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Skills Research Digest Quarter 4 2023

The **Skills Research Digest** monitors recently published skills and labour market research relevant to the work of the Department for the Economy (DfE) 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:

- More coverage of green skills and jobs, including the urgent need to widen the talent pool, amid concerns at the lack of interest, awareness and understanding of opportunities, particularly among young people.
- Continuing pressure on government, from all corners, to reform the apprenticeship levy.
- Student employability and preparation for the changing world of work.
- International students and transnational education.
- Lifelong learning, upskilling, reskilling and retraining.

** 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.*

Contents

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Preparing Young People for Work

16–19 EDUCATION

The OECD published *Policy pointers for equitable, effective and personalised upper secondary transitions*, exploring how countries manage transitions into upper secondary education.

- Well-designed transitions can be a useful, informative step to help young people understand their talents and strengths and how these relate to the range of options available.
  - The risks are high for individual learners, education systems and society of learners ending up in pathways that don't reflect their strengths or interests.
  - Transitions that automatically direct lower performing students to certain programmes – often vocational – without a broader reflection on their talents and personal pathways create high risks for society by contributing to their perception as being of lower prestige.
- While many focus on a binary choice between vocational and general education, transitions should provide learners with advice that influences their initial entry into upper secondary education and the options, choices and specialisations they make during it.
  - Providing advice from multiple sources and encompassing the many high-stakes decisions that a learner faces will help to guide them through.

The OECD published a 'policy perspective' on *Assessing, documenting, and recognising social and emotional skills [SES] in upper secondary education: An overview of practices, approaches, models, and strategies from OECD countries*.

- The report was requested by the Scottish Government's Education Reform Directorate and includes material from a peer learning discussion on the topic, held in Scotland in March 2023.
- It addresses two key questions:
  - How do countries collect information on SES on a systemic level, outside formal upper secondary certification?
  - How do countries assess SES for the purposes of upper secondary certification?
- It provides an inventory and synthesis from 12 countries and detailed case studies from Finland, New Zealand and Canada (British Columbia).

SES are also known as 'non-cognitive capacities', '21st-century skills', 'transversal competencies' and 'complex competencies'.

SCIENCE, TECHNOLOGY, ENGINEERING & MATHS (STEM)

University College London published *Young People's STEM Trajectories, Age 10–22: Main report*, summarising key findings from the ASPIRES3 project in England, focusing on higher education (HE).

- Survey data were collected from 47k+ young people and 760+ qualitative interviews were conducted with a longitudinal sample of 50 young people tracked from age 10 to 22 (and their parents/carers).
- The report sheds light on the factors shaping STEM trajectories, particularly at degree level; it includes links to blogs, videos, resources, academic outputs and four subject-specific reports.
- Among the key findings:
  - Participation in STEM at A Level is high: maths is the most common subject taken (~30% of students); physics is the least common among the sciences (~13%); 5% study computer science or further maths; engineering is relatively uncommon.
  - At undergraduate level, engineering and computing are the most popular STEM degrees in England (excluding medicine), with maths and physics the least popular.
  - At both levels, women are over-represented in biological science and under-represented in physics, engineering and computing; chemistry is relatively gender balanced.
  - At degree level, Black students are under-represented, with the percentage varying considerably between subjects; in 2020/21, physics was lowest (2.6%) and computing was highest (11.0%).
  - In 2019/20, physics had the lowest non-completion rate (4.2%) and computing the highest (9.4%); the most deprived students leave STEM at around double the rate of the most privileged.

- Three main factors shape young people's STEM trajectories:
  - **Alignment of identity with a STEM discipline**: the association of e.g. maths/physics with 'natural talent' makes it hard for many, particularly young women, to see themselves and/or be recognised by others as viable students, even when they are interested and attain highly.
  - **The 'right sort' of STEM capital** (i.e. the extent of subject-relevant capital that they possess and can deploy) supports STEM identity development and progression; less privileged young people are often more reliant on luck to open up key forms of capital.
  - **Field**: specific assumptions, practices and behaviours in STEM education can undermine identification with and progression in STEM and negate STEM capital, even for those who are highly interested and motivated.

The project also published four specific reports on young people's trajectories in chemistry, computing, engineering and maths.

EngineeringUK published *Rapid Evidence Review: STEM clubs and their ability to increase student aspirations for engineering and technology careers*.

- Three research questions were posed:
  - Does STEM engagement through STEM clubs increase students' aspirations for careers in engineering and technology?
  - What methods have been used to measure the effectiveness of these interventions?
  - Which studies show the best modes of delivery for informing the design of future engineering and technology interventions?
- Key recommendations include:
  - Engage experts in the design of club content to ensure that activities are not only educationally enriching, but also closely aligned with current industry practices and trends.
  - Involve role models in club activities, exposing students to educational or professional STEM pathways.
  - Provide comprehensive training for teachers involved – effective facilitators need to have the relevant skills to lead club activities and provide valuable support for students.
  - Consider including competitive elements in clubs, as they have the potential to enhance engagement and foster a sense of enthusiasm and motivation among students.

The review includes studies of three programmes that showed evidence of positive short-term effects related to career aspirations and one that had mixed findings. It also includes an example of a STEM club that increased students' interest in engineering.

EMPLOYABILITY & CAREERS

The Office for National Statistics published *Young people from disadvantaged backgrounds feel less in control of their futures*, analysing data from the first wave of the COVID Social Mobility & Opportunities (COSMO) study*.

- 98.3%, regardless of background, agreed that their future careers were important and 90.5% that if you worked hard at something you would usually succeed.
- However, attitudes about the future varied depending on circumstances.
  - 23.3% of those in the most deprived areas agreed that people like them didn't have much of a chance in life vs 10.0% of those in the least deprived areas.
  - 44.0% of those in lower income households said they didn't think much about the future vs 34.7% in higher income households.
  - At age 16/17, when 94.2% overall were in school/college, 67.5% of those whose parent(s) had a degree-level qualification said they would still be studying in two years' time vs 45.5% of those whose parents had a qualification below degree level.
  - 63.0% of those in the least deprived areas said they would still be studying vs 47.0% in the most deprived areas.
  - 91.6% of parents overall wanted their children to have a better education than they did: 96.4% in the most deprived areas vs 88.0% in the least deprived.

- 83.0% of those with degree level-educated parent(s) said they would apply to university vs 60.6% of those with parents educated to below degree level; in general, parents and children reported similar aspirations.

**A survey of young people in England whose GCSEs were disrupted by the pandemic.*

The COSMO study published *Wave 2 Initial Findings – Briefing No. 2: Post-18 opportunities and aspirations*, following up education and career plans from when they were in year 12 (16–17).

- Those from the most urban areas are among the most likely to report good opportunities available (48%), while those from the most rural areas are more pessimistic (37%).
- 85% have been able to access formal information, advice and guidance since the start of year 12 – 93% of those at private schools, 80% at state schools, 79% at sixth form colleges, 66% at further education (FE) colleges.
- 6% are currently on an apprenticeship and are generally positive about their programme; 54% think apprenticeship pay is good/very good, but this may change if it doesn't keep pace with cost of living.
- Similar to previous cohorts, 68% plan to study at university and, despite pandemic disruptions, 94% are confident about getting a place.
- 87% are currently studying at school/college, down from 92% at the same time last year.
  - Those with parents in routine/manual occupations are twice as likely as those from professional/managerial households to have left education after Year 12.

Young People Not in Employment, Education or Training (NEET): Concepts, consequences and policy approaches by researchers from the Economic & Social Research Institute, Republic of Ireland (RoI), was published in the journal *The Economic and Social Review*.

- The study includes: a discussion of the heterogeneity of individuals within the NEET group; an international literature review on the causes and consequences of NEET status; an overview of policy interventions targeting those NEET, particularly in the RoI; a look at policies that may be targeting different subgroups; and the potential impact on those NEET of emerging labour market trends.
- Young people NEET face increased poverty risk, social exclusion, labour market scarring and adverse health consequences.
- However, the diverse nature of those NEET has led to the concept being criticised as too broad, making it difficult to devise policies to target them as a whole.
- The EU lists seven NEET subgroup categories, including: those with family or caring responsibilities (24%); the short-term unemployed (21%); long-term unemployed (14%); and those with an illness or disability (10%).
  - Composition differs across countries; e.g. 19% of those NEET in the RoI are about to re-enter the labour market or education and are therefore less of a concern.
  - Reducing the number of those NEET in the EU is a major policy objective – the target is 9% by 2030 (in 2021 there were over 13%); countries with NEET rates above the EU average are required to devote at least 12.5% of their funding to reducing the number.
- Findings on interventions include:
  - For those unemployed, job search assistance have consistently been found to be associated with positive employment effects.
  - The evidence on training is mixed; while classroom-based training often has a positive impact on employment, the benefit of on-the-job training is largely confined to the most disadvantaged unemployed people, with a potentially negative impact on highly educated unemployed people.
  - Self-employment and entrepreneurship schemes have positive impacts, with some indicating more success for males and highly educated individuals.
  - Public employment programmes have consistently been found to be ineffective.
- Four emerging trends in the labour market are likely to have an impact on those NEET: technological change; the green economy; co-working spaces; and the platform/sharing economy.
  - Without upskilling opportunities, many young people in carbon-intensive industries face the risk of job loss due to the green transition, which could exacerbate NEET rates.

The EY Foundation published *Breaking barriers: Increasing employment opportunities for young people from low-income backgrounds in Greater Manchester*, in partnership with recent graduates of the EY Foundation's programmes, Young Manchester and local employers.

- Recommendations for employers include:
  - Embed the voice of young people from low-income backgrounds in decision-making processes, including paying them to assess how the organisation works with them from recruitment to progression.
  - Support the provision of high-quality careers education to address labour market shortages and futureproof the workforce.
  - Overhaul job descriptions and the way that roles are advertised.
  - Revise the application process to incorporate inclusive practices and provide more guidance to create a better experience and outcome for both employers and young people.
  - Adjust expectations during the probationary period and increase the level of support during the onboarding process to ensure young people from low-income backgrounds are equipped to thrive.
- Recommendations for policymakers include:
  - Include the voices of young people as part of *[England's]* Local Skills Improvement Plan (LSIP) process, giving them the opportunity to: contribute evidence; assess the accessibility of provision; and co-design employability strategies and careers services.
  - Ensure both large employers and SMEs are actively involved as part of the LSIP governance structure.
  - Support colleges and providers to implement all eight Gatsby Benchmarks of good career guidance, leveraging careers hubs, employers and charities to achieve this.
  - Adopt the Skills Builder Universal Skills Framework, ensuring the skills are developed in an applied environment alongside technical skills, and that this is integrated consistently across courses.
  - Provide additional support to young people from low-income backgrounds to remove barriers, accommodate needs, maintain engagement and encourage the pursuit of Level 4+ qualifications.

The UK Department for Science, Innovation & Technology (DSIT) published findings from phase one of research undertaken by the Behavioural Insights Team (BIT): *Boosting the uptake of digital courses and careers among A/T level students and university students*.

- Barriers to uptake include: lack of knowledge about options; lack of awareness of courses' utility/value; low science capital; lack of encouragement; low teaching quality; given choice too early; perceptions that they're too difficult, 'not for people like me', boring and not creative.
- The implications are that messages should:
  - Highlight the diversity of job roles that involve digital skills, particularly creative roles
  - Present digital job roles as collaborative, social and well-paid
  - Advertise the range of digital A/T level subjects and HE courses on offer, particularly creative ones, and avoid use of 'computer science' as a subject/course title as it is highly unappealing
  - Emphasise that digital subjects and job roles can be accessible to and achievable for everyone
  - Use the terms 'digital', 'artificial intelligence' and 'cyber' with caution
  - Use the voice of people who have relevant experience and/or are well-known and respected.

Also see BIT's report on boosting uptake among early career and experienced professionals (p. 28).

Nominet published *Digital Youth Index 2023*, its annual report based on an Opinium survey of 4k 8–25 year-olds across the UK, plus discussions with young people and youth workers.

- 54% of young people say they teach themselves digital skills (+3ppt on 2022), others learn from: teachers (41%), parents/family (36%), the internet (31%) and friends (21%).
- As they enter FE or employment, their satisfaction with training received for digital skills declines.
- 53% have used an artificial intelligence (AI) chatbot and are curious about how they can use AI tools; however, many worry about AI and its impact on jobs.
- 61% want to pursue a career that uses advanced digital skills (+4ppt).

The data can also be explored and customised.

The British Science Association (BSA) and nuclear services firm Urenco published *Nuclear energy: Young people's views on nuclear energy and careers in the nuclear sector*, based on workshops and a national survey of 1k 14–18 year-olds in May 2023.

- The survey was undertaken through Future Forum, BSA's programme that enables young people to share their ideas and concerns on topics involving science.
- Key findings:
  - Young people are open to nuclear as a future energy source and are keen to find out more; they would like clear, transparent information about the safety, origins, sustainability and waste management associated with nuclear energy.
  - They feel that historic perceptions and concerns about safety, environmental impact and diversity are being reinforced by teaching approaches and representation of nuclear in films and the media.
  - They don't feel that they see or hear much about nuclear in their daily lives and education compared with other forms of energy; they feel less informed about nuclear, and feel that this limits their ability to participate in discussions or consider future career options.
  - Living near a nuclear site or knowing someone who works in nuclear makes them more likely to: feel connected to science; feel knowledgeable about nuclear; be trusting of different groups to give them information about nuclear; and be interested in careers in the industry.
  - They aren't aware of the career opportunities in nuclear or what the routes into those careers are.
  - When compared with previous, similar surveys: there was a higher level of interest in and connection to science; the issues they care about are the same (climate, energy and mental wellbeing); levels of trust in scientists and mistrust of politicians are similar.
  - Climate change, sustainable energy, the cost of living and mental health and wellbeing are the most important issues in terms of improving their lives in the future.
- The report makes recommendations on engaging young people with the industry in the future.

Work Advance published *Improving young people's access and progression in work in film, TV and games*, based on a rapid evidence assessment, interviews and landscape mapping funded by the Creative Industries Policy & Evidence Centre and Mission 44.

- The research explored how 16–24 year-olds from disadvantaged backgrounds can be better supported to access good jobs and career opportunities in these growing parts of the UK economy.
  - It: considered opportunities for good careers in screen and games sectors; examined barriers to access and progression; mapped the landscape of support; and identified opportunities to enhance the approach in future.
- The sector supported 320k jobs in the UK in 2022, and strong expansion and job creation are expected in film and TV production and post-production, TV broadcasting and computer games.
  - However, 87% of screen employers report skills shortages as a problem, particularly among production managers, costume designers and 3D programmers.
- Parts of the sector that are most likely to offer 'good' career paths (i.e. good pay, job security, flexibility and opportunities for professional development and progression): film & TV production and post-production (particularly visual effects [VFX] and animation); TV broadcasting; computer games.
- **Significant and sustained action is needed** for disadvantaged young people to access these careers, including interventions that address individual barriers and drive systemic change.
  - Priorities include: enhanced opportunities for creative learning; better careers information and positive role models; university outreach and bursaries; apprenticeships and short courses; work experience and paid internships; flexible financial support; ongoing mentoring and support; and resources for employers.
- **The mapping exercise** identified 197 active interventions aimed at enhancing diversity and inclusion across the sector, 118 of these with a focus on screen industries, 44 directly targeting disadvantaged young people.
  - There are limitations, however, including: gaps in provision; fragmentation making it difficult for young people to navigate; flux due to short-term funding and delivery objectives; small scale and skewed towards post-16 education and transition to work; lack of holistic support tailored to the distinct circumstances and challenges; London-centric support; and lack of evaluation evidence.
- **Nine recommendations** are made for the industry and policymakers under three headings: enhance the current landscape of support; drive systemic change in the way the sector supports underserved young people; advance new research that extends collective understanding and impact.

The Institutional Landscape

THE FURTHER EDUCATION & SKILLS SECTOR

England's Ofsted published *High-quality curriculum and pedagogy in business education in further education and skills*, the first in a collection on high-quality education in different subjects.

- In weaker apprenticeship providers, the links between off- and on-the-job training are weak; in the weakest provision, the curriculum is viewed as a separate piece of training or study that is parallel to work, but not sufficiently integrated.
- Weaker providers also assume collaborative working procedures to be a matter of common sense, whereas stronger providers teach theories of team development and group working before beginning group tasks.
- Reflecting on and learning from experience is a vital characteristic of professional expertise and is a critical part of effective apprenticeship provision; where it is superficial or unsupported, strong progress is rare.
- Successful providers involve employers in curriculum design, implementation and review; they share the same culture of high expectations about the nature and significance of the apprenticeship programme, leading to sound enrolment decisions, high retention and good progress.

The Gatsby Foundation published *Employer research into industry associates [IAs]* in English FE colleges, based on a literature review and interviews.

- IAs work in industry and also contribute to technical education teaching in FE colleges through e.g. co-delivery of a session, or delivery of masterclasses or short elements of the curriculum.
  - Their role and time commitment vary and may include curriculum and assessment development and/or involvement in day sessions, project briefs, short courses, modules or even a part-time role ('dual professional').
  - They are motivated by: feelings of giving back by sharing knowledge and experience; their organisation's commitment to corporate social responsibility (CSR) and social value; marketing and brand awareness, particularly linked to future recruitment; personal development.
- IAs prepare for their sessions in a range of ways, including talking to other IAs, creating banks of learning materials and attending college with another IA for their first experience.
  - Colleges' support structure vary; some offer e.g. training and certification; information on students' prior knowledge and expectations; teachers working with IAs to plan activities.
- Most IAs find the role enjoyable and rewarding, gaining improved presentation, communication and training skills plus greater overall self-confidence; some use this as evidence in performance reviews.
- Challenges include: anxieties around safeguarding or behaviour management; time commitment; how to pitch the sessions; communication with colleges due to multiple contacts; gaps in college teachers' skills and knowledge.
- Recommendations for colleges include: create a list of colleges wanting IA input; designate a member of staff to work with employers on the scheme; use hooks such as social value, CSR and engagement with the future talent pool.

HIGHER EDUCATION (HE): WIDENING PARTICIPATION

The Office for Institutional Equity at the University of East London published *Prior learning experience, study expectations of A-Level and BTEC students on entry to university and the impact of Covid19: Findings from the undergraduate Pre-Arrival Academic Questionnaire 2019 and 2021*, highlighting the disadvantages many students face on entry.

- BTEC respondents were more likely to live at home while studying, impacting on maintenance loans, travel time to campus and participation in extracurricular activities, and potentially causing attendance issues.
- A level respondents were substantially more likely to get financial support from parents/guardians; second generation A level and BTEC entrants were more likely to get support than first generation.

- Female BTEC first generation students were the most likely not to receive such financial support.

- BTEC respondents had a more diverse learning experience in accessing materials before, during and after Covid; accessing books and materials in a school or college library was low for both groups.
- After Covid, there was greater use of email and virtual learning environments in accessing learning information, submitting work and receiving feedback; reverting to pre-Covid study methods raises issues about the breadth and depth of digital learning experience on entry.
  - It is often assumed that undergraduate entrants know how to engage in digital learning as a result of the pandemic and because they are socially digitally experienced – this is not the case.
- A level respondents mostly received written feedback, which is common at university, whereas feedback for BTEC respondents was face-to-face; both preferred face-to-face.
- Across all respondents and all areas, males had lower levels of concern than females, with BTEC males being the least concerned.
  - First generation were less concerned than second, who were more likely be aware of potential issues.
- Males in general had a stronger perceived skill ability on entry than females, particularly BTEC males.
  - A level and BTEC males were the least likely to say they would use key university support services, possibly due to perceived skill ability.

The report includes suggested next steps for universities, contributed by a range of commentators.

The Quality Assurance Agency for Higher Education (QAA) Scotland published *Mind the Gap? The transition of college students to university: Collaborative cluster final report* from its college-led project examining the differences in teaching and learning in colleges and universities and what this means for students moving between the two sectors.

- 21% of Scottish-domiciled undergraduate university entrants – and 41% of university entrants from the 20% most deprived areas – come via college routes.
- The main differences in learning and teaching experienced by college students transitioning to university, which could be managed more effectively are:
  - Sectoral: differences in staff/student relationship; cultural perceptions of college and university
  - Academic: independent learning; academic writing
  - Identity and social: student confidence
  - Logistical: signposting of resources and support at both college and university; mandatory student support.
- The differences are a major source of the 'deficit model' of the perceived shortcomings of college students that require to be remediated by universities when they join an existing cohort.
- Given the diverse nature of the college student body, a more nuanced and flexible approach that recognises learner differences may support student transitions more effectively; however this would be difficult to reproduce at scale.
- The report asks whether a 'joined-up' tertiary sector would remove the cultural barriers within the sector and lead to greater parity of esteem between college and university education.

QAA Scotland also published A Qualitative Analysis of the Transition from College to University*, providing a more detailed understanding of the issues faced by students during the transition phase.*

England's Office for Students (OfS) published *The impact of [widening participation programme] Uni Connect on intermediate outcomes for learners: A report on the learner survey findings after Wave 4*.

- Uni Connect can have a positive influence on learner outcomes when offered as a multi-intervention approach.
- Targeting doesn't appear to be as effective for some subgroups and current interventions aren't addressing their barriers; i.e. those who have ever been eligible for free school meals (FSM), who have a disability and/or who would be the first in their family go to HE.
- Although only a small proportion of the wave 4 cohort are less likely to apply to HE, the pandemic disproportionately affected some groups who were already disadvantaged and under-represented.

- An increased emphasis on attainment and on improving access to information and guidance and challenging perceptions of HE can help to mitigate some of the pandemic's effects.

