmes; however, promotional activities to reduce bias based on protected characteristics are not having sufficient impact.
 - Promotion in schools is variable and some schools have few or no learners undertaking FAs.
 - Teachers, parents and young people are often not aware of the full range of progression opportunities to further learning and employment; this has a negative impact on recruitment.

Audit Scotland published [Planning for skills, findings from an audit in November 2021 of how effectively the Scottish Government, SDS and the Scottish Funding Council \(SFC\) work together to ensure the skills system responds to individuals' and employers' needs.](#)

- Key messages include:
 - In 2017, following an Enterprise & Skills Review, the Scottish Government committed to improving skills planning to make it more effective; however it has not provided the leadership needed for progress.
 - SDS and SFC started joint work on a more integrated skills approach but a lack of consensus emerged.
 - The Scottish Government's current arrangements are unlikely to achieve skills alignment at the pace required and urgent action is needed.
- Recommendations include:
 - The Scottish Government should: clearly set out its strategic intent, the outcomes it aims to achieve and how it will measure progress; clarify governance and oversight arrangements; and clearly articulate expectations of SDS and SFC.
 - SDS and SFC should: implement solutions to overcome obstacles to joint working; and provide regular reports of progress on skills alignment.

The Scottish Government published [Scotland's National Strategy for Economic Transformation: Delivering economic prosperity, a new ten-year strategy.](#)

- Its six programmes include:
 - Entrepreneurial people and culture, e.g. embedding a culture in the education and skills system where entrepreneurship is encouraged
 - Skilled workforce, e.g. embedding access to entrepreneurial learning in schools and colleges; and developing a National Digital Academy focusing on transition to net zero and lifelong training.

The Scottish Government and COSLA (Convention of Scottish Local Authorities) published [National Workforce Strategy for Health and Social Care in Scotland, a ten-year strategy on plans to 'recruit, nurture and retain staff'.](#)

- The framework has training, wellbeing, job satisfaction and fair work at its core.
 - Actions include increasing funded training places for adult social care and reviewing opportunities to widen access to careers, e.g. adopting Open University and apprenticeship models.

The Scottish Government published [Getting the Right Change: A retail strategy for Scotland, a five-year plan on the themes: people, sector, place and just transitions.](#)

- 'People' includes supporting skills development and career progression to help retailers retain staff and attract new talent.

WALES

The Welsh Government published [***Stronger, Fairer, Greener Wales: A plan for employability and skills.***](#)

- Five key areas of action:
 - **Future generations:** invest in and strengthen the whole-system approach to implementing the Young Persons Guarantee to make it easy for everyone under the age of 25 to access an offer of work, education, training or self-employment; the offer includes access to some of the 125k new apprenticeships open to people of all ages.
 - **Tackling economic inequality:** shift the focus of employability programmes to helping those furthest away from the labour market; improving labour market outcomes for disabled people, Black, Asian and minority ethnic people, women and those with low skills.
 - **Promoting fair work for all:** support and encourage employers to create high-quality employment, improve the offer to workers, champion fair employment practices, ensure the social value of investment and encourage the public sector to embed the priorities in workforce planning.
 - **Healthy work, healthy Wales:** support people with a long-term health condition to work by preventing people falling out of employment through health prevention, early intervention, healthy workplaces and maximising the role of the health service as an anchor employer.
 - **Learning for life:** ensure educational inequalities narrow and standards rise and participation in the skills system is widened for disabled people and ethnic minority groups, while tackling low qualifications and increasing worker mobility.

REPUBLIC OF IRELAND (RoI)

The OECD published [***Resourcing higher education in Ireland: Funding higher education institutions,***](#) the latest in a series of policy briefs on the topic.

- Through its system of differentiated payments in lieu of fees and subject-area weightings, the design of the Irish funding model for HE instruction provides a similar level of recognition of cost differentials between subject areas as found in comparable OECD jurisdictions.
 - However, its core funding model, with its relatively small research component, provides more limited recognition of the underlying costs of university research.
- The RoI succeeds comparatively well in promoting access to HE and study success for students from disadvantaged backgrounds, and has an unusually comprehensive set of policy measures in place to support further widening of access.
- However, two areas of concern emerge:
 - Whether the current institutional funding model provides sufficient resources for part-time students and sufficient flexibility to adapt to students joining programmes through non-standard access routes
 - As the level of funding has declined, so has the value of the access bonuses paid for each student; recent increases in funding have been used primarily to meet core salary costs, meaning resources for targeted support for students remain limited.
- RoI's funding model reserves part of the total budget as 'top-sliced' funds, which are allocated as earmarked grants for specific priority topics, aligned with government priorities; however, such programmes are associated with resource-intensive competitive bidding procedures that can create a disproportionate level of administrative burden in relation to the sums awarded.
 - When additional funding becomes available, an alternative approach would be to mainstream at least some of the top-sliced funds into a strategic investment component of core funding.
 - Finland, e.g., splits its strategic funding into two parts: the majority is allocated for priorities agreed in performance contracts; the rest is retained at national level for targeted funding calls.

EUROPE

The European Commission published [***Vocational education and training: Skills for today and for the future.***](#)

- The report outlines: the EU's vision and strategic objectives for the future of VET, and the importance of VET reforms at national level; leading EU initiatives; and assistance available to member states.

- The 'Council Recommendation on VET for sustainable competitiveness, social fairness and resilience' defines key principles to ensure VET provides quality learning opportunities.
 - Its focus is on increased flexibility, reinforced opportunities for work-based learning and apprenticeships, and improved quality assurance.
 - It establishes the following EU-level objectives to achieve by 2025: at least 82% of VET graduates are employed; 60% of recent VET graduates benefit from any form of work-based learning during their studies; 8% of VET learners undertake learning abroad.
- Principles for national-level reforms:
 - Be agile in adapting to labour market changes
 - Have flexibility and progression opportunities at its core
 - Be a driver for innovation and growth
 - Be an attractive choice, based on modern and digitalised skills and training provision
 - Promote equality of opportunities
 - Be underpinned by a culture of quality assurance.

The European Commission published [Data collection and analysis of Erasmus+ projects: Focus on education for environmental sustainability: Final report](#), on the outcomes of projects implemented between 2014 and 2020.

- Environment and the fight against climate change is one of four priorities of the Erasmus+ programme for 2021–2027, along with inclusion and diversity, digital transformation, and participation in democratic life.
- Recommendations to help shift the focus of activities from awareness raising to taking action include:
 - Develop hands-on approaches and activities that yield tangible results.
 - Use positive communication to inspire and motivate individuals.
 - Consider including peer-to-peer teaching as an efficient way to inspire change in a target group.
- Recommendations to achieve a long-lasting impact include:
 - Use interdisciplinary and multidisciplinary approaches to learning for environmental sustainability.
 - Provide a long-term perspective to be able to trigger a change in individuals' behaviour.

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