- Despite the pandemic, knowledge levels about HE and its benefits have not fallen for this cohort.
  - However, given the impact of the cost of living crisis, it is important that Uni Connect continue to provide information on the costs and benefits of HE and the financial support available.
- Engaging key influencers in outreach is essential, as they have a role in supporting and encouraging learners to believe in themselves and that HE is an option for them, particularly when interventions are run by people with whom learners identify.

The size and characteristics of the samples at each wave, attrition rates and changes in the way Uni Connect was targeted and run have limited the extent to which the evaluation can attribute impacts to the programme. A technical annex was also published.

The Sutton Trust published *25 Years of University Access: How access to higher education has changed over time*, using data from across the UK.

- The entry rate for POLAR quintile 1 (areas with the lowest historic participation in HE) has increased from 11% in 2006 to 24% in 2022, but the gap between POLAR1 and POLAR5 (highest historic participation) has only narrowed by 3ppt (26ppt in 2022).
  - Participation at Russell Group universities by low-quintile groups was 35% below the sector average in 1997, increasing to 45% in the early 2010s, but since improving to 38%; levels remain lower than the late 1990s.
- State school access was 90% of all students at English providers in 2020, up from 82% in 1997.
  - However, there are still 4,700 state school students who have the grades to attend the most selective universities but are still missing out on places, a number proportionally similar to 1997.
- The proportion of young people from lower socioeconomic backgrounds increased from 27% in 1997 to 33% in 2014, but considerable gaps remain; at Russell Group institutions, the proportion fell in the same period.
- Application and entry rates differ considerably between UK nations and English regions: in 2006, 29% of young people in London went on to HE, rising to 51% by 2022; in Northern Ireland it rose from 33% to 40%; in North East England, it rose from 22% to 30%.
- Black students are the most likely to enter HE (53%), having been least likely in 2006; the entry rate for white students is 34%, however they are more likely to go to Russell Group universities.
- Access gaps between men and women have widened from 7ppt in 2006 to 13ppt in 2022, when just over 50% of women applied to HE compared to 38% of men.
- The lack of progress on widening participation, despite substantial effort, could be disheartening; however, many of the measures that have worsened are areas that have had much less focus.

The Higher Education Statistics Agency (HESA) published *Location, location, location: An examination into the value of place-based measures in widening participation*, exploring how the association between neighbourhood deprivation and degree attainment differs by family background.

- Previous research in widening participation has indicated that area-based measures don't necessarily reflect the individual circumstances faced by a (prospective) student.
  - Despite living in a deprived area, family income/education levels may be high and they may not require additional help in the form of outreach or study support.
  - However, living in a deprived neighbourhood could inhibit an individual's ability to reach their potential regardless of their personal situation.
- Two key findings:
  - Irrespective of parental qualifications, those from the most deprived deciles are less likely to be awarded a first or upper second class degree.
  - There is little disparity in the degree outcomes of those from the most deprived deciles by family background.
- This suggests that area-based measures in widening participation activity can be useful.

The Higher Education Policy Institute (HEPI) published *The Robbins Report at 60: Essential facts for policymakers today*; the 1963 Robbins report recommended a major expansion of HE.

- The Robbins report recommendations were immediately accepted by both the then Conservative government and Labour opposition; its importance has been compared to Beveridge in 1942.
- Although the number of students did grow, policy veered off in unforeseen directions:
  - The principle that HE courses should be available for anybody qualified by ability and attainment was initially accepted but was often under threat afterwards.
  - Robbins followed rather than led on future student numbers and didn't sort out student finance; its ideas on increasing university student accommodation weren't followed.
  - The binary divide of universities and polytechnics was contrary to its recommendations; and it didn't lead to a wave of new universities as had been proposed.
- The Robbins report is not necessarily a good model for tackling current perceived challenges.
  - In particular, it largely dodged the question of how to pay for the costs of expansion, expecting public spending on HE to increase, which it initially did before falling back.
  - While the country is 3.5 times richer than in 1963, the number of full-time students is ten times higher and most of the costs of expansion have landed on students via fees and loans.

HE: INTERNATIONAL STUDENTS

The Lifelong Education Institute published *International Students and Immigration: Tackling myths and misconceptions*, a think piece on the impact of current and new legislation.

- International students are valuable economic and research contributors to British HE and society as a whole; debates on their future in the UK are becoming increasingly prominent and interwoven with discussions around immigration.
- Recommendations include:
  - Introduce a clearer and easier visa process for incoming international students in order to bolster the international profile of UK institutions.
  - Acknowledge the need for clearer transparency and communication between incoming students and employers in order to secure sponsorships.
  - Secure the ability for students and academics to bring spouses or partners who work in high-skilled sectors.
  - Dispel the misconception that dependants are unable to support themselves while in the UK and are a burden on the welfare state.
  - Reclassify international students in the UK Tier Visa system to better recognise the level of expertise and skills they bring into the UK.

The House of Commons Library published *International students in UK higher education*, a briefing covering numbers, UK-wide and UK nation policy issues, funding and the costs and benefits.

- In 2021/22 there were 679,970 overseas students studying at UK universities (120,140 from the EU), a new record total comprising 24% of the total student population.
  - The top sending countries have changed over the last few years: China sends the most students (just over 97k entrants in 2020/21, up 87% since 2011/12); India and Nigeria have increased numbers rapidly in recent years.
  - Since 2016/17 there has been a fall in entrants from EU countries, e.g. Romania students are down by 70%, Poland 66%, Greece 66%, Cyprus 58%, Germany 52% and Italy 51%.
- There are growing concerns about the reliance of some UK universities on international tuition fee income, particularly from Chinese students.
- It has been suggested there is a tension between successive recent governments' ambitions to increase international student numbers and reduce net migration.
- In 2023, 58 (over 25%) of the world's countries are headed by someone educated in the UK which is second to the USA (65).

Jisc published *International students' digital experience Phase two: The experiences and expectations of international students studying in UK higher education*, based on feedback from 2k students at HE institutions (HEIs) in England and Northern Ireland, plus 14 HE providers and a number of sector bodies.

- Civil digital infrastructure and experience of digital teaching and learning differ depending on students' home global area, which also influences students' involvement in various online behaviours.
  - Home country civil digital infrastructure shapes digital practice, which in turn forms the basis of assumptions about how digital will be accessed and used in the UK.
- Most international students are positive about the use of technology-enabled learning on their course; they particularly appreciate access to a wide range of digital resources, online libraries and recorded lectures.
- Many have some initial challenges ('digital shocks') as they transition into the habits and expectations in UK HE; they need to understand how, when and why to use digital.
  - They struggle with practical issues, e.g. setting up authentication and accessing systems outside the UK.
- Most use AI to support their learning and want more guidance on effective and appropriate practice.
- It is important for providers to actively consider the needs of both current and future cohorts and to embed these across strategic areas, including: business planning; equality, diversity and inclusion (EDI); curriculum design; and student support.

The report includes recommendations for support pre-arrival, on arrival and during the course.

UCAS and Pearson published *Global Insights: What are the experiences of Chinese students in the UK?*, drawing on applicant data, a survey and previously unpublished behavioural insights.

- The number of undergraduate Chinese students placed through UCAS has more than doubled (+9,400) since 2016 and 25% of international acceptances are currently from China.
- If long-term demand continues to grow, there could be 50k applicants by 2030; however, 2023 saw a 1% year-on-year reduction – the first since 2013 – while acceptances fell by 6%.
  - A return to growth will depend on: the recovery of the Chinese economy; the ongoing impact of the pandemic; intensifying competition from mature and new study destinations; and the influence of the wider public narrative on migration.
- Key findings include:
  - 92% of Chinese students would recommend the UK as a study destination and 92% say their expectations of quality have been met or exceeded.
  - 62% of them selected the UK for its reputation, but 63% applied or planned to apply to another country, including the USA (40%), Canada (29%) and Australia (27%).
  - 57% of them opted for London (33%), North West England and Yorkshire & the Humber.
  - 76% of 2023 acceptances of Chinese students were by high-tariff providers, up 228% on 2014; growth in medium-tariff providers was 92% and 20% in low-tariff.
  - 43% of such acceptances in 2013 were for business courses, but this fell to 26% in 2023, while creative arts & design subjects more than doubled from 4% to 11%.
  - Almost 75% of Chinese students enrolled on a UK undergraduate degree are considering a postgraduate degree, while 43% are looking for a job in the UK and 34% in China.
- The next iteration of the UK's International Education Strategy should be built around:
  - **Trusted growth**: the demonstration of exceptionally high levels of compliance with all visa and immigration requirements
  - **High-quality growth**: the admission of talented international students with the potential to succeed in UK HE and meet skills needs both within the UK economy and overseas
  - **Sustainable growth**: ensuring that providers: are recruiting from sustainable markets and spreading and mitigating the risks of relying on a narrow set of nations and of subject areas; and have the capacity to consistently welcome and support international students and provide them with a world-class experience.

HE: THE STUDENT EXPERIENCE

The Institute of Labor Economics (IZA) published *Learning from Mistakes: The implications of course repetition for student subsequent success*, based on data from the US.

- Most institutions allow low-performing students to make a repeated attempt for the same course, but little is known about the implications for the academic success of these students.
- The effects of course repetition on below-average students' subsequent outcomes are quantified, using variations in university grade-point averages.
- Students develop greater interest, persist longer and perform better in a given subject upon repetition in comparison to their non-repeating peers who receive the same initial-attempt grade.
  - The effects are particularly pronounced for students who are exposed to the college environment and/or a subject matter for the first time and are entirely explained by the gains in learning.
  - A moderate number of repetitions during a student's undergraduate career is not found to cause any disruptions to the student's routine progress in pursuing a degree.
  - In the longer term, the improved persistence and performance further contributes to the successful completion of a degree programme, even though the gains from repetition diminish with each repeated course and can cause delays in graduation.
  - Course repetition can have a favourable impact on a student's future academic interest and learning outcomes in the subject, and significantly boosts their likelihood of enrolling in and successfully completing an additional course.

England's OfS published *Working better together to support student mental health: Insights on joined-up working between higher education and healthcare professionals to support student mental health, based on a ten-month action learning set project*.

- Five key challenges were identified and proposed approaches developed:
  - **Addressing the diverse needs of students**: improved and timely guidance to prepare students for life in HE, including on support services available and recommended pathways.
  - **Clarifying roles and responsibilities**: a government-led declaration of responsibilities for student mental health would help providers, healthcare colleagues and service users distinguish between and understand the provision available.
  - **Improving NHS–HE communications and information sharing**: participants need guidance on data-sharing protocols, and a process for students in mental health crisis or being discharged from hospital to opt in to information being shared with their institution.
  - **Resources and support**: increased funding for more qualified staff to meet increasing demand, plus steps to remove duplication across NHS and HE and maximise the resources available.
  - **Lack of strategic collaboration**: a joint HE/NHS strategy for student mental health is critical, as it will help to tackle the other challenges and ensure a coordinated approach.

England's OfS published *Meeting the mental health needs of students*, an *Insight* brief with new analysis of data for those who have reported a mental health condition to their provider.

- In 2021/22, 24.5% of full-time students (up from 0.7% in 2010/11) and 5.3% of part-time students reported a mental health condition when entering HE in England.
  - Females are more likely to report a condition than males (6.3% vs 2.3%); the reporting rate has increased dramatically for females, while it has increased far less for males and remained relatively stable for the last four years.
  - Others more likely to report a mental health condition include: those from areas with the lowest rate of HE participation; those eligible for FSM; those of mixed ethnicity.
  - Mature full-time entrants are more likely to report a condition than their younger counterparts.
- Overall, there are differences in continuation, completion and progression rates for full-time undergraduates who report a condition and those who don't.
  - The completion rate for Black students entering HE in 2017/18 was 10.3ppt lower if they reported a mental health condition – the largest such disparity for any ethnic group.

OfS also published case studies from the University of Bristol and Academy of Contemporary Music, highlighting the importance of understanding and exploring the needs, barriers and challenges faced by different groups of students and how to provide appropriate support.

Advance HE published its two annual survey reports of postgraduate students across the UK.

***Postgraduate Research Experience Survey (PRES) 2023*, based on 37,661 responses from 105 institutions (including four in Australia for the first time)**

- 79% were satisfied with their experience, down from 80%, continuing an overall downward trend.
- There has been a clear improvement in the key area of research culture, particularly around opportunities to discuss research with other researchers.
- Opportunities to develop wider skills and career preparation have also improved; attending or presenting at conferences, publishing, teaching or demonstrating have generally recovered following the pandemic.
- Face-to-face interactions with staff are increasing, but a hybrid approach is becoming established as the most common.
- Satisfaction levels are strongly linked to methods of interacting with staff, with a major decline among those who interact mainly online and an 11-point difference from those who interact mainly in person.
- There has been an increase in the proportion of postgraduates who have considered leaving their course, with financial concerns increasingly cited as a cause.

***Postgraduate Taught Experience Survey (PTES) 2023*, based on 84k responses from 101 UK institutions.**

- Overall, 83% were satisfied with their experience, up 1ppt on 2022 and the highest since 2016 and 2014 when it also reached 83%; the rise was mainly driven by students from India, Nigeria and Pakistan.
- Satisfaction levels among non-EU overseas students have continued to increase and now exceed those of UK students across all measures, including teaching, engagement with the course, assessment, skills development and course organisation.
- 18% had considered leaving their course, with the percentage citing financial difficulties increasing from 8% in 2022 to 11% in 2023.

Both reports provide many more detailed findings.

The House of Commons Library published *Students and the rising cost of living*, a research briefing covering both FE and HE students in the UK, although focusing mainly on England.

HEPI published *Student accommodation costs across 10 cities in the UK: Cost pressures and their consequences in purpose-built student accommodation*, based on a survey by Unipol, a student housing not-for-profit.

- Data are provided for 34 HE providers in Bournemouth, Bristol, Cardiff, Exeter, Glasgow, Leeds, Liverpool, Nottingham, Portsmouth and Sheffield.
- Findings include:
  - Overall average annual rents are up from £6,520 in 2021/22 to £7,475 in 2023/24, an average rise of 14.6%.
  - In both 2022/23 and 2023/24, rents grew on average by 7% (by 4.4% in 2021/22); the highest increases were in Glasgow (20.4%) and Exeter (16.1%); Bristol had the highest average rent (£9,200) followed by Exeter (£8,559).
  - 45% of the rooms covered in the survey were university provided; their rents rose on average by 10% across the two years; rents for the 55% private sector rooms rose by 19%.
  - Across England, average annual rents are £7,566 – 76% of the maximum maintenance loan.
  - The biggest drivers of rising rents are energy, construction, staff and borrowing costs; supply is hindered by barriers to gaining planning permission and high development costs.
- Recommendations include: basing the student maintenance system on actual costs; university partnerships with the private sector; providing accommodation bursaries; universities providing expert housing advice for students; better dialogue between universities and planners.

A Wonkhe blog post asks What is the rest of Europe doing about student housing?*. The shortages are widespread but government plans and responses differ; it includes example approaches from the RoI, Denmark and Central and Eastern Europe.*

GRADUATES & GRADUATE EMPLOYMENT

Prospects Luminate and the Association of Graduate Careers Advisory Services published the annual *What Do Graduates Do? Insights and analysis from the UK's largest higher education survey*, covering the 2020/21 graduate cohort.

- The report draws on HESA's Graduate Outcomes Survey of 206,465 UK-domiciled, first-degree graduates (119,925 female, 86,540 male) 15 months after leaving their studies.
  - It includes detailed outcomes for those who studied: business & administrative studies; creative arts; technology, engineering & maths; humanities; science; and social sciences.
- This cohort spent a substantial amount of their studies in the pandemic and were surveyed during a period of widespread occupational shortages; overall findings include:
  - 59.6% were working full time in the UK (+3.1ppt on the 2019/20 cohort), 10.4% part time; 10.5% were working and studying, with 25% taking professional qualifications.
  - Of those working: 14.9% were health professionals (-1.9ppt); 12.4% business, HR & finance professionals (+1.3ppt).
  - Non-professional jobs fell 2.4ppt to 24.5%, with the highest proportions as clerical, numerical and secretarial clerks (8.2%) and retail, catering, waiting and bar staff (8.0%).
  - The top five professional jobs were in: nursing; programming & software development; advertising & marketing; primary teaching; secondary teaching.
  - 23.5% were working in London (+0.9ppt), 2.9% were working in Northern Ireland (-0.3ppt).
  - 7.8% were in further study: 8.8% doctorates; 47.2% master's; 13.6% postgraduate diploma/certificate (including PGCE/PGDE).
  - 5.0% were unemployed (-0.9ppt) and 6.7% were classified as 'other'.
- Expert insight pieces cover: AI and its impact on careers services and the early careers recruitment process; the impact of hybrid working; measuring student engagement with careers services; and whether graduate recruitment has returned to 'normal'.

The Institute for Fiscal Studies (IFS) published *The changing geography of jobs*, examining the geographical implications of long-term trends in the labour market, including for graduates.

- Between 1993 and 2022, employment in traditionally middle-paying occupations in GB fell 12%; employment in low- and high-paying occupations grew 14% and 95% respectively.
  - This 'hollowing out' has had profound implications for the geography of jobs and the opportunities available to workers with different educational backgrounds in different parts of the country.
- The occupations that have grown the most since 1993 are either in low-paid services (e.g. social care and hospitality) or in high-paid services (e.g. IT, business and finance).
  - Low-paid service sector jobs have emerged everywhere, but the new 'high-end' jobs are mainly in London and other cities; the number in high-paying occupations in inner London has tripled.
  - There is a strong correlation between the size of the local labour market and the concentration of new high-skilled services, which are also concentrated in cities such as Birmingham, Manchester and Leeds, though less so than in southern cities of comparable size.
- HE participation has expanded evenly, but graduate jobs have become more concentrated in London.
  - In ex-industrial regions, fewer than 50% of working graduates are in a degree-level job vs 65% in inner London; it is +4ppt on 1993 in London, while falling nearly everywhere else.
- Overall, the group most negatively affected by patterns of occupational change in recent decades may be graduates from poorer family backgrounds who are unable to fully capitalise on their education due to the costs of moving and the lack of graduate jobs where they live.

Universities UK (UUK) published *Universities improving graduate employment: Case studies*, highlighting the approaches taken by eight universities in England and Scotland.

- The universities featured are: Chichester; Heriot-Watt; Huddersfield; Leicester; Liverpool John Moores; Regent's University London; Winchester; and York St John.

SQW published *Evaluation of the Student Engagement in Knowledge Exchange [KE] Competition* in England, which aimed to provide evidence of how KE activities involve or benefit students or graduates directly and to inform ongoing KE policy and funding.

- The OfS/Research England competition funded 20 projects led by HE providers and involved 20k students and 3,600 partners, including businesses, schools, colleges and NHS trusts.
- **Benefits of KE activities for students** included:
  - The development of knowledge and skills, including employability, entrepreneurial, professional, interpersonal, practical, technical and research; some projects saw a greater benefit for those from under-represented groups.
  - Enhanced knowledge and awareness of available career pathways, particularly when activity involved direct engagement with partner organisations.
  - Improved confidence in running KE activities, and enhanced self-awareness of the skills, abilities and value they are able to bring to partnerships and employment opportunities.
  - Enhanced access to KE for under-represented groups.
  - Subsequent employment, business start-up, continuing study and access to other opportunities such as internships.
- **Benefits for partner organisations** included:
  - Changes that resulted in follow-on business outcomes; improvements in staff and organisational capacity through increased access to student time and skills; and an enhanced appreciation of the value students can bring.
  - New or enhanced partnerships with other organisations in the project and an increased understanding of how the HE provider and its research can support them.
- **Benefits for HE providers** included: testing and/or scaling KE models; helping demonstrate the value of KE across the sector; supporting the establishment and development of partnerships; and staff knowledge and skills.
- Overall:
  - The competition established a well-developed 'community of interest', with strong buy-in to the evaluation, potentially providing a valuable resource to support ongoing student KE development.
  - Student KE has a complementary role within the broader KE landscape; this relationship and implications for KE policy and funding should be considered further.

Think tank Demos published *The AI Generation: How universities can prepare students for the changing world*, with support from the University of London.

- There is a reasonably strong consensus about the critical employability skills needed today.
  - More important than specific academic and technical skills are the broader skills of: listening to and persuading clients and colleagues; analysing and communicating information to solve problems; and having the ability to manage workload, career and professional development.
  - These are the 'GRASP' (general, relational, analytical, social and personal) skills that will increase in importance in coming years and remain important in working with AI.
- However, there isn't much evidence on how well universities help students acquire these skills, or even how they should be defined or success measured.
  - What happens outside the classroom – work experience, placements, club/society membership, studying overseas – has the most impact, but such experiences aren't taken up equally by all.
- Universities should:
  - Review employability strategies and support students to acquire GRASP skills through course content, teaching methods and engagement with employers and entrepreneurs
  - Integrate AI into learning and teaching, including through richer hybrid learning experiences
  - Extend co-curricular and extracurricular activities and support students to take advantage of these opportunities
  - Develop their relationships with employers and civil society organisations to ensure that both students and society can benefit from the skills acquired by students.

Kingston University published *Future Skills: The Kingston approach*.

- Since September 2023, following a pilot involving 600 students, every first-year undergraduate at Kingston has studied and been assessed on a Future Skills module as a core part of their degree.
  - This includes a self-assessment of their current digital and AI skills, and guidance and resources to progress them to the next level.
  - It will continue each academic year until all undergraduates have attained the full set of nine graduate attributes: creative problem solving; digital competency; being enterprising; having a questioning mindset; adaptability; empathy; collaboration; resilience; and self-awareness.
- The programme draws on findings from annual surveys of 2k senior business leaders; the survey has now been extended to include 1k full-time students and 2k members of the public; findings include:
  - Only 7% of businesses think university graduates joining now are adequately prepared for an 'AI-first world' *[one in which AI is embedded/integrated].*
  - 50% of current students believe their present or future job will be under threat from AI.
  - Only 12% of the public think they have good understanding of how AI is going to change the future of work.
- A call to action for policymakers includes:
  - Provide sustainable funding to support the rollout of outcome-driven initiatives like Future Skills.
  - Remove bureaucracy constraining the sector to give universities: freedom to innovate; access to a larger pool of funding; increased opportunities to share knowledge through business partnership.
  - A more flexible approach to skills funding, e.g. align the apprenticeship levy to skills and growth.
  - Commit to supporting future skills by broadening the school curriculum.

HE: TEACHING, RESEARCH & INSTITUTIONS

Jisc and Emerge Education published *How can edtech address some of the greatest challenges facing HE leaders?*, a 'primer' based on interviews with leaders and edtech founders, case studies and desk research.

- It offers an overview of current issues and innovation in three topical areas: digital solutions for a smarter campus; AI and assessment; and student engagement.
- Challenges include: legacy technology; a lack of data integration, particularly in decentralised university structures; a mismatch of pace and priorities when working with start-ups; delegation of 'digital' by leaders who lack confidence in their own skills; lack of digital capabilities among staff.
- Six keys to success:
  - Robust and secure technology infrastructure
  - Effective processes for managing investment and change
  - Strong stakeholder engagement and customer focus
  - Digitally aware executive leadership
  - Development of all stakeholders' digital skills and capabilities
  - Evidence-based centres of expertise in digital research and education.

UUK published *Cyber Security and Universities: Managing the risk (2023 update)* with Jisc and the National Cyber Security Centre (NCSC).

- 50% of HEIs participating in the government's Cyber Security Breaches Survey 2023 reported experiencing breaches or attacks at least weekly, with 75% saying they were negatively impacted regardless of whether or not there was a material outcome.
  - The sector has to routinely defend against a high volume of relatively unsophisticated but incessant speculative and opportunistic attacks alongside more serious attacks carried out by organised criminals, including state-sponsored groups.
- There is a growing trend of destructive ransomware attacks (15 in 2020, 18 in 2021, 19 in 2022), which are impacting the ability of HEIs to undertake core activities such as teaching or research.
  - The increase in serious incidents in 2020 and 2021 resulted in the NCSC issuing an unprecedented three alerts to the UK research and education sector.

HEPI published *Change by Design: How universities should design change initiatives for success*.

- Change in universities is generally broadly driven by one or more of: a new strategy or market positioning; government policy or regulation; a desire to create more efficient use of resource; external events (e.g. Covid-19); managerial innovation; technological opportunity.
- UK universities have a strong history of change and of doing it well; the sector's ability to evolve in response to external change, while protecting the essence of a university, has been a critical part of its sustained success over the years.
  - However, the view that 'this institution is bad at change' is widely held among staff, while students may regard their university as outdated and slow at adapting to the modern world.
- Many university leaders would argue that change is challenging, time consuming and costly.
  - HE-specific challenges include: governance built for consensus not speed; overcautious attitudes to risk; decentralised control; and the 'tyranny of the status quo'.
  - In the future, their ability to design how they respond to changes in the world around them will increasingly become a requirement if they are to remain relevant.
- Many of the factors that prevent success can be overcome by better design of the change itself, starting with a 'scheme for change'.
  - The scheme should broadly answer five questions: Why is it necessary? What will replace the status quo? How will the move from the status quo to the future state be achieved? What delivery model should be employed? What will success look like?
  - The delivery model needs to be based on seven key design decisions relating to: speed; top down or bottom up; capability; portfolio, programme or project; who needs to be involved; the project management approach; project governance.

The Economy 2030 Inquiry published *Steering Economic Change: How higher education can boost people-powered growth*, one of a series of externally written policy essays aimed to provoke public debate. *[Also see reports on pp. 21 and 31.]*

- The UK needs to break out of a 'too many university degrees' mentality and focus on how best to reform HE and ensure it is properly funded, notably by the income-related contributions from graduates that have been part of the system for 20 years.
  - It also means bold new initiatives so that universities stay in touch with their graduates and innovative new universities are created.
- Eight reforms are proposed, including:
  - Funding pots that support HEIs and FE colleges to work together to provide access to Level 4/5 courses and a demand strategy that significantly raises employer and learner awareness of the range and value of such qualifications.
  - An open, evidence-based debate about the calibration of the graduate repayment scheme.
  - Degree apprenticeships funded out of the standard fees and loans model, releasing levy resources to focus on younger apprentices and courses at Level 2–4.
  - A competition inviting applications to create a new university with a particular focus on places that don't currently have one.

The Economy 2030 Inquiry is a collaboration between the Resolution Foundation and the Centre for Economic Performance, and is funded by the Nuffield Foundation.

UUK International published *The scale of UK HE TNE [transnational education] 2021–22*, its seventh report analysing trends by provider, location, type and level.

- In 2020, the income generated from UK TNE activity was estimated to be £2.3b, up 112.9% in current prices since 2010.
- Its importance is recognised by the UK Government, with the UK International Education Strategy aiming to increase education exports to £35b per year by 2030.
  - The strategy prioritises establishing long-term sustainable partnerships in five countries: India, Vietnam, Nigeria, Indonesia and Saudi Arabia.
  - However, despite its crucial role in the HE sector and UK economy, the challenge to develop strategic, sustainable and secure TNE persists.

- In 2021/22, 162 providers reported 558,215 students (up 9.3% from 2020/21) learning through TNE in 2,030 countries and territories worldwide.
  - England had 85.9% of TNE students (at 134 providers), Scotland 8.1% (16), Wales 5.7% (9) and Northern Ireland 0.3% (3).
  - 40.8% were studying via 'collaborative provision'; 27.5% through 'distance, flexible or distributed learning'; 27.4% while registered at an 'overseas partner organisation'; 6.9% overseas.
  - 66.8% were studying for undergraduate degrees, 32.0% on postgraduate taught programmes and 1.3% on postgraduate research programmes.
  - 51.1% of UK TNE students were based in Asia, 18.5% in Europe, 13.7% in the Middle East and 10.5% in Africa.
  - Europe hosted 149 providers, followed by Asia (147) and Africa (130).

The report includes insights by international region, and separate reports cover Scottish and Welsh TNE.

The International Higher Education Commission (IHEC) published *The Role of Transnational Education Partnerships in Building Sustainable and Resilient Higher Education*.

- Findings include:
  - TNE is an area in which the UK has a lead, with 0.5m students enrolled on degree programmes overseas; however, new approaches and providers are essential if it is to fulfil its potential.
  - While pockets of expertise exist, there is a lack of specific experience, particularly for a number of key countries; the motivations of students and partner institutions are not well understood.
  - Institutional strategies differ but a clear UK position on TNE is imperative, including appropriate investment to improve understanding of: supply, demand and finances; risk and risk mitigation; awareness of needs; and staff training.
  - Benefits to UK HEIs, overseas partners and students include: academic; research enhancement; financial returns; increased international profile; and improved access and quality experiences for students.
  - TNE is offered primarily through international branch campuses, distance learning and partnerships, with partnerships offering the greatest potential for a mix of benefits for all involved.
  - TNE has a growing role in generating impact and change towards meeting UN Sustainable Development Goals and this has facilitated cross-institutional dialogue towards shared objectives.
- Recommendations include:
  - The establishment of a TNE academy – modelled on Advance HE – that will support the development of novel academic, operational and financial models for TNE.
  - Clear targets for growth as part of the next UK International Education Strategy, including different modes of provision informed by detailed, market-oriented, in-country research.
  - An appropriately funded, dedicated, all-UK marketing initiative focused on key TNE markets and segments, owned by a single entity that can act on behalf of the sector.

The IHEC published *Is the UK developing global mindsets? The challenges and opportunities for internationalisation at home [IaH] in driving global engagement*.

- IaH is 'the purposeful integration of international and intercultural dimensions into the formal and informal curriculum of all students within the domestic learning environment'.
  - It enables students and stakeholders to build global competencies, enhance learning outcomes and employability, contribute to national talent pools and facilitate knowledge diplomacy.
- When travel was restricted by the pandemic, there was a surge in interest in non-physical mobility and HE providers strengthened their courses with international content using virtual learning, internships and employer engagement.
  - Anecdotal evidence suggests successful outcomes for programmes with 'collaborative online international learning' (COIL) components, connecting students and staff across cultures to learn, discuss and collaborate.
- In contrast, a 20-year decline in UK students studying modern foreign languages shows no sign of abating, although institution-wide language programmes have become a significant feature.
  - Brexit has resulted in significant reductions in the international diversity of incoming and visiting exchange students at undergraduate level, and the UK's exit from Erasmus+ has significantly impacted the overall classroom experience.

- The shift from long- to short-term mobility has impacted substantially the benefits UK students accrue and the intellectual and social capital they can share with others on their return.

- Understanding and reporting of the benefits of IaH need to improve to help the sector find new ways of harnessing a wider range of tools to engage more students.
  - Institutions need to adopt a more structured approach to IaH, supported by: a critical mass of practitioners; expertise in IaH and COIL developments; a wide network of academic and corporate partners; better data management systems; clear understanding of how IaH creates value added; and a plan to undertake IaH cohesively and coherently.

The QAA published *Realigning the UK higher education system: Learning from the devolved nations*, as part of its policy series on The future of quality in England *[also see p. 42]***.**

- Since the implementation of the Higher Education & Research Act and the adoption of a risk-based regulatory system in England, England's approach to external quality assurance has diverged from that of the other three UK nations.
  - England has not only deviated from internationally recognised good practice, e.g. the European Standards and Guidelines, but also from sector-owned, common, UK-wide quality benchmarks.

- International stakeholders tend to view UK HE as a single entity and changes in one nation can negatively impact its international standing and create barriers for international mobility.
  - The absence of UK sector-wide standards in the English framework weakens comparability across the UK and may create additional burdens for providers operating across multiple parts of the UK.

- Approximately 57k students from other parts of the UK were enrolled in an English university in 2021–22 with around 80k English students studying across the other nations of the UK.

- The benefits of collaboration, KE and student mobility demonstrate the importance of UK cohesion within and beyond nations' borders, and how alignment is instrumental in ensuring that the UK remains an internationally attractive and respected destination for students.

QAA also published Instilling international trust in English higher education – a quality perspective*, suggesting that the international reputation of England's HE sector is at risk of being undermined by divergence from international commitments in quality, 'unhelpful political rhetoric and a lack of collaborative global outlook'.*

The National Centre for Universities & Business published *State of the Relationship 2023: Analysing trends in UK university–business collaboration*, its tenth annual assessment of partnerships, based on data from 2021/22.

- **UK-wide**:
  - There were 80,881 interactions in 2021/22, up 5.1% from 2020/21, the first increase since the pandemic; those involving SMEs grew by 4.0% and those with large businesses by 7.5%.
  - Total income to universities from KE activity was £1.2b (up 16.1%).
  - There were 43,230 degree apprenticeship starts, up 10.3%, emphasising their growing popularity.
  - Universities' contribution to research commercialisation continued to grow, with 26k licences granted (up by 40%).

- **For universities in Northern Ireland**:
  - Compared to the five-year average, interactions with large businesses were up, but those with SMEs were down 10.1%.
  - Income from licensing grew significantly (561.8%) and academic spinouts were up 6.3%, but the number of licences and patents declined.
  - The percentage of university income achieved in 2022 through collaboration was 31.7%, down 1.4ppt from 2021.

- Areas highlighted **to watch for the future** include whether university–business collaboration on talent development is reflected in future apprenticeship and internship rates.

The OECD published *Strengthening higher education–school partnerships for green and digital innovation*, an Education Spotlight with key lessons and examples of policy and practice to inform collaboration between HE and secondary education.

- HEIs can support secondary schools in: curriculum development (educational resources, research, science communication and dual enrolment programmes); initial teacher education design and evaluation; upskilling and reskilling for teachers and leaders; and self-evaluation and data analysis.

- To grow and maintain effective partnerships with schools, HEIs can:
  - Develop a strategy and leadership for collaboration with schools, which can incentivise and guide relationship-building and resource allocation
  - Support different levels of partnership, adapted to the needs of individual schools and HEIs, ranging from spontaneous/on-off interactions relying on pre-existing relationships, to more strategic partnerships with dedicated staff from schools and HEIs collaborating
  - Provide time, resources and training to those who wish to engage in partnerships, by taking it into account in career advancement or by setting up an institutional support centre.
- Governments can support collaboration through: regulation and guidance; funding to pilot, scale and evaluate cooperation; and online platforms and peer learning.
- An OECD-facilitated international peer learning workshop in the RoI, where activity is led by the National Forum for the Enhancement of Teaching & Learning in HE, highlighted the need for:
  - An overarching framework that gives HEIs and schools a mandate to collaborate, with space for discretion and experimentation
  - Measures to help HEIs and schools initiate and maintain partnerships, and respond effectively and dynamically to societal pressures to adapt education to new competency demands (e.g. digitalisation, AI, climate change)
  - A sustainable 'networking space' for policymakers, teacher educators, academics and school practitioners to exchange and align education policy, practice and research
  - Time and resources for HE and school educators to engage in meaningful cooperation and experimentation, plus evaluation of their collaboration to draw lessons and improve arrangements
  - A professional recognition framework for academic staff, which incentivises transversal skills development and values societal engagement as much as research and teaching
  - International partnerships, supported by organisations such as the OECD and European Commission, to support peer learning among public bodies with responsibility for teaching and learning enhancement across all levels of education and training.

The Chartered Association of Business Schools published *Annual Membership Survey 2023: Results*, based on responses from over 50 UK deans.

- 39% report lower enrolments of UK students than in 2022, 29% higher enrolments.
  - 69% said EU enrolments were largely unchanged, 23% lower; almost 50% had higher enrolments of non-EU international students, 33% lower.
- 30% expect a decrease in income (up from 2%); 36% expect moderate increases (down from 49%), only 9% expect significant increases (down from 28%).
  - 64% report higher-than-expected expenditure in 2022/23; 68% expect it to rise again in 2023/24.
- University finances rely heavily on their business school's recruitment of domestic undergraduates – 94% stated some degree of reliance.
- The vast majority expect to see negative impacts on their business school's ability to recruit international students because of the new policy on visas for students' dependents.
- 49% saw an increase over the last five years in the proportion of students from neighbourhoods with low HE participation.

WORKFORCE ISSUES

Jisc published findings from its *Teaching staff digital experience insights survey 2022/23*; *UK further education (FE) survey findings* is based on responses from 1,630 staff in 22 FE and sixth form colleges*; *UK higher education (HE) survey findings* is based on 2,437 responses from 30 universities.**

- 86% of FE (+11pt on 2021/22) and 67% of HE classes (+33ppt) were mainly delivered on campus.
- 71% of FE (+11ppt) and 57% of HE staff (+18ppt) wanted mainly on-site teaching.
- 56% of FE (unchanged) and 51% of HE staff (+3ppt) said the support they received to teach effectively online was 'above average'.
- 35% of FE (+4ppt) and only 16% of HE staff (+2ppt) were assessed on their digital skills and training needs.

- 48% of FE (-4ppt) and 50% of HE staff (unchanged) received training to teach online.
- 28% of FE (+9ppt) and only 8% of HE staff (+2ppt) received formal recognition for digital skills.
- 46% of FE (+8ppt) and 49% of HE staff (+7ppt) reported wifi connection problems.
- 66% of FE (-3ppt) and 64% of HE staff (unchanged) rated the quality of the online learning environment as above average.
- FE staff want: reliable equipment and software; improved online learning platform performance; time to develop their skills and learn new technologies.
- HE staff want: more support for online lectures; in-house training on digital skills; recognition for digital teaching skills.

**20 in England; one in Northern Ireland; one in Scotland.*

***20 in England; two in Northern Ireland; three in Scotland; five in Wales.*

The Workplace

RECRUITMENT

The Institute of Student Employers (ISE) published *Student Recruitment Survey 2023: Trends, benchmarks and insights* based on 169 responses from large UK employers. *[The report is available to members or to purchase.]*

- Graduate recruitment grew by 6.0% over the year, while school/college leaver hiring grew by 20%; employers expect to hire 5% more graduates in 2023–24.
- 54% of employers had difficulty filling at least one graduate role (+11%); 61% at least one school/college leaver role (+31%); this despite receiving 86 applications per vacancy (+23%).
  - There were particular difficulties in: IT and digital; engineering; accountancy, finance and banking.
- Student hiring in 2022–23 was up 16% from 2021–22.
- Employers in all sectors reported a growing need for skills such as digital and accounting.
- 18% set no minimum entry requirements for graduates (down from 26%); 44% set a 2:1 degree minimum (down from 76% in 2013–14 when the survey was first carried out).
  - For the first time, fewer than 10% set a minimum UCAS A level grade requirement (down from 40% in 2013–14).
  - Over 80% have no intention of moving from a degree as a fundamental criterion for graduate hires, although 34% believe they will drop all qualification requirements in the next five years.
- There is a continued push for greater diversity in intakes and increasing reliance on technology for more authentic forms of testing: 54% use psychometric and aptitude assessments in the first stage.
  - Almost 33% are using AI in recruitment to manage large volumes (up 24ppt).
  - However, 51% say that in-person activities engage students the most and 47% that they generate the most high-quality applications.

Also see The state of student recruitment in 2023*, a Wonkhe blog on the report by ISE's chief executive.*

APPRENTICESHIPS & TRAINEESHIPS

The Chartered Institute of Personnel & Development (CIPD) published *Devolution and evolution in UK skills policy: Finding common ground across the four nations*, focusing on apprenticeships.

- The UK's four skills systems have increasingly diverged in recent years, especially since the introduction of the apprenticeship levy in 2017 and subsequent reforms.
  - This has resulted in: an increasingly complex landscape for employers and people professionals operating across the UK; and an opportunity to compare the impact of very different approaches.
- Apprenticeships are a useful case study as they have evolved and diverged the most; and vocational education (especially apprenticeships) needs to be boosted to tackle skills gaps and mismatches.

- Key findings include:
  - Skills and labour shortages continue to impact all four nations and virtually all sectors; skills gaps, mismatches and underutilisation point to persistent labour market/skills system inefficiencies.
  - Employer underinvestment in the quantity and quality of staff training is a serious UK-wide problem.
  - England's apprenticeship system diverged considerably and has at least three times as many standards as the other three nations.
  - England and Wales have nearly double the apprenticeship participation rate per 1k employees compared with Northern Ireland and Scotland.
  - Apprenticeship starts in England fell 31% (almost 160k) from 2015/16 to 2021/22.
  - With the exception of Northern Ireland, apprenticeship provision is increasingly concentrated among older apprentices.
  - In Scotland, the number of apprenticeship starts aged 25+ has doubled since 2015/16 (+5,400), but those aged 16–24 has fallen by over 5,800.
  - 99% of UK businesses overall and 61% in the private sector are SMEs; but the number of SME apprenticeship starts in England is 45% below pre-apprenticeship levy figures.
- Recommendations include:
  - Reform the apprenticeship levy into a flexible skills levy; ringfence devolved funds for levy-payers to use on non-apprenticeship programmes and for shorter individual upskilling opportunities.
  - Support high-quality advisory services for SMEs, including a focus on management capability.
  - Incentivise small businesses to hire apprentices.
  - Provide UK-wide advice on navigating skills development to employers operating cross-nationally.
  - Position apprenticeships as vocational pathways – not upskilling opportunities – that provide in-depth quality training and experience in a workplace setting.
  - Widen access to apprenticeships by increasing the focus on traineeships and other pathways.
  - Specify minimum two-year programmes (with some exceptions) across the UK, with minimum off-the-job training days set as a percentage of the duration.
  - Introduce fast-track routes to apprenticeship qualifications for adults with existing skills; introduce new master craftsperson qualifications to provide progression for adults.

Also see a report by the IFS on Investment in training and skills – *p. 21.*

The Economy 2030 Inquiry published *Steering Economic Change: Applying the Robbins Principle to further education and apprenticeship*, one of a series of externally written policy essays aimed to provoke public debate. *[Also see reports on pp. 16 and 31.]*

- The Robbins Principle states that qualified people wishing to progress further in education should expect to find a place.
  - This principle has never been applied to those going down the 'vocational' route, but if we want better productivity and higher wages, it's time it was.
- To apply the Robbins Principle to apprenticeships would place an obligation on government to ensure enough places are available for all qualified young people who want one, meaning:
  - A guaranteed share of the apprenticeship levy being reserved for under-25s taking Level 2/3 apprenticeships
  - Funding for apprenticeships in non-levy firms becoming demand-led
  - Placing a duty to secure enough local places in an organisation such as a combined mayoral authority, the local authority or the local skills improvement partnership
  - A national system of pre-apprenticeship courses in FE for those not qualified to take a Level 2 course; restoring real expenditure on FE to 2010 levels.
- This could cost an extra £3b, but that would still be less post-18 subsidy than enjoyed by those going on to HE.

Also of interest: HEPI's The Robbins Report at 60 – *see p. 9.*

The Gatsby Foundation published *Great Expectations: Three steps to a world-class apprenticeship system* for England, based on best international practice and a decade of data.

- Despite positive developments over the last decade – e.g. putting employers at the heart of the system and introducing more rigorous assessments – policymakers need to tackle issues including:
  - Participation by under-19s has fallen by 32% over the last five years.
  - The introduction of the levy has encouraged larger firms to take on more apprentices, but may have reduced uptake by SMEs.
  - The greater regulation of apprenticeships has coincided with a decrease in completion.
- Recommendations are made in three areas:
  - **Ensuring a career foundation**: broadening standards; strengthening the inclusion of transferable competencies; and establishing a formal name for the apprenticeship qualification.
  - **Improving the quality of training and clarifying the offer** including: simplifying and enforcing the off-the-job training requirement; and supporting and developing on-the-job training.
  - **Reviving youth apprenticeships**: improving incentives – where there's full funding, the remaining levy funds should be used flexibly; and broadening the T level Transition Programme into a preparation for apprenticeships.

EngineeringUK published *A 5-point plan to grow and sustain engineering and technology apprenticeships for young people: An inquiry led by Lord Knight and Lord Willetts*, focused on England.

- Many businesses, particularly SMEs, are struggling to find capacity/resources to take on young apprentices; they are concerned about training quality and barriers relating to standards and bureaucracy.
- For many young people, the toll of the pandemic and disruption to their education have made it harder to navigate their next step into FE, HE or employment.
  - Not enough are aware of, or value, the apprenticeship options available or know where to start; financial barriers and entry requirements are also having an impact on access.
- The five-point plan:
  - **Rebalance education** so the secondary system is fit for the future and there is genuine parity of esteem between technical and academic pathways – with a broad, more balanced curriculum to 16, continued funding of BTECs, revised accountability measures and a new careers strategy.
  - **Support young people better** throughout their apprenticeship, breaking down barriers, including via: an expanded pre-apprenticeship offer for 16–18s; child benefit maintained for apprentices under 20; support for transport costs; a reshaped route to functional skills.
  - **Refocus funding** to ensure long-term support for apprenticeships at all levels and greater equity between vocational and academic routes; fund degree apprenticeships through the standard HE fees and loans model, so that the levy can focus on 19–25s studying at Level 2–5.
  - **Enable businesses, particularly SMEs**, to play an active role in apprenticeships; work with employers and providers to ensure that engineering & technology standards are given the strategic importance they merit and meet the skills needs of the sector.
  - **Employers must play their part** in growing and sustaining apprenticeships for the future and helping to widen opportunities for young people, including reporting female apprentice numbers.

The two inquiry leaders are former Labour and Conservative education ministers respectively.

ScreenSkills published *Apprenticeships in the Screen Industries*, the final report of a study into the take up of apprenticeships in England and the enablers and barriers that affect employers.

- The research examined five sectors: film, TV, VFX, post-production and animation.
- A relatively high number of young people are studying screen training courses in schools, FE and HE; however, screen industries have had difficulty recruiting new entrants with the right mix of skills.
  - Industry skills assessment reports commonly identify that over 33% of sector employers experience skills gaps among their existing workforce and/or have recruitment challenges.
- Compared to other sectors, the take up of apprenticeships is relatively low; in 2021/22 there were 1,377 apprentices.
  - Apprenticeships are not well-established in the sector; awareness levels varied among employers, and there were also varied views on the quality of the screen industries apprenticeship standards.

- Although seen as beneficial in general, apprenticeships were felt to be less effective for the sector than other work-based learning routes, particularly due to a perceived high level of bureaucracy.
- There was also a view that the off-the-job training apprenticeships receive is less effective than the in-house training that employers provide to their junior staff and new entrants.

- Structural barriers affecting apprenticeship take up include: the high proportion of micro-employers the high proportion of short-term contracts; the limit of apprentices working only 40 hours per week when flexibility is required; financial contribution.
- The number of providers offering most screen-related standards is relatively small, and many are based in London and the south east.
- Six recommendations are made for ScreenSkills, the sector and for government, including working with employers to develop a 'best practice' guide to apprenticeships.

TRAINING & DEVELOPMENT

City & Guilds published *Training Trends 2023: Unlocking investment, realising potential*, based on Censuswide surveys of 600 learning & development (L&D) and HR professionals, business and finance leaders in large UK-based companies with international operations.

- 40% of decision-makers identified staff training as the top driver of their business growth.
  - Almost 66% said they'd be increasing spend on training; 55% identified improved staff performance and productivity as the two most important benefits.
- 60% overall said that investment in non-mandatory training is at risk of being deprioritised; this rose to 67% among finance and business leaders.
- 33% of HR/L&D professionals want more support when seeking budget for staff training and in aligning their programmes with strategic goals and priorities.
  - 33% saw their biggest challenge as knowing what success measures to use.
  - Only 30% strongly agree that their training programmes are high quality.
  - The most common reasons training budget requests are rejected: training doesn't address key business problems; it is not aligned with priorities of other departments; no clear alignment with the overall business strategy; low/no confidence in return on investment.
- Finance and business leaders are more confident than HR/L&D professionals that their current training is sufficient (75% of finance & business leaders vs 54% of HR/L&D professionals), there is enough budget (78% vs 64%) and programmes are high quality (75% vs 50%).
- Finance and business leaders are a lot less confident – but still more so than HR/L&D professionals – that their organisation is prepared for AI (44% vs 21%), automation (43% vs 26%), hybrid working (42% vs 22%), sustainability (51% vs 26%) and digital transformation (42% vs 34%).

Business in the Community (BITC) published *Upskilling for All: Supporting low-skilled employees to progress at work*, drawing on a YouGov survey of 1,097 UK workers in February–March 2023.

- Among lower skilled workers:
  - Just 25% have been encouraged to gain the skills they need for more senior roles (compared to 60% of higher skilled workers).
  - 55% feel that their current job makes good use of their skills and abilities (76%).
  - Almost 50% know which skills they need to progress in their careers (70%).
  - 45% believe they have an equal opportunity to advance in their career regardless of their personal characteristics or circumstances (66%).
  - Only 10% have undertaken any training or development activities in their current roles (50%).
- BITC's Upskilling for All project calls on businesses to put in place:
  - An effective data strategy so that they can identify where skills gaps lie
  - Supportive and supported line managers so they can encourage and support their direct reports
  - A culture of continuous learning so employees are driven to engage with development opportunities.

The report includes short case studies from employers.

Reskilling in the Age of AI: Five new paradigms for leaders – and employees was published in the *Harvard Business Review*, based on interviews with leaders from ~40 organisations around the world that are investing in large-scale reskilling programmes.

- The report was produced by members of a collaboration between the Digital Data Design Institute at Harvard University's Digital Reskilling Lab and Boston Consulting Group's Henderson Institute.
- There are five emerging 'paradigm shifts' in reskilling that companies will need to understand and embrace if they hope to succeed in adapting to the rapidly evolving era of automation and AI:

  1. Reskilling is a strategic imperative

  - The labour market is increasingly constrained by the ageing working population, new occupations and an increasing need for employees to develop skills that are company-specific.
  - Reskilling allows companies to build competitive advantage quickly by developing talent not readily available and filling skills gaps instrumental to achieving strategic objectives.
  - Some companies now consider reskilling a core part of their employee value proposition and a strategic means of balancing workforce supply and demand, and some are using it to tap into broader talent pools and attract candidates who wouldn't otherwise be considered.

  2. Reskilling is the responsibility of every leader and manager

  - Reskilling investments need a profound commitment from HR leaders, but unless the rest of the organisation understands their strategic relevance, it's very hard to obtain the relentless and distributed effort needed to succeed.
  - Reskilling initiatives are visibly championed by senior leaders, often CEOs; they work hard to articulate the connection between reskilling and strategy and to ensure that leadership and management teams understand their shared responsibility for implementing these programmes.

  3. Reskilling is a change-management initiative

  - Reskilling requires a focus on many different tasks simultaneously, particularly: understanding supply and demand; recruiting and evaluating; shaping the mindset of middle managers; building skills in the flow of work; matching and integrating reskilled employees.

  4. Employees want to reskill – when it makes sense

  - One of the biggest challenges is persuading employees to embark on reskilling programmes.
  - Suggestions include: treat employees as partners; design programmes from the employee point of view; dedicate adequate time and attention to the task.

  5. Reskilling takes a village

  - Companies need to harness the potential of the wider ecosystem in which reskilling takes place, e.g.: consider industry partnerships to conduct joint training; partner with non-profits to reach diverse talent; work with colleges and training providers.

- **Two key limitations** hamper the above: lack of rigour in the measurement and evaluation of what works; lack of information about how to generalise and scale up successful programmes features.

Cedefop (the European Centre for the Development of Vocational Training) published *Microcredentials for labour market education and training: The added value for end users*, based on mapping and analysis of microcredentials in retail and manufacturing.

- Industry-related certificates and certifications range from entry level to those that can be 'stacked' and can support progression to technician-level and engineering-level roles.
  - They are technical and sometimes very specialised, suggesting that they top up qualifications, adding value for learners and employers, but are possibly not recognised in further learning.
  - While some refer to the European Qualifications Framework (EQF) and assessment formats, information varies substantially, contributing to fragmentation.
  - It is uncertain what role they can play as pathways for low-qualified users, particularly in a context where transversal skills play a bigger role.
- There has been a massive increase in online certificates and badges covering a range of skills, many free of charge, but it is unclear what role they play in labour markets and how they are valued by learners and employers.
- Microcredentials are offered by both individual providers and a range of partnerships based on common business interests that tend to cross traditional boundaries.
  - They include university colleges or academies, local economic actors and sector bodies, public employment services, and public and private training providers.

- Some grow out of shared technologies and training needs for industry 4.0 or cluster strategies.
- While many have set ambitious targets for intended users, it is currently unclear how they will engage with wider groups of learners and SMEs.
- The range of initiatives contributes to a sense of fragmentation, but their diversity can serve as a backdrop to national skills strategies, providing opportunities to engage a wider range of stakeholders in consolidated approaches to microcredentials.

- Microcredentials are often perceived as building blocks in comprehensive skills strategies due to their alignment with business targets.
  - However, lessons from European vocational education and training (VET) system reforms show they often fall short due to path dependency shaped by institutional structures and legacies.
- Users associate microcredentials with a range of benefits, but many question whether they will increase employment and job promotion opportunities.
  - The labour market and wider social value of microcredentials is not yet well understood, especially for the low qualified, the long-term unemployed or the elderly with outdated skills.
  - The added value for groups at risk will ultimately depend on how skills are conceptualised in the design of microcredentials and the nature of existing or future supporting structures.
- Microcredentials exist in an area between the public and the private spheres, and between providing targeted skills in demand and laying the foundation for employment in labour markets marked by AI and advanced digital technologies.
  - This underlines why a European or national blueprint for microcredentials skills ecosystems could be premature, given that a multitude of models and approaches are still at an early stage of development and the benefits for different users are not fully understood.
  - A consolidated research strategy will allow for an iterative approach to developing and mainstreaming microcredential design and provision, while also recognising that comprehensive support structures are needed for more learners and SMEs to benefit from microcredentials.

IZA published *Technological Change and Returns to Training*, analysis of whether returns differ if training is accompanied by technological innovations, based on data from Germany.

- Adopting a new technology in the workplace is on average associated with a higher likelihood of participating in training.
  - Training is often seen as a way of helping staff adapt and as a safeguard against possible negative consequences of technological change.
- New technology adopters don't benefit in terms of wage increases or job mobility (job changes and promotions) when participating in training.
  - Although training participation in general increases wages by 0.9%, new technologies have no impact on wages once individual fixed effects are taken into account.
  - Although training participants have a reduced probability of job changes, this only applies to training that is not accompanied by technology adoption – if it is, there is no effect on job change.
- Low-educated workers experience no wage effects from training or new technologies; however highly educated individuals have significant positive wage effects from technology adoption.

IZA published *Can Workforce Development Help Us Reach Full Employment?* considering the US experience and drawing comparisons with that of countries in the EU and OECD.

- It explores the background to the employment/workforce issues that workforce programmes address, and reviews the impact on employment of on-the-job training and other employee development.
- More and better workforce development could help somewhat to achieve lower unemployment and higher labour force participation, although other policies are also needed to achieve these goals.
- Countries with more 'active labour market policy', especially over longer time periods, produce more encouraging results; such countries:
  - are willing to invest more substantial resources in workforce programmes
  - have much stronger career and technical education institutions and work-based learning.

SKILLS GAPS & SHORTAGES

England's Department for Education published *Employer skills survey [ESS] 2022: Research report*, covering findings for the whole of the UK and based on responses from almost 73k employers, including 3,400 from Northern Ireland.

Due to changes in methodology and the distorting effect of Covid, UK-wide data are compared with 2017, while national data for England, Wales and Northern Ireland are compared with 2019. The following highlights barely scrape the surface of the detailed data available in the report.

- 23% of employers reported vacancies (Northern Ireland 21%), up from 20% in 2017 (16%); the overall number of vacancies also rose, from just over 1m in 2017 to almost 1.5m in 2022.
  - The density of vacancies (as a proportion of employment) increased in all nations and is now 5.0% in England and Northern Ireland, 4.8% in Scotland and 4.7% in Wales.
  - The largest increase occurred in Northern Ireland, up from 3.1% in 2019.
- The proportion of vacancies classified as skill-shortage vacancies (SSVs) – hard to fill due to applicants lacking skills, experience or qualifications – increased from 22% in 2017 to 36% in 2022.
  - SSV density rose markedly for all nations, with Northern Ireland seeing the highest increase, up from 22% in 2019 to 35% in 2022.
  - Lack of specialist skills/knowledge was the most likely cause of SSVs (87%).
- The most common factor deemed important in new recruits was relevant work experience (62%), followed by maths & English GCSE A*–C or equivalent (47%) and vocational qualifications (43%).
- 30% had provided work experience in the last 12 months, including for adults and the unemployed; only 10% had offered work inspiration activities in educational institutions, the same as in 2016.
  - Northern Ireland saw the largest decrease in employers providing any kind of work placement, from 48% in 2016 to just 26% in 2022; this was primarily due to a fall in education placements, from a high figure of 41% to 21%.
  - The most common reasons for not offering work experience/inspiration were lack of suitable roles (29%) and lack of time/resource to manage it (19%).
- Among employers in England, 16% had heard of Higher Technical Qualifications, but only 7% had some knowledge of what they involved; 32% were aware of T levels, but only 15% knew something of what they involved.
  - 33% said they would be interested in providing T level work placements, down from 36% in 2019.
- 30% had recruited an education leaver in the last 2–3 years, in line with previous surveys; 27% had recruited 16–18 year-olds, 55% 19–25 year-olds, 33% those aged 50+.
  - Word of mouth and personal recommendations were the most common recruitment methods (70%), followed by social media adverts (56%) and adverts on their own website (51%).
- The proportion of staff not considered fully proficient increased for the first time since the ESS began in 2011, from 4.4% to 5.2%, equivalent to 1.72m employees, up from 1.27m in 2017.
- Over 33% of employers reported skills 'under-use', with Wales seeing the highest percentage at 38%, Scotland and Northern Ireland 37% and England 35%.
  - All nations have seen a drop in the percentage of overqualified or over-skilled employees, with Northern Ireland seeing the greatest fall, from 9.4% to 8.3%.
- 60% had provided staff training in the last 12 months, compared with consistent levels of around 66% from 2011 to 2017; this was mainly driven by a reduction in off-the-job training from 48% to 39%, although on-the-job training also fell (53% to 49%).
  - The proportion of staff being trained fell by 2ppt to 60% and the total number of training days fell from 114m in 2017 to 108m in 2022.
  - Northern Ireland had the lowest proportion of employers who train (58%), while Scotland had the highest (64%); however, Northern Ireland has the highest percentage of staff trained (64%).
- Expenditure on training and development over the previous 12 months was £53.6b, down 7.7% in real terms on 2017.
- 19% offered apprenticeships at the time of interview, including 11% who had current apprentices.
  - 38% planned to offer them in the future, including 25% of those not currently offering them.

- 37% of those who have them and plan to continue to offer them expect numbers to increase in the next two years.

National results, including nation-specific questions, are available for Northern Ireland, England, Scotland and Wales.

The CBI (Confederation of British Industry) published findings from the 2023 *Employment Trends Survey* with Pertemps Network Group.

- 38% of businesses have been unable to grow and respond to new opportunities due to labour shortages in the last 12 months; 22% had to hold back investment in other parts of the business; 12% have shrunk.
- 77% believe access to skills (up 5ppt from 2022) and 66% access to labour (down 11pt) are key threats to the UK's labour market competitiveness.
  - 82% believe that access to skills will still be a threat in five years' time.
- To ease the impact of labour shortages: 69% are investing in training to upskill current staff (up 14ppt); 65% in leadership and management capabilities; 60% in technology and automation to increase productivity (up 20ppt); 60% in basic pay (up 4ppt).
  - In terms of attracting and retaining talent, basic pay (66%), training and development (53%) and communicating company values (52%) are the most important measures.
- To ease labour shortages government should: provide incentives to invest in technology and automation (68%); reform the apprenticeship levy so funds can be spent on other training (65%).
- Future policies to drive productivity and sustainable growth should focus on: incentives to invest in technology and automation (82%); giving employers flexibility to spend apprenticeship levy funds on other training (65%); making all skill levels permanently eligible for the Shortage Occupations List (59%); increasing Access to Work support to help employers hire those with disabilities (62%); incentives to invest in workplace health measures (54%).

The Edge Foundation published its 13th bulletin on *Skills shortages in the UK economy*, on how a lack of competitiveness, education and training can be overcome in different sectors.

- It summarises recent research, including from: Youth Employment UK (2023 Youth Voice Census); Nesta on green skills and training; New Economics Foundation on closing the green skills gap; the Institute for the Future of Work on human flourishing in an age of AI; and EngineeringUK.

The Financial Services Skills Commission (FSSC) published *People + Technology: How skills can unlock value for financial services*, based on analysis of 45 interviews with sector leaders, stakeholders and commentators.

- The sector already has a significant skills gap – 160k workers across the industry (16%) currently require upskilling.
  - Investment in skills is failing to keep pace with changing skills needs driven by technological advancements, evolving customer and workforce demographics, and geopolitical challenges.
  - Closing the skills gaps could: contribute an extra £555.6m per year to the UK economy by boosting productivity; save £175–225m for the sector by improving retention; save each firm ~£50k per employee reskilled in reduced recruitment, redundancy and onboarding costs.
- Demand for highly skilled talent will continue to grow – in 2022, 73% of the 1m industry jobs were classified as highly skilled (managerial and professional), up from 52% in 2004.
  - 260k highly skilled people are expected to leave the sector through retirement and attrition by 2035; the sector already struggles to attract younger workers and retain older employees.
  - The number and share of women has declined from 51% in 2004 to 43% in 2022, due to the fall in medium and lower skilled roles typically held by women, and the increase in tech roles more typically held by men.
- Technology and AI promises to change the nature of many jobs, skills and how people are trained and upskilled.
  - There is an urgent need to ensure skills in technical (e.g. AI and cyber) and sustainability areas are developed in combination with personal and interpersonal skills (e.g. empathy, creative thinking and adaptability).
- Efforts to close skills gaps are not going far or fast enough as demand for skills still outstrips supply.

- Firms are increasing efforts to address skills gaps via: skills forecasting; increasing non-mandatory learning; and using tools (e.g. FSSC's Future Skills Framework) to identify reskilling priorities.
- Skills forecasting is often done with a short-term horizon and firms continue to struggle to fill business critical roles.

- Four recommendations for firms:
  - Ensure skills are integral to business strategy, transformation plans and risk registers.
  - Build a robust, data-led evidence base of existing capabilities and future skills needs, monitoring progress and impact, with three-year skills forecasts in place by the end of 2027.
  - Offer 'deep' reskilling to the 16% with skills proficiency gaps by the end of 2025, plus upskilling, increasing learning and building talent pipelines.
  - Collaborate as a sector, establishing impactful relationships with education and training providers, and working to engage government and others to drive a higher priority for skills in public policy.

BIT published *Boosting the uptake of digital careers among early career professionals [age 27–35] and experienced professionals [age 50+]*, findings from phase one of a project commissioned by the UK's DSIT and the Digital Skills Council.

- Barriers to uptake include: low awareness of upskilling opportunities; financial cost of retraining and switching careers; high numbers leaving the labour market due to early retirement and career breaks; lack of entry/junior-level roles; perceptions that tech sector jobs are difficult, complex, involve long, antisocial hours and are prone to high levels of discrimination.
- Implications are that **messages for early career switchers** should:
  - Highlight the availability of free retraining options; stress the accessibility of digital jobs; show that it's possible to switch careers
  - Emphasise growth, flexibility and the high-paying nature of tech
  - Avoid the term 'cyber'; be cautious with 'digital' and 'artificial intelligence'; use 'tech'; communicate simple job titles
  - Focus on a wide range of jobs and pro-social goals; use relatable messengers from a trusted authority.
- Implications are that **messages for experienced professionals** should:
  - Highlight the 'skill' aspect of digital skills training; focus on how the training fits within their personal lives
  - Emphasise the exciting nature of the tech sector; alleviate age anxiety by showing that everyone can work in tech
  - Emphasise diversity of job opportunities; use relatable messengers
  - Use pensions rather than salaries
  - Be similarly cautious with terminology as for early career switchers.

Also see BIT's report published by the DSIT on boosting uptake among A/T level and university students (p. 4).

The Open University (OU) published *Educate, measure, speak up: How businesses can get ahead with ESG [environmental, social & governance factors]*, based on a UK-wide Opinium survey of 528 business leaders. *[An email address is required to access the full report.]*

- Only 8% had a fully realised ESG strategy; 28% said they lacked the finances and 24% were missing the essential skills.
- Over 80% said they had skills or leadership gaps when implementing ESG improvement; the main skills gaps were in waste reduction, data analysis and energy tracking or usage.
- 77% of those engaging with ESG factors employed an ESG professional.

Skillnet Ireland published *The Future of Irish Hospitality: Attracting & retaining talent*, research in response to skills shortages following the pandemic, including a survey by Interactions Research of over 800 employees.

- Two key factors are affecting employment in hospitality: international staff – a significant proportion of personnel – returning home; and employees leaving for the retail and distribution sectors in particular, and some for the construction sector.

- Low unemployment rates and tight labour markets for skilled workers have made it difficult to hire 'ready-made' workers, thus businesses need to (re)train, (re)skill, upskill and source personnel.

- The research aimed to:
  - Help members upskill their current workforce and train new employees, ensuring they have the necessary tools to stay relevant and deliver quality product and customer service
  - Provide solutions to closing skills and knowledge gaps within the industry while meeting needs
  - Help the industry understand knowledge, skills and attitude gaps, and how providing the right training and education contributes to closing them while creating a more talented workforce and competitive business
  - Help the industry understand its workforce and introduce methods to manage and retain staff.
- Six segments were identified and personas developed for each, covering attitudes, perceptions, skills and training needs:
  - **Future Star** – with a positive outlook and a keenness to maintain their work–life balance, they have the potential to mentor and develop junior staff and new entrants
  - **Career Committed** – personal development and enhanced management skills can keep them motivated
  - **Family Ties** – to keep them engaged, their acquired skills need to be recognised and their leadership/people skills enhanced
  - **Career Seeker** – to keep them in the industry they need career guidance and opportunities to upskill
  - **Career Mover** – recognition of prior learning and microcredentials to acquire qualifications may make them more interested in staying in the sector
  - **Career Entrant** – they need confidence building and to be shown a purpose and progression opportunities; develop their people skills: listening, patience, taking feedback and correction.
- Training and development recommendations, plus recommendations for the industry include:
  - Review the learning and development planning for staff, and how learning plans reflect on-the-job training and upskilling.
  - Engage employers in the microcredential movement, e.g. in the development and delivery of training in IT/computer/digital skills, including in e.g. finance and accounts, and in customer service, hospitality skills/barista/food and drink, and professional development.
  - Review how positions are advertised, including job descriptions and how they reflect the persona needed.
  - Provide workplace coaching across all personas, to enhance efficiency and creativity among employees, and develop leadership skills by enhancing their overall performance.
  - Conduct a thorough analysis of past hires.
  - Digital literacy – all personas need computer skills, IT skills and digital literacy.

SKILLS POLICY

England's Department for Education published *A Skills Classification for the UK: Plans for development and maintenance*, output from phase one of work commissioned by the Department's Unit for Future Skills.

- A skills classification is a comprehensive list of all the skills and associated knowledge required to carry out job-related tasks.
  - When linked across occupations, qualifications and courses, it becomes a powerful tool for purposes ranging from job analysis and recruitment to careers advice and labour market analysis.
  - It enables: better matching between the needs of employers and the skills available in the workforce; greater precision around defining and identifying skill shortages; and improved planning by providers around specific skills.
  - It provides careers guidance specialists with the tools and language to advise on specific career pathways.
- A survey of 109 stakeholder organisations and detailed interviews with key users found:
  - A common language when sharing information on skills is the single most important requirement.

- Despite widespread use of international classifications (e.g. O*NET [US] and ESCO [EU]) there are concerns around applying their definitions within the UK labour market and the lack of clarity and consistency of terminology.
- 50% of responding organisations currently pay commercial providers for skills information, rising to over 75% for local and regional skills bodies and authorities.
- Detailed skill descriptions, short skill names and multiple levels of aggregation are particularly important.
- The perceived benefits are: improved data sharing (67%); simplified innovation (57%); improved quality of services provided (45%) and received (37%); reduced effort maintaining existing skills frameworks (36%); improved training/management practices (32%); reduced costs (27%); and improved recruitment (22%).

- A hierarchical standard skills classification is proposed, comprising three levels: skill areas; skills groups; and occupational skills.
  - This will be underpinned by a set of occupational tasks and a range of subjects, tools and methods that collectively encapsulate the knowledge used within a job.
- The UK lags behind other countries in this area, but is therefore well placed to draw on their work; the task will also be made easier by recent advances in natural language processing tools using large language models.
- The report sets out examples of how the standard skills classification will benefit different user types such as job seekers, employers and local economic or skills partnerships, plus plans for construction and release over an 18-month period, followed by maintenance and updating.

The IFS published *Investment in training and skills*, a chapter in its annual *Green Budget 2023* report, analysing the trade-offs government must make when considering skill system reform.

- The UK has seen a significant decline in participation in adult education and training, with adult starts on publicly funded qualifications falling by 70% since the early 2000s (1.5m in 2020).
- The number of adults participating in employer training has remained fairly stable, but the average number of days per employee per annum has fallen by 19% in England since 2011.
  - Average employer spend on training has fallen by 27% per trainee since 2011 and, since its peak in 2003–04, public funding has dropped by 31% in real terms and funding rates have been frozen.
- There are five main adult skills policy levers for government: direct funding of qualifications and skills programmes; loans to learners; training subsidies; taxation of training; and regulation of training.
  - In changing any lever, there is a trade-off between the costs of the reform and the benefits, which depend on whether the reform leads to additional training that is genuinely new and productive.
- Ensuring that public funding is well spent is key: adult skills funding is set to increase by 11%, reaching around £4.7b by 2024–25.
  - Given the low returns to many adult courses, increasing funding rates might offer a better return than expanding the range.
- The introduction of England's Lifelong Learning Entitlement (LLE) could reshape the post-18 student loan landscape; in 2022–23, £124m was lent to FE students vs £19.9b to HE students.
  - However, progress has been slow and important questions still remain about how the system will be designed, including which courses will be covered.
- The apprenticeship levy was introduced in 2017 but didn't achieve the target of 3m starts in England by 2020 (there were 2m starts 2015–20).
  - While overall numbers have fallen back, higher level starts have almost tripled since 2016, and the average duration has increased by 22%.
  - The levy has raised £580m more than has been allocated on skills and training across the UK.
  - The levy should be reformed to provide a uniform subsidy rate for all employers, as larger, levy-paying employers benefit from a higher subsidy rate.
  - Rates should be lower than at present, as they are effectively subsidising the full cost of apprenticeship training.
- Labour has announced plans to broaden the levy into a 'growth and skills levy', which will allow employers to use subsidies for non-apprenticeship training.

- Past experience suggests a risk of significant deadweight and an extended subsidy would add to costs, which could perhaps be covered by lowering the existing subsidy rates.

- At present, all spending on employer-provided training is tax exempt; providing tax relief for self-funded training on the same basis would remove a disincentive for groups such as the self-employed.
  - However, careful regulation would be needed to avoid the risk of fraud.

The Economy 2030 Inquiry and the Pissarides Review into the Future of Work and Wellbeing published *Learning to Grow: How to situate a skills strategy in an economic strategy*.

- The report considers: whether the UK has an appropriate skill base given its existing strengths; whether the future demand and supply of skills will need to change given these strategic sectors and technologies; and what policies will be needed to make this happen.
  - The strategic sectors have higher skill requirements and tend to employ more highly educated workers.
  - Strategic technologies require high skill levels as well as adaptability.
  - There are challenges that need to be overcome to ensure the right skills are in place, as indicated by the large wage premium attached to university degrees.
- It asks why there is a skills gap – reasons include:
  - There are still too few graduates for the needs of the workplace, too many people with low levels of skills and qualifications, and far too few with the skills associated with tertiary-level education – particularly the case within strategic sectors and those most exposed to new technologies.
  - The fall in workplace training over recent decades across all education groups.
- Four policy directions are discussed:
  - Having more tertiary-educated young people, requiring more public spending on education.
  - Enabling more sub-degree qualifications and a better integrated system.
  - Encouraging employers to invest more in their staff, extending incentives currently used to promote R&D.
  - Empowering individuals to undertake lifelong learning with a well-piloted form of Individual Learning Account.

Both the Economy 2030 Inquiry and the Pissarides Review are funded by the Nuffield Foundation. Other Economy 2030 reports can be found on pp. 16 and 21.

The Migration Advisory Committee (MAC) published *Annual Report 2023*, covering net migration, health & social care and international students.

- While there is a range of policy choices that will clearly reduce net migration, it is difficult to have confidence in the likely impact of a particular policy change on long-run net migration; caution is needed in making promises about future levels.
  - Government should consider the total impact of a policy change, as migration policy does not act in isolation; e.g. a binding cap on care worker numbers would decrease net migration, but would also affect the social care sector.
- The Government needs to tackle the underlying workforce issues in the Health & Social Care sector through proper funding and a long-term workforce plan, as it has done for the NHS workforce.
  - Evidence suggests that Scotland's approach to pay and professionalisation has likely led to lower levels of exploitation and less need to rely on the new visa route.
- Since 2018, the number of international students coming to the UK has continued to increase and the Government has already surpassed its target of 600k by 2030.
  - The majority of growth has been in one-year postgraduate Master's courses, largely in less selective and lower fee universities; there has also been a major increase in the number of dependants coming through the student route.
- International students undoubtedly offer an economic benefit to the UK alongside enriching the university communities in which they study.
  - However, not all aspects of student migration have the same benefits or impacts: dependants bring different costs and benefits; most obviously, they don't contribute to university finances.

- The broader economic impact of dependants is unclear, as data are not available on whether or where adult dependants work; additional costs are borne by LA and school budgets, not by the universities where international students study.

MAC published *Review of the Shortage Occupation List [SOL]*, the first major review since 2020, commissioned by the UK Government.

- The SOL allows employers to hire international workers on 80% of the UK's 'going rate' for the occupation, making them cheaper than under the main 'skilled worker' route.
  - MAC warns that this could lead to exploitation, while providing little value for money; it may also be exacerbating gender pay gaps, as women are 7% more likely to be paid below the going rate.
- It is not convinced that the list provides a sensible solution to shortage issues in low-wage sectors and recommends that it should be abolished.
  - Rather, MAC could be commissioned to examine individual occupations or sectors with particularly acute labour shortages.
  - Measures including wages, terms & conditions, training and education and investment in technology are likely to be a 'more sustainable response' to shortages.
- If the Government wishes to retain a SOL, it would be more appropriate for shortage to be assessed on a cross-departmental basis with a wider skills and training lens – similar to the methodology used to determine shortage as part of reviewing Australia's Skills Priority List.

MillionPlus (the Association for Modern Universities) published two reports on the role of modern universities in tackling the skills challenge.

- ***Future proofing England's workforce – how modern universities can meet the skills challenge*** examines England's ongoing skills gaps across different occupations and regions, and the 'complex web of factors' that contribute to current deficits.
  - Employer decisions around training and job quality interact with government policies on education, migration and careers advice; data limitations, economic conditions and individual motivation also shape imbalances.
  - Tackling gaps requires coordinated efforts engaging all stakeholders, but this hinges on empowering modern universities as 'anchors' of opportunity via data, resources and autonomy.
  - Nine recommendations include: multi-year funding for specific regions and jobs; incentives to study in priority areas; open-access and granular data on demand, vacancies and salaries and innovative analysis (including AI) to anticipate future needs; broadening the apprenticeship levy.
- ***Skills, skills, skills – the role of modern universities delivering the workforce for the future*** sets out the skills being developed by universities through different programmes and provisions.
  - It also considers how skills gaps are being identified and integrated in curricula.

The OECD published *Skills Outlook 2023: Skills for a resilient green and digital transition*, highlighting the importance of supporting individuals in acquiring a wide range of skills at varying levels of proficiency in order to promote economic and social resilience.

- Two areas of investment that can help societies anticipate rather than react to future adverse events such as the pandemic are: promoting environmental sustainability; and ensuring human-centred digital technologies that effectively support communication and information exchange.
- Demand for skills that are projected to grow the most to 2030 relate to: interacting with computers; thinking creatively; analysing data and information; and communicating with those outside an organisation.
- However, many people don't have baseline levels of proficiency in the skills needed to ensure their own and societal economic and social wellbeing and contribute to a greener future.
  - The pandemic demonstrated the importance of health literacy – the ability to access, comprehend, assess and apply information to make informed decisions; 40% of adults reported they would find this difficult/very difficult.
- Individuals also acquire and lose proficiency in different skills over time, depending on usage, external constraints and rapidly evolving environmental and social conditions.
- Attitudes and dispositions are key: young people who agree that looking after the environment is important are 16ppt more likely to save energy; however, disadvantaged young people are 25ppt less likely to reach baseline proficiency in science.

- 73% of those with tertiary qualifications, 66% with secondary and 63% with neither perceive climate change as a threat; those with tertiary qualifications are more likely to be willing to compromise their current lifestyle for the benefit of the environment.

- Identifying populations that lack proficiency in important skills and developing polices to support them is critical to building system-level resilience; identifying and responding to vulnerability due to a lack of proficiency in skills is also key to a just, inclusive and sustainable twin transition.

IZA published *No Longer Qualified? Changes in the supply and demand for skills within occupations*, a study of changes in employer education and skill requirements drawing on 200m US online job postings between 2007 and 2019.

- Labour market 'mismatch' often refers to an imbalance in supply and demand across occupations; however mismatch *within* occupations can arise if skill requirements are changing over time.

- Findings include:
  - The degree of persistence in educational upskilling lasted longer than was previously known; it varied considerably across occupations and was often coupled with an increased demand for software skills.
  - Upskilling contributed to reduced matching efficiency in certain segments of the labour market; it was particularly lower in higher skilled occupations, possibly because they are becoming more specialised.
  - The demand for software skills was a distinguishing feature of occupations that showed a pattern of persistent educational upskilling.

SKILLS FORECASTING

Cedefop published *Going digital means skilling for digital: Using big data to track emerging digital skill needs*, a policy brief using analysis of online job adverts to shed new light on evolving digital skill requirements across the 27 EU member states (EU-27).

- Between Q1 and Q2 of 2023 the number of adverts targeting IT workers decreased by almost 100k.
  - In the past five years, most advertised jobs were for IT professionals; just 13% of online job adverts for IT workers targeted IT technicians.

- Employment for IT professionals and technicians in the EU is projected to continue growing by 2% per annum until 2035; retailers transitioning to ecommerce will increase employment and new software, systems or tech solutions will translate into new IT jobs.

- While demand has been growing steadily, participation in IT education and training has not increased sufficiently.
  - The number of IT graduates with an upper secondary VET qualification is now over 100k, but gaps remain between supply and demand.

- Among business ICT profiles, online job adverts expanded fastest for business information managers and data scientists; between 2018 and 2022 the use of data analytics in organisational decision-making became more prevalent.

- Denmark, Portugal and Finland lead the way in AI adoption (15% of companies), while less than 2% in Romania and Cyprus use any AI tools; lacking access to workers with advanced IT skills remains a major barrier.

- Blockchain technology has the potential to become more widely adopted across other sectors.
  - Occupations for which some employers require blockchain expertise include: game designers, researchers, engineers, developers, lawyers, marketing managers, economists and HR recruiters.

- There are significant gaps between sectors in terms of requiring non-IT workers to have at least one digital skill, but demand is growing.
  - Pre-Covid, 26% of non-IT jobs advertised by employers in transportation & storage required digital skills – in 2023, it was 39%.

- VET teachers and trainers need to know how to: integrate digital technology in teaching; include state-of-the-art technologies in programmes; and support learners.
  - However, not all feel confident and only 50% received support when trying out new digital technology-enabled teaching.

Cedefop published a new series of occupation data insights, drawing on recently developed or updated products and tools, e.g. the European skills and jobs survey (ESJS).

- The first batch out of 34 insights have been published:
  - Four managerial occupations: CEOs & legislators; business managers; technical managers; and retail and hospitality managers.
  - Six professional occupations: science and engineering; ICT; health care; teaching; office; and legal, social and cultural areas.

The European Commission Digital Skills & Jobs Platform published *'All things data': A skilled workforce for a data-driven future?* as part of its digital brief series, providing insights into how data are being used to define future work.

- The skills needed to build for a 'data-driven future' include:
  - **Data literacy skills**: to know and be able to assess which data are being used, their source, whether they are reliable, if analytics conducted on top of the data can be trusted, and whether any human controls can allow a user to verify these issues
  - **Awareness and deep understanding** of the scope of data-based tools/working with data tools, the ability to understand their limitations and possibilities and to assess the validity of interpretations based on the data
  - **Negotiation** about interpretations/sense-making of data, e.g. how to manage differing interpretations
  - **Data-technical skills**, e.g. in data engineering, data analysis and data tooling; in being able to capture data, to manage it responsibly and accurately, to define analytics around it; and to accurately interpret outcomes of data analysis and translate them into business insights.

The Institute of the Motor Industry published *EV [Electric Vehicle] TechSafe Technician Forecasts*, a briefing paper on the need to grow expertise in the automotive sector.

- In Q2 2023, 2,900 technicians achieved EV certification, making a total of 45,300 qualified EV technicians in the UK, described as 'a commendable 20%' of all UK technicians.
- The rate of EV qualifications is slowing, however (down 36% from Q2 2022) due to economic pressure, high vacancy rates and mixed messaging in industry.
  - High vacancy rates have shifted the industry's focus towards recruitment and away from training.
  - Existing technicians are also being used to cover vacancies, rather than receive additional training.
  - If the automotive workforce cannot see immediate returns on EV training investments due to consumer hesitation, the existing skills gap will widen.
  - The initial surge in training uptake was concentrated in dealerships, training providers and roadside assistance services; demand has been slower in the independent sector, where many new EVs remain within their three-year servicing agreements with dealerships.
  - A shortfall of up to 13k qualified technicians is anticipated by 2032 if current trends persist.
- Recommendations include prioritising training, attracting newcomers to the sector and ensuring a sustainable pipeline of qualified technicians.

GREEN SKILLS & JOBS

The Prince's Trust and Public First published *Generation Green Jobs? Exploring young people's readiness for the net zero skills revolution*, based on a survey of 2k 16–25 year-olds and five online focus groups in areas expected to see significant numbers of new green jobs.

- Young people see the environment as a top concern but this doesn't translate into their career choices; environmental purpose doesn't make a role more attractive.
  - Only 18% say they would factor in an employer's environmental sustainability, compared with 49% citing opportunity for career progression; for many, social purpose is more of a motivator.
  - They associate green jobs with having a positive impact (50%), being rewarding to work in (40%) and generating pride (37%), but these factors aren't as important as pay and progression.
- They find many green jobs unattractive – less than 25% were interested in each of the green roles tested and interest was lowest for those most in demand, such as heat pump engineer (7%).
  - Those familiar with the term 'green jobs' are around 20ppt more interested in a role in the green economy than those less familiar with the term.

- Those living in 'green growth' areas are no more interested in or aware of these jobs and are no more likely to think green jobs will be available in their local area.
- They have little understanding of how net zero will impact industries and jobs and are more likely to expect most green jobs to be in environment and conservation than e.g. carbon capture.
- Young women are less aware of and interested in green jobs than young men.

- Young people think those who work in the 'green economy' are young (30%), degree-educated (30%) and have studied science at school (27%).
  - Green jobs are seen as for those who take an academic route, which limits how many feel confident that they can access them.

The report makes recommendations for educators, employers, third sector organisations and government.

Nesta and BIT published *Inclusion in green jobs: Summary report*, based on interviews with 16 women in the UK with varying levels of experience and expertise actively looking for work or education.

- Previous research found that men were more interested in green skills training than women (53% vs 47%); 66% of those transitioning into green jobs were men.
  - In 2021 it was estimated that only 25% of global green jobs would be held by women by 2030.
- Eight barriers and three facilitators cut across different stages of women's job search journeys:
  - **Barriers**: lack of awareness of green jobs; perceptions of poor pay; other job factors more important; association with men's work; perceived skills mismatch and retraining concerns; perceived competitiveness of applications; difficult to find green jobs; greenwashing concerns.
  - **Facilitators**: interest in tackling climate change; perceived flexibility of green jobs; perception of available opportunities.
- Potential interventions proposed: communications/awareness; targeted messaging; a green jobs site.

The Environmental Policy Forum published *Green Skills Survey: A summary of the headline findings and recommendations*, based on a survey of 31 professional bodies and learned societies in the natural environment, engineering and the built environment sectors.

- The cross-sector green skills challenge is significant, particularly specialist knowledge/skills and attracting recruits/entry routes; notable skills gaps include behavioural change and digital skills.
- The biggest barrier to entry is limited awareness of green jobs/routes available, linked to insufficient reach to teachers, students and careers advisers.
- Activities to address the skills challenges include: improving awareness of roles/entry routes through online content and campaigns; and calling for more investment in green skills through policy work.
  - Raising awareness of roles/routes with those in education is expected to become a top priority.
- There is growing interest in collaborating on boosting green skills.
- The most common key asks of government, investors and employers are: a collaborative, joined-up approach; improving EDI; and ensuring greater investment in green skills (including providing financial incentives to enter green jobs).

The Green Jobs Foundation published *Green jobs: State of the nation*, based on Lightcast research.

- 280,589 'green' jobs (that directly/indirectly contribute positively to the environment) were advertised in the UK in 2022 (up 42% from 2021).
  - The huge rise is likely to be largely driven by existing roles becoming green jobs, as companies transition to deal with pressure to be more sustainable and contribute to the net zero drive.
  - Scotland (2.8%), SW England (2.6%) and NE England (2.4%) had the highest proportions of green jobs advertised.
  - The ten most frequently used green skills in UK job adverts: waste management; renewable energy; environment health & safety; ISO 14000 environmental management; EVs; water treatment; net zero; waste water; environmental policy; ISO 9000 environmental management.
- The green jobs advertised showed significant salary uplift compared to regional averages for all jobs (highest, 29% in Scotland).

- Green jobs can be promoted as positive career choices for individuals beyond environmental awareness and a desire to contribute to sustainability.
- They can also offer people in low-skilled, low-income jobs the chance to retrain and increase their earnings.

- Investment needs to be prioritised to increase the amount of courses related to green jobs and skills offered by UK combined authorities.

The Green Jobs Foundation was created in 2022 as a 'think and do' body, aiming to accelerate awareness and access to green jobs in the UK.

Cedefop published *From 'Greenovators' to 'Green' Minds: Key occupations for the green transition*, a briefing note on the nuances of defining 'green' occupations.

- Some occupations are readily linked to the green transition, but identifying 'green' occupations is not always so easy.
  - The green transition was originally about reducing fossil fuel dependency, but the growing intensity of the climate crisis has broadened efforts to curtail CO2 emissions.
  - A previous Cedefop study [*summarised in* Skills Research Digest *Q2 2023, pp. 25–26*] stressed the need for sectors to shift from linear to circular production models to reduce consumption of natural resources, and this wider approach is shaping skill demand.
- There is a lack of consensus on what 'green' occupations are and how to define them – should this be by work tasks, the skills needed for the job, workplace or something else?
  - As most occupations probably include 'green' and 'non-green' tasks or skills, a 'greenness' continuous scale provides an occupational classification with a better understanding of changes in skillsets, but timely updates are imperative to capture emerging green jobs.
- Given the difficulties of identifying 'green' occupations with outdated classifications, Cedefop's data-driven approach extracts information from online job adverts related to skills asked for by employers.

The OECD published *Education Policy Outlook 2023: Empowering all learners to go green*, using its National Survey for Comparative Policy Analysis of 36 education systems – including Northern Ireland, England and Scotland – to list three emerging priorities for policymakers.

- Translate learners' environmental awareness into action:
  - 57% of education ministries prioritised this, but just 26% focused on developing learners' agency.
  - Those that are promoting environmental agency are focusing on dedicated time and space for active pedagogies, student voice structures and establishing a culture of collective action.
- Provide all learners with experiences to help them shape the green economy:
  - 71% of ministries prioritised 'green' curricula, while 46% focused on supporting all learners to address real-world problems using diverse disciplines.
  - Some promote transversal competencies through active learning, also focusing on under-represented groups; others aim to nurture learning cultures and external partnerships.
- Position education as a strategic sector for the transition to greener societies:
  - Education shapes individuals' behaviours, values and purpose; it inspires collective action, influences local and global economies and drives policy agendas.
  - However, while 74% of ministries prioritised collaborating with environment ministries, fewer than 25% reported the same with other key actors (e.g. industry, business and employers).

The Institute for Public Policy Research (IPPR) Fair Transition Unit published *From missed chances to green advances: The case for a green industrial strategy*.

- While the UK has made considerable progress in reducing emissions, it has failed to ally these environmental gains with comparable economic ones; findings include:
  - The environmental goods and services sector's contribution to UK GDP is 3.9%, compared with 5.8% for the EU, 10.9% in Denmark and 11.5% in Sweden.
  - The UK employs a lower proportion of its working-age population in renewable energy than most other European countries.
  - As many as 1.6m jobs could be created in the transition to a green economy, many of which will require skills from the existing workforce and others that can be supported in retraining if the government provides meaningful support.

- This will only happen with coordinated, long-term public policy, substantive public investment and commitment to working with industry, workers and trade unions, and local communities.

PwC published *Job greening in the UK financial services sector* as part of its Green Jobs Barometer series, in collaboration with the FSSC and the Aldersgate Group.

- In 2022/23, 2.2% of vacancies in the sector were identified as 'green', up from 0.25% in 2019/20, growing from 4,900 jobs to 16,700; this growth is expected to accelerate.
  - The growth has been driven by the creation of new green jobs in the sector, e.g. sustainable investment analyst, climate strategist and ESG analyst, and the greening of existing jobs.
  - There are significant regional disparities across the UK: London accounted for 6,600 green jobs demanded in a year compared to only 150 for Northern Ireland; London has the highest number of green jobs; and Scotland has the highest share of its financial services workforce going green.
- **The industry has a green skills gap** and is not doing enough to upskill its current workforce.
  - Graduates with sustainability skills would only be able to fill 900 of the ~17k vacancies in 2023.
  - 80% of the expected workforce in 2030 are already in the workforce, therefore upskilling and reskilling are urgently needed.
  - Failing to upskill will decelerate progress to net zero and make the UK less competitive.
- The shortage of new green talent can be attributed to several factors:
  - The absence of green knowledge and skill integration in traditional finance degree programmes.
  - A knowledge gap among students regarding green skills and available career paths in this field.
  - Graduates with green skills choosing to work in industries they perceive as better aligned with their values.
- Recommendations include:
  - Firms developing a culture of continuous learning, within organisations and at the economy level.
  - Multi-stakeholder taskforces facilitating dialogue between firms and educational institutions, to help input into courses and training.
  - Promoting inclusivity to tap into a wider talent pool, with training and access to green jobs across sociodemographic groups and regions.
  - Industry to: offer firm-wide sustainability programmes; target upskilling and recruitment from diverse backgrounds; and use the apprenticeship levy to fund green apprenticeships.
  - Education and training organisations to: incorporate green finance modules in the curriculum, including in apprenticeships; promote green career pathways for new entrants; and create a standardised curriculum for sustainable finance accreditations.
  - Government to: provide greater clarity on sustainability regulations to provide an incentive for businesses to upskill; increase the flexibility of the apprenticeship levy; and target greater funding towards adult and upskilling initiatives, e.g. green skills bootcamps.

The Institute of Physics (IoP) published *Physics Powering the Green Economy*, on the role that physics innovation and physicists have played and will need to play in scaling up a sustainable, internationally competitive green economy in the UK and the RoI.

- Most clean technologies are built on physics discovery and innovation and need physics skills for their continued development.
  - 72% of R&D investment from UK Research and Innovation since 2006 in five main green economy technology areas (nuclear, renewables, hydrogen and clean fuels, energy storage and carbon capture, usage and storage) has been in topics classed by the IoP as 'core' and 'strongly' physics.
- Physicists' skills and ways of thinking should be developed and drawn on at all levels.
  - It is vital that education providers ensure physics is taught at all levels and that it is regarded as accessible and relevant rather than a highly academic esoteric subject.
  - Skills in physics should also be attained by individuals and put to practical use after A level studies or via apprenticeship training.
  - An overarching systems approach is needed to deliver on R&D and business support, including securing the necessary physics skills in a way that promotes diversity and inclusion in the sector.

The European Training Foundation published *Skills for the Green Transition: Evidence from the EU neighbourhood*, research into policies and advances in skills deployment in 25 countries* neighbouring the EU.

- The report describes three aspects of skills for a green transition: skills linked to sustainable thinking and action (i.e. system thinking, political agency); technical skills (occupation specific or cross-sectoral); and transversal skills (i.e. ICT, STEM, teamwork).
- Strategies in the 25 countries have ambitious green transition targets, however the skills dimension is often downplayed, e.g. only eight mention the need for skilled workers in their energy strategies.
  - They fail to sufficiently acknowledge the need for a qualified workforce or outline adequate measures for supplying essential green skills and competences.
  - They fall short in comprehensively describing the range of skills related to the green transition.
- Education systems often focus more on teaching accepted knowledge than on empowering students to thrive in unpredictable futures, inadvertently perpetuating practices that worsen inequality and harm the environment.
  - The lack of an integrated approach hinders comprehensive skills development.
- Although policymakers recognise the challenges in aligning skills development with the green transition, limited skills and employment data impede precise planning.
- Many countries have unrealised potential in attracting talent to construction and energy sectors, and employer representatives highlight rising shortages for medium- and high-skilled workers.

**Includes Israel, a small advanced economy (SAE) of interest – see p. 54. Eight recommendations are made, and there are 17 country reports and two thematic reports on energy and construction.*

AUTOMATION & AI

England's Department for Education published *The impact of AI on UK jobs and training* by its Unit for Future Skills, applying a US-based methodology to separate the impact of AI from that of automation more generally.

- The approach considers the abilities needed to perform different job roles and the extent to which these can be aided by a selection of ten common AI applications.
  - It also considers which qualifications are more or less commonly held by workers in the AI-impacted jobs, using a novel dataset that links training routes to job occupation.
- Main findings:
  - Professional occupations are more exposed to AI, particularly those associated with more clerical work and across finance, law and business management roles.
  - This includes management consultants & business analysts, accountants and psychologists, as well as teaching occupations, where the application of large language models is particularly relevant.
  - The finance & insurance sector is more exposed to AI than any other, followed by: information & communication; professional, scientific & technical; property; public administration & defence; and education.
  - Workers in London and SE England have the highest exposure to AI due to their concentration of professional occupations; workers in NE England are in jobs with the lowest exposure in the UK.
  - However, overall the variation in exposure across geographical areas is much smaller than the variation observed across occupations or industries.
  - Employees with more advanced qualifications are typically in jobs more exposed to AI; e.g. those with a Level 6 qualification (degree level) are more likely to work in a job with higher exposure to AI than employees with a Level 3 qualification (e.g. A levels).
  - Employees with FE or apprenticeship qualifications in accounting & finance and HE qualifications in economics and maths are typically in jobs more exposed to AI.
  - Employees with qualifications at Level 3 or below in building & construction, manufacturing technologies, and transportation operations and maintenance are in the least exposed jobs.

IZA published *Automatability of Occupations, Workers' Labor-Market Expectations, and Willingness to Train*, based on a survey of workers in Germany.

- The study looked at whether workers are aware of their occupation's automatability, and how factual information about the automatability affects their job expectations and willingness to participate in further training
- 76.7% of respondents agree that further training is useful for keeping pace with structural change.
  - 66.2% agree that the future need for further training will increase for all employees, and 62.5% that everyone affected by structural change should participate in further training.
  - Respondents' main reasons for not participating in further training are financial constraints (45%), lack of employer support (45%) and time constraints (35.2%).
- Workers who believe that their occupation's automatability is low state the lowest likelihood of participating in further training.
- On average, workers underestimate the automation risk of their occupation, especially those in high-automatability occupations.
- Randomised information about their occupation's automatability increases their concerns about their professional future and expectations about future changes in their work environment.
  - The information also increases willingness to participate in further training, especially among those in highly automatable occupations (+5ppt); it substantially narrows the gap in willingness to train between those in high- and low-automatability occupations.
  - However, misconceptions about an occupation's automatability significantly contribute to low training participation rates among workers in roles most susceptible to technological change and automation.
- If workers underestimate their occupation's automatability, they may therefore underinvest in keeping their skills updated, potentially jeopardising success amid ongoing labour market changes.

The OECD Centre for Educational Research & Innovation published *AI and the Future of Skills, Volume 2: Methods for evaluating AI capabilities*.

- The AI & the Future of Skills project is developing a framework for regularly measuring AI capabilities and comparing them to human skills, which should help policymakers anticipate AI's impacts on education and work.
- Phase two of the project is exploring three different approaches to assessing AI:
  - The use of education tests – asking computer experts to evaluate AI's performance on OECD's tests in reading, maths and science.
  - Tests used to certify workers for occupations – the tests present typical complex practical tasks and are potentially useful for understanding the application of AI in the workplace.
  - Measures from direct AI evaluations – experts were commissioned to develop methods for selecting high-quality direct measures, categorising them according to AI capabilities and systematising them into single indicators.
- Both expert judgements and direct AI measures are necessary to develop indicators of AI capabilities that are understandable, comprehensive, repeatable and policy relevant.
- The third phase of the project is working on a concrete approach for developing such indicators in different domains, using experts to develop a set of integrated AI indicators.
  - The resulting indicators will then be linked to measures of human competences and examples of occupational tasks to derive implications for education and work.
  - They should aid decision-makers in determining necessary policy interventions as AI advances.

IZA published *Automation and Gender: Implications for occupational segregation and the gender skill gap*, examining the differential effects of automation on the labour market and educational outcomes between 1980 and 2017 in the US.

- Although women were disproportionately employed in occupations with a high risk of automation in 1980, they were more likely to shift to high-skill, high-wage occupations than men over time.
- There is a clear gender dimension:

- For a given change in the risk of automation, women are much more likely to move out of routine task-intensive, clerical and retail sales occupations and into higher skilled professional and technical occupations.
- Men are relatively more likely to shift out of production and craft occupations into low-skilled and low routine-intensive occupations such as transportation and construction.
- Overall, initially routine-intensive local labour markets experienced greater occupational gender integration.
- Areas with greater exposure to automation experienced a greater movement of women into occupations with high social skill (and high cognitive) requirements than men.

- College attainment among younger workers, particularly women, also rose significantly more in areas with greater exposure to automation.
- Overall, automation is likely to have played an important role in women's relative progress in the labour market.
- Looking ahead, automation (to the extent that it shares features of the computerisation 'shock' of the 1980s) is likely to pose a greater challenge for the prospects of men relative to women, raising important concerns as to how the present generation of men can rise to the challenges (and promises) of technological change.

CEPS (Centre for European Policy Studies) published *Forge Ahead or Fall Behind: Why we need a United Europe of Artificial Intelligence*.

- Despite Europe having been at the forefront of every industrial revolution, including the digital one up to the emergence of the internet, it is not leading the AI revolution; this is a serious problem as Europe will have to accept cultural and ethical embedding from AI developed elsewhere in the world.
- Although the US and China dominate the global AI marketplace, there are several European hubs with a rich pool of AI talent, scientific excellence and commitment to responsible AI development.
  - This talent and technological potential can forge a path towards trustworthy AI, rooted in humanitarian and democratic values.
  - Europe must strengthen investments in these hubs and help them become better connected.
- Policy ingredients that need to be addressed if Europe is to become a true AI competitor include:
  - Investing in skills and making them available to EU start-ups: developing a tailored approach to the skills needed to transform industrial ecosystems; revamping the education system to nurture a future workforce skilled in AI technologies and critical thinking.

ADULT & LIFELONG LEARNING

The Learning & Work Institute (L&W) published *Adult Participation in Learning Survey 2023*, based on responses from 9,506 UK adults aged 17+, including 400 in Northern Ireland.

- 49% of UK adults have taken part in learning in the last three years, up 8ppt from 2022 and the highest recorded since the survey began in 1996.
  - Age, social grade, labour market status and the age at which respondents completed full-time education are all significant predictors of participation.
  - More men are now participating than women (51% vs 47%).
- The participation rate in England is 51% (+9ppt), 46% in Northern Ireland (+3ppt), and 41% in Scotland (+2ppt) and in Wales (unchanged), leading to a new gap between UK nations.
  - All English regions saw increased rates but the gap between the highest (London – 64%) and the lowest (North East – 42%) is unchanged at 22ppt and may be increasing over the longer term.
- 60% of those in the AB social grade are participating compared with 46% in C1, 55% in C2 and 38% in DE; 35% in DE haven't participated since leaving full-time education, compared with 14% in AB.
  - 64% of those working full time are participating compared with 45% of those unemployed and seeking work.
  - 64% of 35–44 year-olds are participating (+16ppt) and 36% of 55–64 year-olds (+10ppt).
- 57% have taken up their main learning for work/career reasons and 41% for leisure/personal interest, unchanged from 2022, reflecting a sustained increase in learning for leisure post-pandemic.

- The most commonly reported method of learning is independently on their own (34%); 64% say at least some has been online, 50% say it has been fully online; 67% have paid some sort of fee.

- 48% are very (24%) or fairly likely (24%) to take up learning in the next three years, up from 40% in 2022: 84% of current learners but only 11% of those who haven't learnt since full-time education.

There are also findings on: benefits, barriers, learning for career change, using technology and awareness of post-16 options.

L&W published *Using technology to support learning and work: Insights from the Adult Participation in Learning Survey* – key findings from a set of questions in this year's survey.

- 95% of those who had participated in learning during the last three years had used technology, consistent with wider results that show a year-on-year increase in online learning.
  - Types of technology vary widely: 46% watched online videos; 40% completed online assessments; 38% used emails; 35% used video calls/webinars; 33% online learning platforms.

- Respondents said they were more confident using common technologies (e.g. email, smartphones, laptops/PCs and online search engines) in their everyday lives than for learning or work.
  - 69% are confident using email in everyday life, but it falls to 58% for work and 56% for learning.
  - Just 40% are confident in joining video meetings for work and 39% for learning; only 31% are confident using online platforms to learn.

- Those groups least likely to have participated in learning (e.g. older people, those with low/no formal qualifications, unemployed and those in lower socioeconomic groups) are also most likely to lack confidence in using technology for learning and work.

- Those who had used technology identified ways it **enables learning**, e.g. learning at home (48%), at a convenient time (43%) or at their own level and pace (40%); and ways it **enhances learning**, e.g. making it more interesting (29%), and increasing confidence (25%) and motivation (24%).
  - 77% of those who hadn't used it identified at least one potential benefit vs 97% of those who had.

- As part of their learning, 14% had already engaged with AI (17% of men, 11% of women) and 9% with virtual reality (10% of men, 8% of women).

L&W published *All change: Understanding and supporting retraining and career change* as part of its New Futures* programme.

- A record 7.4m people started a new job in 2022–23, driven by a 20% post-pandemic spike in job moves; most moves were within the same sector.
  - Sector switching remained below pre-financial crisis rates, with around 1.7m people making the switch, more commonly in retail and hospitality.

- People qualified to at least degree level are 20% more likely to change jobs in the same sector than those at Level 2 or below, but the latter are 30% more likely to switch sectors.
  - 16–24 year-olds are twice as likely as older people to change jobs in the same sector and 3.5 times as likely to switch sectors.
  - Older people, people working outside retail and hospitality, and people who are more highly qualified are the least likely to switch.

- The average sector switcher working full time faces a £3,731 (14%) pay dip ranging from 5–10% for those switching out of accommodation and food services to 30% for construction and retail.
  - Subsequent pay growth is 2.9 times faster for people changing job than those staying in the same job, but the initial drop in income can be challenging to manage, particularly if training is required.

- Some change jobs or careers to find a role that suits their skills, ambitions and circumstances; others are forced by losing their job, a lack of similar opportunities or a change in circumstances.
  - L&W's 2022 Adult Participation in Learning Survey found that 31% thought they would need training, 25% financial help and 23% advice to retrain.
  - Many aren't sure what opportunities are available, how to access them or what training is needed.

- England's new LLE needs widening to provide more support to more people, including career changers, focusing on: awareness and advice; flexible and tailored learning; and financial help, including enabling benefit claimants to train for up to one year.

**New Futures, funded by the Covid-19 Support Fund, is supporting those who need to reskill and change career due to the pandemic; it includes pilots, evaluation and analysis to inform policy and practice.*

Lloyds Bank published *UK Consumer Digital Index 2023: The UK's largest study of digital and financial lives*, based on findings from over 27k customers and including the 2023 UK Essential Digital Skills (EDS) benchmark.

- The EDS benchmark measures the fundamental tasks needed to access the online world; it has been measured on behalf of England's Department for Education.
  - EDS comprise 26 life tasks and 20 work tasks split across five skill areas: communicating; handling information and content; transacting; problem solving; and being safe and legal online.
  - The framework has three progressive tiers: Foundation, EDS for Life and EDS for Work.
  - An individual needs to perform at least one task in each area, without assistance, to achieve EDS for Life or Work.
- Among the headlines:
  - 25% of UK adults have the lowest digital capability (including 300k aged under 50) and are likely to struggle interacting with online services; key causes are cost of living, fear of fraud and lack of motivation to learn.
  - 84% (44.7m) are at Foundation level (able to perform all eight fundamental tasks) (+4ppt on 2022); 2% (1.3m) are 'digitally disengaged' (-2ppt).
  - Those digitally disengaged or with partial Foundation Level are most likely to be female, aged 65+, social grade C2DE and/or not working.
  - 92% (48.8m) have EDS for Life (+4ppt); 3% (1.5m) can't do any of the EDS for Life tasks (-2ppt).
  - 82% (33.2m) have EDS for Work (+4ppt); 5% (1.9m) can't do any of the EDS for Work tasks (-3ppt).
  - Northern Ireland is below the UK average on EDS for Work (73% vs 82%), as is England (81%); Wales is below average for Foundation Level (82% vs 84%) and EDS for Life (90% vs 92%); Scotland is at or above average in all three areas.

A map shows Foundation Level, EDS for Life and Work rates for every region/nation of the UK.

QAA published *The right ambition, the wrong solution? How [England's] Lifelong Learning Entitlement can deliver a high-quality learning experience*, as part of its policy series on The future of quality in England *[also see p. 18]***.**

- The current policy works in terms of:
  - identifying the right problem: skills gaps; poor productivity; recruitment difficulties; barriers to training, upskilling and reskilling; dominance of the three-year undergraduate degree at age 18
  - changing the funding to address the disparities between those undertaking full qualifications or degrees and those who don't need such long-term and intensive learning.
- However, policymakers need to:
  - Balance the option of working towards a full qualification with accessing a suite of standalone modules, by: removing the requirement for modules to be drawn down from parent course; lowering the threshold of 30 credits to ten credits.
  - Facilitate greater collaboration with the sector, by: enabling it to retain authority on the definition of credit; consulting providers on the barriers, resources and capacity involved to present an accurate impact assessment; consulting with providers offering short courses or microcredentials to gather best practice and evidence on learner demand.
  - Use evidence to determine how quality is measured, by collecting evidence on sector response, learner demand and progression pathways before producing proportionate and relevant quality measurements.

The European Education & Culture Executive Agency published *Back to the Future! Future gazing on adult learning and education – EPALE [Electronic Platform for Adult Learning in Europe] Community Storybook 2023*.

- The 'storybook' is a compendium of experiences, insights and achievements contributed by 86 adult learning practitioners from 24 country members of the EU's EPALE community.
  - Three chapters cover the current and future positions and 'Skills! Skills! Skills!'.

EPALE is an open platform sharing resources, blog posts and discussions on adult education and training.

Cedefop published *Towards European standards for monitoring and evaluation of lifelong guidance systems and services (Vol. II): A preliminary list of indicators for quality frameworks*, a tool for policy dialogue and reflection.

- The list proposes indicators according to: type – input and process, output, outcome, impact; target elements – e.g. practitioner competence, client satisfaction, increased knowledge and skills of service users; and characteristics for each indicator.
- It is a first attempt to present some of the most relevant and common indicators across the EU, based on a literature review and analysis of 40 measures in selected member states.
  - It includes feedback from stakeholders and field experts, representing current discussions.

EQUALITY, DIVERSITY & INCLUSION (EDI)

Making the Leap published *Reaching potential? Advancing social mobility in 2022-23: Key findings from the UK Social Mobility Awards 2023*.

- In total, employers who entered the awards employed close to 1m people across 15 sectors, with finance, law and professional services the most represented.
  - Among educators, just under 50% of entries came from universities.
- Among the findings:
  - 87% actively reached out to individuals of low socioeconomic background (LSEB) in 2023; 52% recruited LSEB people (down from 75% in 2022).
  - Employers' actions included: offering LSEB candidates wider pathways to employment, e.g. apprenticeships, paid internships and paid work placements; running targeted recruitment programmes for those facing specific disadvantages, e.g. refugees and asylum seekers.
  - Some introduced more inclusive hiring practices, e.g. removing academic requirements for entry-level roles; offering targeted recruitment support; using technology and training to reduce bias.
  - Only 35% took action on inclusion and retention (down from 53%); 31% reported progression initiatives (up from 23%), particularly in the finance sector.
  - Staff-led social mobility networks and employee resource groups were increasingly popular; some set targets for senior level representation, ensured progression pathways and processes were transparently defined and communicated, and provided targeted training and development.
  - Key enablers included: action informed by data to drive targeted action; setting realistic goals; transparency, accountability and ensuring it was a long-term organisational priority; passionate leadership, both 'top down' and 'bottom up'; intersectional approaches.

McKinsey & Company published *Diversity Matters Even More: The case for holistic impact*, the fourth in a series, based on data for 1,265 companies in 23 countries and six global regions.

- Companies with diverse leadership teams continue to be associated with higher financial returns across industries and regions, despite differing challenges, stakeholder expectations and ambitions.
  - In 2023, top-quartile companies for diversity had a 39% greater likelihood of financial outperformance compared with their bottom-quartile peers, up from 15% in 2015.
  - Ethnic diversity is the same, with a 39% increased likelihood of outperformance for those in the top quartile of ethnic representation versus the bottom quartile.
- Equitable representation is in sight for the first time in some areas.
  - In the UK, diversity-leading companies average 28% ethnic representation, exceeding the country's general population.
  - In the US, leading companies have reached 50% female representation on executive teams and now have on average 39% of executives from historically under-represented ethnicities.
  - 80% of companies now have at least one woman on their executive team, compared with under 66% in 2020; however, the percentage with ethnic representation is only up from 61% to 68%.
- Across all industries surveyed, more diversity in both boards and executive teams, in both gender and ethnicity, is robustly correlated with higher social and environmental impact scores.
- Creating social impact alongside other business priorities is a challenging task, yet over 50% of sampled companies perform well in community involvement.
  - This suggests diverse leadership teams could help to bolster community involvement, positively impacting ethical disposition, community orientation and the general image of a company.

BITC published *Race at Work Charter 2023: Executive Summary* drawing on a survey of 250 UK employers, exploring the actions they are taking against seven charter commitments.

- 44% published their ethnicity pay gap in 2023 (30% in 2020).
- 95% have a race champion or executive sponsor for race (no change); 53% have targets to increase the racial diversity of their boards and senior executive teams (46%).
- 84% support ethnically diverse individuals in leadership, progression and recruitment (74%).
  - However, only 44% have set objectives for their board and senior team that include action on race (46%); only 20% set race objectives for line managers (no change).
- 73% have mentoring or reverse mentoring schemes for Black, Asian, mixed race and other ethnically diverse employees (72%); 56% sponsor ethnically diverse employees (46%).
- 95% have a bullying and harassment policy, but only 25% of them have conducted a review to ensure the policies are working (38% in 2020 and 45% in 2019).

Cogent Skills' Science Industry Partnership (SIP) published *Building a More Inclusive Future: Promoting Equality, Diversity & Inclusion in UK Life Sciences*, based on a literature review plus survey responses from 31 employers, national data, case studies and best practice.

- Among the findings drawing on its EDI checklist of policies, practices and initiatives:
  - Primary concerns include: the lack of minority ethnic individuals in senior positions (52%) and within the organisation generally (42%); the lack of women in senior positions (42%).
  - 74% have an EDI strategy and 54% have a diversity manager or diversity taskforce responsible for implementing it; 58% have EDI embedded into the wider organisational strategy.
  - 63% train line managers on EDI issues.
  - 74% have transparent pay, training and promotion processes to ensure equal access; 74% create career pathways with defined competency frameworks that clarify requirements for advancement.
  - 89% offer flexible working arrangements where possible; 74% make their workplaces welcoming and supportive to those returning from parental leave or career breaks.
  - 68% take steps to mitigate bias in recruitment; 63% consciously use succession planning to identify and develop diverse future leaders; 62% use initiatives to diversify employee networks.

International Comparisons

The British Council published *Global Perceptions 2023: How 18 to 34 year olds see the UK and the world*, based on a survey of 19,601 educated young people in 18 G20 countries.

- The UK is now ranked second behind Italy and just ahead of Canada for overall attractiveness.
  - The UK score (76%) is 1ppt higher than in 2021 and +5ppt on spring 2016 (when it was joint 4th) – just before the vote to leave the EU.
  - The rankings vary considerably by the respondents' country: the UK ranks first among those in India and Italy but 5th in Brazil, Germany, Türkiye and the USA, 6th in Mexico and 7th in Argentina.
- The UK averages second for trust (second for trust in people – 61% and in government – 54%; first for trust in institutions – 58%) but its position is strengthening, and on current trends it is well placed to overtake Canada.
  - Cultural and educational exchange plays an important role in positive perceptions of the UK; where this is curated by the British Council, trust towards the UK Government is 15ppt higher.
- The UK is first among the G20 countries for influence in the world, just ahead of Japan and the US.
- The three values considered most important by respondents overall are equality (36%), sustainability (30%) and freedom (30%).
  - The UK comes 4th (53%) after Canada (61%), Australia (57%) and Germany (53%) in terms of the countries felt to do most to support these values.

Cedefop published a *Global inventory of national and regional qualifications frameworks [NQFs] 2022* in two volumes:

- *Volume I: Thematic chapters* identifies emerging issues in 93 NQFs, including digitalisation, validation of informal and non-formal learning and the increased use of microcredentials.

- A cross-country analysis of national case studies examines the objectives, functions and characteristics of NQFs and their contributions to wider educational and training systems.
- Countries mentioned include England, Scotland, Wales, the RoI and most of the SAEs *[see p. 54]*.

- *Volume II: National and regional case studies* includes information on 79 countries, including NQF objectives, functions and institutional arrangements, and insights on impact and future priorities.
  - It includes case studies from England & Northern Ireland, Scotland, Wales, the RoI and all the other SAEs.

Cedefop published *2022 country reports* for its European inventory of NQFs.

- They include reports for RoI and for Austria, Belgium, Czechia, Denmark, Estonia, Finland, Iceland, Luxembourg, Norway, Sweden and Switzerland.
- Each report includes information on: the national context, NQF objectives and functions; levels, learning outcomes and qualifications; institutional arrangements and stakeholder involvement; recognition and validation of prior learning; NQF implementation and impact; referencing to the EQF and reflections and plans.

The European Commission published:

- ***The Structure of the European Education Systems 2023/24: Schematic diagrams – Eurydice facts and figures*** for 39 systems from 37 countries participating in the Erasmus+ programme; it covers mainstream education from pre-primary to tertiary.
- ***Compulsory education in Europe 2023/2024: Eurydice facts and figures*** for 39 systems from 37 countries participating in Erasmus+.
- A set of ***Structural Indicators for Monitoring Education and Training Systems in Europe 2023***, providing a snapshot of the presence (or absence) of top-level measures for 38 European education systems, on:
  - ***Equity in school and higher education*** based on indicators on key policies in four broad areas
  - ***Early leaving from education and training [ELET]*** with data on education policies including: early warning systems to prevent ELET; teacher education and training on ELET; targeted support for learners at risk of ELET; and education and career guidance
  - ***Higher education*** on key policies addressing gender equity, admissions and lifelong learning.

Government

NORTHERN IRELAND

The Department for the Economy (DfE) published *Careers Advice and Guidance and Future Intentions 2022: Findings from the Young Persons' Behaviour and Attitudes Survey 2022*.

- 66% of Year 11/12 pupils felt very confident (16%)/confident (50%) about making career decisions.
- 85% were not aware of the government's all-age careers service; 85% didn't know how to contact a careers adviser outside school.
- 80% would like to find work after they finish school; 63% knew what area they wanted to work in; 38% would like to set up their own company.
  - 69% would like to continue studying; 60% knew what subject they wanted to study; 37% would like to attend university outside Northern Ireland and 34% locally.
  - 57% would like to do an apprenticeship or vocational training.

The DfE published *Further Education Outcomes: Academic year 2021/22*, plus an infographic and dashboard, drawing on the ninth annual survey of FE college leavers.

- Six months after achieving their qualification, 91% reported a positive outcome:
  - 58% were in employment: 71% in full-time and 23% part-time work; 7% were in work and study.
  - 33% were re-enrolled in education, of whom 82% were on a course at a higher level; 31% were at university and 60% in an FE college.
  - 4% classified themselves as unemployed.

The DfE published *Measuring Success: 10X metrics to achieve a 10X economy – Annual Report 2023*, setting out progress against the baseline report published in October 2022.

- Progress on the three 10X pillars of **innovation**, **inclusivity** and **sustainability** is measured through a three-tier approach:
  - **Tier 1 International metrics**: high-level, internationally recognised metrics that enable comparison across all SAEs; they include tertiary-level educational attainment (innovation) and Level 3–8 educational attainment (inclusivity).
  - **Tier 2 Underpinning metrics**: a set of Northern Ireland-focused measures that are important for painting the overall picture of performance and identifying key policy lessons.
  - **Tier 3 Programme-level/Policy metrics and key performance indicators (KPIs)** – yet to be fully developed: policy owners and implementation agents will be required to demonstrate how their actions and KPIs align with and drive change in the Underpinning metrics and ultimately improve the International metrics.
- Due to data lags, the impact of Covid-19 and short-term variability in the data, it may be too early to draw definitive conclusions about 10X performance.
- In summary, however, the report shows that Northern Ireland is within range of the other SAEs across many of the Tier 1 metrics, although there is substantial scope for improvement.
  - **Innovation**: below the SAE average across all four Tier 1 metrics, including tertiary-level educational attainment
  - **Inclusivity**: better than the SAE average, but lagging behind on indicators including educational attainment at Levels 3–8
  - **Sustainability**: KPIs are at relatively similar levels to many of its comparators.
- With room for improvement across the board, a sub-regional approach is now being considered; in May 2023, a call for evidence sought views on what such an approach should look like.

The DfE also published Place10X Call for Evidence: Summary of responses & next steps*, with a view to shaping future place-based departmental interventions. A sub-regional economic plan is now being developed, to be completed by September 2024; and work is underway to embed a place-based focus in existing programmes, including apprenticeship proposals and the development of tech clusters.*

The Northern Ireland Statistics & Research Agency and the DfE published *First Degree and Postgraduate Students with Narrow STEM Qualifications gained at NI HEIs (10X Strategic Goal) – 2017/18 to 2021/22*, an HE statistical factsheet.

- One of the three strategic goals set out in the 2022 *Skills Strategy for Northern Ireland* seeks to increase the numbers gaining Narrow STEM qualifications from 24% in 2019/20 to 27% by 2030.
  - Narrow STEM related courses include: biological sciences; physical sciences; mathematical sciences; computer science; engineering & technology; and architecture, building & planning.
- In 2021/22, the proportion remained at 24%, although the underlying number of students increased from 3,565 to 4,405.
  - The most popular subjects were computing (33%) and engineering & technology (24%).
- 35% of males and 17% of females gained Narrow STEM qualifications, similar to previous years.
  - Males were most likely to qualify in computing (41%) and engineering (30%); females were most likely to qualify in psychology (30%), computing (20%) and engineering & technology (15%).

ENGLAND

England's Careers & Enterprise Company (CEC) published *From outreach to intake: Employer Standards for Careers Education*, drawing on self-evaluation data gathered from CEC's new Employer Standards framework and tool.

- The tool helps organisations target their outreach work with schools/colleges and compare their programmes to other industries.
- Nine standards cover three areas:
  - Inspire young people for their best next step: 1. Provide meaningful opportunities.; 2. Be inclusive; 3. Evaluate and improve.
  - Prepare young people to be career ready: 4. Build essential skills and explain their relevance; 5. Prepare young people for application processes; 6. Raise awareness of pathways into work.

- Collaborate for success: 7. Engage over the long term; 8. Partner with others; 9. Value the engagement.

- 365 employers have completed the nine standards: 66% large/medium-sized; 34% small/micro; their education programmes have improved and outreach efforts are more likely to result in intake.
  - Cornerstone Employers, who play a key role in Careers Hubs, perform better against the standards than others, achieving on average at least 6.1 standards vs 4.9 for non-Cornerstone Employers.
  - Construction and health & social work are among the sectors with sophisticated outreach programmes that include long-term engagement and effective targeting; employers are achieving or exceeding 7.1 and 6.5 Standards respectively, versus 5.7 for all employers.

- Employers who use outreach to promote pathways to work are receiving more applications; those doing the most targeted and intensive work are four times more likely to report an increase in apprenticeship applications.

- 83% say their work in schools/colleges is helping develop new talent pipelines; 37% say it reduces recruitment costs; 86% that it is encouraging young people to take up careers in their sector; 70% closing skills gaps; 67% helping to improve diversity.

- Standard 5 is proving the most challenging for employers, while 58% of Year 11 students report they don't feel confident talking about their skills in an interview.
  - 41% of employers are helping young people prepare for job applications, of whom 71% focus on interviews but only 35% on areas such as assessment centres, psychometric testing and presentations, despite these being increasingly common.

The House of Commons Library published *Careers guidance in schools, colleges and universities (England)*, a research briefing looking at the requirements, the quality of advice provided and the organisations working to provide it.

- State-funded schools and FE colleges in England are required to provide careers guidance for 11–18 year-olds students, a duty that has been steadily extended over recent years.
  - In September 2012, LA-maintained schools became subject to a statutory duty to provide impartial careers guidance to pupils in Years 9–11.
  - In September 2013, this was expanded to cover pupils in Years 8–13,and in September 2022, new legislation extended it to Year 7 and to academy schools.
  - England's Department for Education publishes statutory guidance on the duty, most recently updated in January 2023.

- HE institutions are not required to provide careers advice, but nonetheless offer the service.

Think tank EDSK published *Broken Ladders: Why the 'ladder of opportunity' is broken for so many young people*, focusing on those in England who don't follow an academic path.

- In recent years apprenticeships have 'drifted away' from young people; various programmes have come and gone; and research evidence has frequently been ignored in favour of ideology.
  - The instability has not only been detrimental for young people, but employers are less likely to engage with and recruit younger workers if the education and skills system is constantly changing.

- A high-performing and respected HE sector is essential in a modern economy, but too little attention has been paid to those who feel that university and other forms of HE are not right for them.

- Government must take an evidence-led approach that allows every young person to find a suitable pathway that matches their skills and talents; progress is required on two fronts:
  - Better pipelines into good quality jobs for everyone who chooses to seek employment and training after leaving school/college.
  - Recruiting young people de-risked to the point where it becomes a rational business decision for employers, rather than relying on a handful of willing organisations.

- Ten recommendations:
  - To increase entry-level opportunities and clear progression to apprenticeships, redesign the 16–24 'traineeships' programme, with an expenses bursary of £100 a week.
  - To enhance employability skills, introduce a new 14–16 'Young Traineeships' programme, to include a 50-day work placement over two years, with completion equivalent to GCSE at Grade 4.
  - To ensure recognition of achievement, the EBacc performance measure withdrawn immediately and 'Progress 8' reformed to include any subjects chosen alongside English, maths and science.

- An independent review of T levels to make them more viable for learners and employers; consider reducing their size, splitting up the 45-day work placement and redesigning the 'foundation year'.
- Exam boards to be allowed to create new English and maths qualifications that are specific to each of the 15 technical education routes.
- To ensure that apprenticeships remain focused on young people who aren't following an academic pathway, make those already qualified at Level 6+ no longer eligible to start a levy-funded apprenticeship.
- To prioritise the interests of young people but without excluding older learners from starting an apprenticeship, consider preventing employers from accessing further levy funding if they have trained more apprentices aged 25+ than 16–24.
- To generate more job openings for the most disadvantaged young people, reinstate a more targeted version of 'Kickstart', which offered subsidies to employers for creating new jobs.
- To build capacity among employers to recruit and support young people, give financial incentives of up to £5k for organisations offering apprenticeships, traineeships and T level placements.
- To ensure that new non-apprenticeship opportunities are sustainable over time, focus on funding and promoting local partnerships between employers, e.g. through 'training networks'.

The cross-party think tank Policy Connect published *Higher Technical Qualifications [HTQs]: How to liberate employers & skill workers for the future*, findings from an inquiry carried out by the Skills Commission in partnership with the Centre for Education & Youth.

- England's HTQs are employer-led qualifications at Level 4/5 that are an alternative to apprenticeships or degrees and aim to provide the skills employers require while also being designed for modular and flexible study.
- Uptake and utilisation remain low; a series of sector-specific roundtables highlighted three primary reasons:
  - Learner-led demand is held back by a lack of awareness, financial disincentives, lack of flexibility and uncertainty about employment prospects.
  - Employer-led demand is held back by a lack of awareness and financial disincentives.
  - Even where there is demand, providers face barriers to offering course places.
- Five key policy recommendations to address existing gaps:
  - **A phased, employer-led strategy for growth**: generate greater demand from employers for employee training; encourage adult learners to independently upskill or reskill; develop a broader appeal for HTQs that includes the specialisation of school leavers.
  - **Liberate employers' choice**: make it easier for employers to spend the apprenticeship levy; e.g. they could choose to use 100% for apprenticeships or up to 50% for accredited HTQs.
  - **Seed the market for HTQs funded via the LLE**: remove barriers to their use, such as minimum eligibility requirements and equivalent or lower qualification restrictions; increasing employer demand will de-risk individuals' use of the LLE on an HTQ.
  - **Back flexible training offers through coordination**: a joined-up approach at the local level would allow employers to drive new markets for providers by sourcing appropriate in-service training for employees that is flexible and modular in nature.
  - **Accredit modularised qualifications**: flexibility and modularisation are needed to enable mid-career upskilling and reskilling through HTQs; regional collaborative mechanisms can inject flexibility, while England's Institute for Apprenticeships & Technical Education (IfATE) now has the powers to accredit and quality mark modularised HTQs.

HEPI published *Connecting the Dots: The need for an effective skills system in England*, arguing for significantly more focus on breaking down pervasive silos.

- England's post-16 system suffers from so many multiple and overlapping dysfunctions that 'system' is a misnomer.
  - The lack of a strategic framework and an increasingly difficult financial environment are driving non-strategic competition for learners, which discourages the development of specialisms and undermines effective partnership working.
  - Collaboration between tertiary institutions is discouraged by the 'regulatory quagmire' of multiple bodies vying for influence and setting different expectations, making the offer difficult to navigate for learners and employers.

- To meet England's skills needs, a range of appropriately funded specialist institutions is required, which in turn requires a joined-up post-16 system with clear roles in a national framework with regional accountability and delivery.
  - **Secondary**: sixth forms could prioritise between a focus on HE progression via A levels/BTECs or through technical provision via T levels and employer sponsorship.
  - **FE**: depending on local need, colleges could specialise in: gateway provision, e.g. adult education and remedial FE; specialist provision; or technical provision through applied qualifications including Level 5/6 HTQs.
  - **HE**: while some universities would continue to offer comprehensive course portfolios others could focus on technical education complemented by innovation driven by employer partnerships.

The Edge Foundation published a blog post on the RoI's Technological Universities (TUs), mergers of Institutes of Technology (former regional training colleges) that prioritise teaching, research and collaboration, contribute to regional economic development and are key to its plans for tertiary education.

The Association of Colleges published *Colleges respond to labour market need* – findings from a survey of 86 colleges in England.

- Learner demand is outstripping funding for courses in four key sectors on the SOL: construction; engineering; digital; and health & social care.
- 34% have waiting lists for full-time construction courses, 22% engineering, 12% health & social care and digital.
  - 10% have waiting lists for part-time and evening courses in construction and engineering and 5% in health & social care and digital.
- Meanwhile 86% of large organisations and 68% of SMEs are facing skills shortages; 28% of businesses say they have had to turn down work or are unable to bid for work due to staff shortages.

The new FE Collective* published *Thinking About ... Artificial Intelligence, Investing in the Sector of the Future, Progression*, based on an event examining these three critical areas.

- Key findings include:
  - Complicated, scarce and lagged public funding of FE and skills must be replaced with a more agile, localised and modular system of investment and provision.
  - The Government's 'parent–child' micromanagement of FE and skills should be scrapped in favour of greater autonomy and trust in the sector's knowledge, understanding and vision for its future.
  - FE and skills can become more 'investment ready' for public and private investors with a long-term strategic plan that gives clarity on skills needs for the jobs of the future.
  - AI can revolutionise learning for the better, but more investment is vital alongside better guidance on safeguarding and ownership of data.
  - Professionalisation of the sector is key to its progress, with educators, leaders and governance given better guidance on progression routes and continuing professional development.

Ten top takeaways and a call to action for each theme are provided.

FE Collective was founded by* FE News *to '[harness] the collective intelligence' and create a knowledge exchange and inclusive think tank.*

The Sutton Trust published *Student Maintenance – analysis December 2023*, drawing on findings from a survey of 2,104 current undergraduates in England.

- Findings include:
  - 62% spend less than £37 a week on food – the minimum needed for a single person to buy essential items according to the Joseph Rowntree Foundation and Trussell Trust.
  - Students outside London have median costs of £11,400 p.a. for accommodation (52%), groceries (12%) and bills (6%); however the median total loan in England outside of London is £7k; in London, it's £8,500 compared with £17k+ needed to live in the capital.
  - 66% take on paid work, 20% of them for 16–30 hours a week, with 49% missing classes as a result and 23% having missed a deadline or asked for an extension.

A brief comparison of trends in maintenance support across the four UK nations is included.

L&W published *Essential Skills: England* summarising findings from a modelling exercise among 16–64 year-olds.

- L&W argues that the government should aim for 90% of adults to have essential skills for life and work by 2035, up from 75% today, and is calling for increased investment and local targeting.
  - 9m 16–64 year-olds in England lack essential literacy or numeracy skills.
- Disparities within local areas far exceed those between authorities.
  - London has the third lowest percentage of people with essential skills needs among the combined authorities; it is also home to ten of the 20 wards with the highest essential skills needs.
  - Greater Manchester Combined Authority has the third highest percentage of needs among the combined authorities but includes six of the 20 wards in England with the lowest percentage nationally.
  - Just 2ppt separate Tees Valley (25%), which has the highest needs, and the West of England (23%), which has the lowest.

SCOTLAND

The Fraser of Allander Institute at the University of Strathclyde published *The economic contribution of colleges in Scotland*, commissioned by College Development Network and Colleges Scotland.

- For the 2021/22 graduation cohort, the following are estimated:
  - Scottish GDP will be cumulatively better off by £8b in present value terms over the long term when compared to an economy without these skilled graduates, equivalent to a £73k boost in productivity per graduate.
  - The uplift in productivity will support over 31k full-time equivalent (FTE) jobs across the Scottish economy.
- Over their 40-year working lives, those who graduated in 2016/17–2021/22 will make the Scottish economy cumulatively better off by around £52b, help to boost labour productivity by 2% and help to support an additional 203k FTE jobs.
- College spending also supports significant economic activity and employment, in addition to the 10,700 FTE employment supported by the sector.
  - Modelling suggests it helps support an additional 4,400 jobs, of which 2,700 are directly supported by college supply chain spending, with the remaining 1,700 supported across the wider economy.
  - It generates substantial additional economic activity; with £225m supported in GVA (gross value added), colleges have the second highest GVA output multiplier (GVA supported for every £1m of final spend) of all 97 economic sectors.

The Institute also published The economic impact of university research funding in Scotland*.*

Skills Development Scotland published *CESAP [Climate Emergency Skills Action Plan] Pathfinder: A Dynamic Skills Response to Supporting the Transition to Net Zero*, an overview for Scotland following the 2020 publication of *CESAP 2020–2025*.

- The research examined current and future skills demand, aimed to establish a baseline of green skills provision and identified opportunities for action needed across the skills system.
- ~£90b of **green investments** are underway or planned for the next three years, mainly in energy transition, transport and construction.
  - This is a significant level of investment and over the duration of the planned expenditure (up to 10 years) would be around 5% of Scotland's GDP annually.
- **Demand for green skills**:
  - In 2022, 690,900 people were employed in CESAP sectors, 26.5% of Scottish employment, with the largest share in construction; 77k additional people are expected to be required from 2022 to 2025.
  - Competition for skills – particularly in energy & waste treatment, construction, transport, manufacturing and agriculture – is a key challenge, and upskilling and reskilling are critical.
- **Provision of green skills**:
  - 26.6% of college enrolments were aligned to green sectors, 44.7% of these were in engineering.

- Almost 30% of Modern Apprenticeship (MA) and 38% of Graduate Apprenticeship (GA) starts are in sectors important to net zero transition.
- Retaining talent and skills is important to achieving the transition – there is strong retention of MAs and GAs who trained in green occupations, with ~90% of GAs and MAs aligned to CESAP sectors still working in the sector 15 months after qualifying.
- However, of the 15.8% of graduates from Scottish universities who were working in a CESAP sector 15 months after graduation, ~40% of these were in a job outside Scotland.

- Recommendations include establishing a mechanism to better disaggregate the extent to which existing provision is supporting reskilling and upskilling to support the transition to net zero.

WALES

The Welsh Government published *Economic Mission: Priorities for a stronger economy*.

- Four key priorities:
  - **A just transition and green prosperity**: realising the enormous net zero economic opportunities and engaging with businesses and people to move towards a just transition.
  - **A platform for young people, fair work, skills and success**: backing young people to achieve ambitious futures in Wales; prioritising their skills and creativity.
  - **Stronger partnerships for stronger regions and the everyday economy**: working with regions to agree a smaller set of priorities for growth, local jobs and major investment; new joint working to boost the case for UK investment in areas including nuclear, offshore wind and tech.
  - **Investing for growth**: working in partnership to boost investment and growth that prizes fair work and long-termism; a new mission-based innovation strategy will target new investment in a post EU landscape, supporting commercialisation, R&D and entrepreneurship.
- The Government will: publish an updated Net Zero Plan for every carbon budget; narrow the skills divide through its Employability & Skills Plan; provide more support for R&D and a thriving HE sector and advance the Digital Strategy for Wales; take a Team Wales approach to decisions that consider future generations.
- It will work with the Wellbeing Economy Governments (WEGo) group – Wales, Scotland, Iceland, New Zealand, Finland and Canada – to understand the key priorities for a wellbeing economy.

The Federation of Small Businesses and the CIPD published *A Skills-Led Economy for Wales: Growing SMEs through skills development*, based on in-depth interviews with 30 firms and stakeholders, focused on how well the system meets their key business and skills challenges.

- Overall, there is a critical need for:
  - A more robust alliance between education and training and labour market stakeholders, with a particular emphasis on SMEs.
  - At Welsh Government level, a collaborative, cross-departmental approach that aligns with skills and economic needs; and a skills-led mission that ensures a joined-up approach geared towards long-term economic development.
  - An interconnected response at local level, which is of particular relevance to SMEs; the OECD has long advocated for a local ecosystem approach to address issues related to growth, jobs and skills.
  - Building core people-management capability and improving 'absorptive capacity', given that many SMEs either lack a dedicated HR function or are time and resource poor.
- Principles for a skills-based economy growth approach, focused on SMEs, include:
  - While many economic development and growth levers don't sit with Welsh Government, this area is largely devolved, and so should provide a clear economic priority.
  - The strategy must be based around making access to skills easier, within a wider business support aim of creating more 'headroom' for businesses to take opportunities including skills development.
  - The general focus of business support should be on alleviating short-term difficulties in the cost of living and of doing business, with the aim of providing headroom in the longer term to build a more resilient SME-growth entrepreneurial ecosystem.
  - A mission approach would then look to gear institutions, ways of working, targets and measures and contracting obligations and procurement processes to building that goal.

REPUBLIC OF IRELAND (RoI)

The Department of Further & Higher Education, Research, Innovation & Science (DFHERIS) published *Statement of Strategy 2023–25*.

- Its six strategic goals are:
  - Develop talent
  - Promote research, innovation and science
  - Support inclusion
  - Global engagement: in order to continue to draw high achieving individuals from abroad to the RoI's international education system and to enable the RoI to compete on the world stage
  - System performance and reform: collaborating with stakeholders in developing a 'unified tertiary system', transforming apprenticeships and embracing the importance of skills development
  - Capabilities of DFHERIS staff: including addressing learning and development needs.

SOLAS (Further Education & Training Authority of Ireland) published *National Skills Bulletin 2023*, an overview of the labour market at occupational level for the National Skills Council.

- The report supports policymaking in employment, education and training, and immigration (particularly sourcing skills in short supply in the Irish and EU labour market) and informs careers guidance and choices.
  - Skills shortages are anticipated in occupations including science and engineering, ICT, health & social care, construction, other craft, hospitality and transport & logistics.
  - Upskilling and reskilling requirements due to digitalisation and/or climate-related activities are particularly key for financial, construction, other craft, government admin, manufacturing and transport & logistics occupations.

The OECD published *Boosting Social Entrepreneurship and Social Enterprise Development in Ireland: In-depth policy review*, including a chapter on skills and business development for social enterprises.

- The RoI's 2019–22 National Social Enterprise Policy highlighted needs in areas such as business planning, mentoring, capacity building, impact measurement and digital innovation.
  - Organisational capabilities and skills play a crucial role, as they are embedded in non-transferable assets that can enhance the effectiveness and efficiency of other resources, e.g. marketing capabilities, planning skills, leadership, managerial competency, entrepreneurial traits and quality.
- Several support measures for social enterprises are available in Ireland, usually offered by local, national and some international support networks, incubators and other ecosystem enablers.
  - Despite this, social enterprises still need to develop specific skills, especially around business development, to achieve viability and sustainability.
- Strengths of the social enterprise ecosystem include:
  - **Tertiary and VET-level training and capacity-building** programmes provided by both public and private institutions; some are backed by public funding or embedded within a national public policy initiative, while some focus exclusively on social enterprises; opportunities are also offered by 'ecosystem builders' – usually not-for-profit or hybrid organisations.
  - **Networking organisations** such as the Irish Local Development Network, which represents 49 not-for-profit Local Development Companies.
  - **Social Entrepreneurs Ireland**, which identifies and assists social entrepreneurs throughout their development, from early-stage start-up to impacting at scale.
  - **Local Enterprise Offices** – some allow social enterprises to join their regular training courses.
  - Other enablers such as **HEIs**, which promote skills transfer and development of the knowledge base, and an increasing number of **local and national support and advocacy organisations**.
- Challenges include: overcoming barriers to financial sustainability, including unskilled staff and weak management; the fragmented nature of the various training opportunities available; shortages in training related to general entrepreneurial skills, scaling up, strategic business planning and risk and finance management.

Cedefop published *Ireland: responding to skills and workforce needs in the construction sector*, a news report.

- The approval of the Construction Safety Licensing Bill in summer 2023 brought in skills-based assessments and a modern licensing model for the sector.
- The licensing model, introduced to minimise accidents and injuries, is also expected to create awareness of the scale and diversity of opportunities in the sector and might encourage more women to participate.
  - The legislation also enables people who aren't qualified apprentices or professionals to obtain a licence that recognises their skills.

EUROPEAN UNION (EU)

The European Commission published *Education and Training Monitor 2023*, plus 27 country reports.

- Challenges include:
  - Prevalent underachievement in basic skills
  - Widespread inequity in education access and performance
  - More women than men are obtaining third-level qualifications
  - Women are still heavily under-represented in STEM.
- Teacher shortages are an increasing cause of concern across Europe, particularly in disadvantaged regions, in STEM and language subjects, and male teachers at lower education levels.
  - Policy responses tend to be aimed at addressing shortages in specific subjects rather than at addressing geographic imbalances.
  - Making teaching more attractive requires a balanced policy approach to both teacher recruitment and retention.
- **VET**: Almost 66% of recent graduates from VET experienced work-based learning.
  - After a volatile period linked to the pandemic, the employment rate of recent VET graduates (79.7% in 2022) is moving closer to the target of 82% by 2025.
  - Across the EU on average, recent VET graduates who experienced work-based learning during VET were more likely to be employed (82.5% in 2022) than those who had not (71.6%).
  - Teaching professionals in VET are in high demand, with shortages reported in many countries.
- The proportion of **early leavers from education and training** continues to fall and remains on track to achieve the 2030 target of less than 9%.
- **Tertiary education**:
  - In 2022, 42% of 25–34 year-olds had a tertiary qualification; the EU 2030 target is 45%.
  - There are persistent gender gaps in all EU countries in attainment rates and areas of education; only 18 education systems have strategies aimed at gender equity in HE; those aimed at widening access for under-represented young people are slightly more common.
  - Countries continue modernising HE, via e.g. digitalisation, competence frameworks and microcredentials.
  - The proportion of graduates who spend time abroad during their studies remains below 10% in most EU countries.
  - However, the proportion completing a full degree abroad (degree mobility) continued to increase.
- **Lifelong learning**:
  - Action is needed to (re)engage all working-age adults, particularly those who are older, less educated, outside the labour force and living in rural areas.

Cedefop published *Stemming the tide: Tackling early leaving from vocational education and training [ELVET] in times of crises – Synthesis report of Cedefop/ReferNet survey*.

- The report is based on a 2022 survey of Cedefop's reporting network (ReferNet) and findings are presented comparatively across the participating EU member states, Norway and Iceland.
  - Overall, there are no national definitions of ELVET, although ELVET-related data are collected by 18 countries, with 17 collecting data on factors leading to dropout.

- Around 20 countries have processes and mechanisms in place for identifying and supporting learners at risk of dropping out.

- The top four reasons for dropping out of VET in Europe are:
  - Low overall education achievement and attendance
  - Health and wellbeing issues
  - Lack of family engagement and support
  - Lack of or insufficient guidance to support choices.

- Most countries reported that VET learners in school-based settings were provided with psychological and mental health support during Covid-related school closures.
  - Most offered training on digital skills and competences to facilitate participation in online learning, while many provided free internet connection and necessary equipment.
  - Many adapted the school-based programme to distance learning, e.g. teaching practical elements through simulations.
  - Only in a few was online material translated for ethnic minorities and refugees.

- There is much less information about support in distance learning and teaching in work-based learning settings.
  - Only a few countries reported that companies provided training on digital skills and competences; only four that companies provided free internet connection and equipment; and only three that they offered learners psychological and mental health support.

- Overall, measuring ELVET is complicated and comparative analysis almost impossible.
  - From 2024, the Labour Force Survey will include variables that will be collected every eight years, distinguishing between general and vocational education.

SMALL ADVANCED ECONOMIES (SAEs)

Includes relevant items by/about the following SAEs chosen by the DfE Northern Ireland for comparative purposes: Austria, Belgium, Czechia, Denmark, Estonia, Finland, Iceland, Israel, Luxembourg, New Zealand, Norway, Sweden and Switzerland (in addition to Scotland, Wales and the RoI, covered above).

Cedefop published 2023 Skills Forecast country reports for a number of SAEs, summarising key future trends in jobs and skills up to 2035, taking account of global economic developments up to spring 2022.

- They offer a concise outlook on national employment trends by sector, occupational group and education level, as well as developments in the working-age population by age and gender.
  - A common methodology and harmonised data ensure comparability of results across member states.

- Reports are available for: Austria, Belgium, Czechia, Denmark, Estonia, Finland, Luxembourg, RoI and Sweden.

Cedefop published 2023 updates to its information on 'skills anticipation' in a number of SAEs.

- They summarise the various mechanisms used to forecast future skills needs and how the resulting intelligence is used in both policy and programmes.

- Updates are available for: Austria, Belgium, Czechia, Denmark, Estonia, Finland, Iceland, Luxembourg, Norway, RoI and Sweden.

Cedefop published a series of articles by its community of apprenticeship experts, summarising how apprenticeships are being 'greened' in a number of countries, including Denmark, Norway and Sweden.

Austria

Cedefop published *Austria: monitoring apprenticeship graduates underlines the importance of training success*, a news report.

- Monitoring of apprenticeship graduates and dropouts from 2011 to 2020 shows a direct correlation between training success and labour market success three years after completing an apprenticeship.

- Successful completion is also clearly impacted by age:
  - 7% of apprentices who start their training immediately after completing compulsory schools at age 15 drop out from the training, rising to 12% among 16 year-olds and 21% for 17 year-olds.
  - The proportion continues to rise as age increases and is 34% among 24 year-old starters.
- Although gender doesn't influence overall training success, women are more likely to drop out of male-dominated apprenticeships and men out of those dominated by females.
- Three years after completion, 84% of apprentices were employed, compared with 44% of those who dropped out; 9% were unemployed compared with 24% of those who dropped out.

Denmark

Cedefop published *Denmark: substantial funds set aside for VET*, a news report.

- The Danish government has set aside substantial funds in 2024 and beyond to make VET more appealing to both young people and adults.
  - The funds will be used to enhance quality, including via investments in state-of-the-art equipment, upskilling of educators and the creation of more attractive social and academic environments.
- The investments are expected to contribute to Denmark's overall commitment to environmental sustainability, with VET playing a crucial role in its ambitious green transition, based on the 2020 Climate Act.

Czechia

Cedefop published *Czechia: Changes to the Act on Pedagogical Staff*, a news report.

- The amendment to the Act, which has been in train since 2017, introduces around 40 changes, including:
  - A new vocational training instructor qualification for graduates of upper secondary VET programmes whose educational background aligns with the subject they want to teach; previously, they had to have undergone some form of tertiary pedagogical education.
  - Continuing education programmes to enhance vocational qualifications no longer need to be accredited by the Education Ministry; teaching staff are still legally obliged to update, uphold and improve their qualifications.
  - FE institutions are now authorised to provide pedagogical training for prospective upper secondary teachers.

Estonia

Cedefop published *Estonia: Investing in green and digital reskilling and upskilling*, a news report.

- In 2024, substantial government funds are planned for in-service training, retraining and upskilling for adults who have outdated skills or a low-level qualification.
  - There is also a focus on curriculum development in VET and HE to support digitalisation and the shift towards a climate-neutral economy.
- Through the Recovery & Resilience Fund, €11m have been reserved for the green and digital transitions and a further €9m to advance knowledge and skills in the production, engineering, technology and IT sectors.
- In 2023, provisions were approved to support businesses in their green transition.
  - This initiative involves developing new green skills-oriented microcredential programmes in fields such as transportation, energy, agriculture, food processing, construction, chemical technology, materials processing, environmental sciences and waste management.

Finland

The Ministry of Education & Culture published *Policies for the digitalisation of education and training until 2027*, setting out a number of measures and defining how responsibilities will be shared between the Ministry and the Finnish National Agency for Education.

- The vision is for Finland to become the world's leading developer and user of sustainable digitalisation in teaching and education and training by 2027.

- Digitalisation: promotes equal opportunities for everyone to learn and develop; supports the individual needs of learners and promotes equality and accessibility of education; supports cooperation between actors and learning at different stages of life.
- The approach will follow the principles of sustainable development.

- The goals are:
  - Improving everyone's ability to learn and develop their competence through digitalisation
  - Ensuring digital solutions constitute a high-quality, interoperable digital operating environment supporting cooperation between actors
  - Supporting knowledge-based management and development.

Cedefop published *Finland: The government sets objectives for vocational education and training*, a news report.

- The programme published in June 2023 by the new government set out objectives for VET, including: combatting early leaving; promoting apprenticeships and training agreements; and guaranteeing access to contact teaching, workplace instruction and support for learning.

- The programme also:
  - Foresees restructuring VET funding and introducing stronger incentives for training providers to ensure that learners complete their studies, find employment or continue to further studies.
  - Aims to review and monitor the performance-based indicators used in financing and introducing incentives for VET learners to acquire microcredentials.
  - Aims to strengthen cooperation between VET and business and industry to ensure that VET better meets the needs of the labour market.
  - Strives for more VET in English and more physical and health education.

Israel

The European Training Foundation published *Key policy developments in education, training and employment: Israel 2023*.

- **Covid-19**: the education and training system reacted quickly to the pandemic by increasing public investment and putting in place several new measures and approaches to facilitate hybrid learning.

- **Erasmus+**: Israel's exchanges of students and staff with the EU as a partner in the programme is a success – it ranks third in the world in the number of exchanges.
  - Compared to other partner countries, Israel hosts a bigger share of European participants and leads in the Southern Mediterranean region.
  - Germany is the EU member state with by far the most exchanges with Israel.
  - The Erasmus+ office in Israel continues to actively promote the programme, supporting enhanced cooperation between Israel and other countries, with the focus on VET.

- **Green skills**: in general there is not much discussion within education and training about the meaning of green skills and how to provide them, despite Israel being recognised as one of the most advanced countries in several technologies, including green tech, with a considerable number of climate-tech start-ups.

- **VET and adult learning**: there is no specific strategic framework; the vocational education system continues to be divided between vocational training and technology education with no clear distinction.

- **Gender**: women represent 32% of new entrants on engineering, manufacturing and construction courses, 30% in ICT – and 84% in education, a field traditionally female dominated.

- Recommendations include:
  - To address skills gaps, education reform needs to continue providing market-relevant skills, particularly among groups with low employment, while upholding gender opportunity equality in HE and the workplace.
  - Greater adaptability in the different education streams will be needed to help align student qualifications with increasingly digitised labour market needs.
  - Active labour market policies should seek to expand vocational training and encourage employers' involvement in training courses.

Norway

Eurydice published *Norway: Enhancing skills and competences for the green transition*, a summary of a report by the Norwegian Committee on Skill Needs (Kompetansebehovsutvalget) on the challenges, opportunities and skills needed for the country's green transition. *[The full report is in Norwegian.]*

- Findings include:
  - There is a lack of a comprehensive understanding of the skills required for the green transition within working life.
  - There is a need for better coordination and collaboration between the education system, working life and the authorities.
- Possible measures to address these issues include: strengthening the knowledge base; developing relevant and flexible education and training programmes; facilitating lifelong learning and career guidance; and ensuring social security and inclusion for workers in transition.

Sweden

The OECD published *Climate policies and Sweden's green industrial revolution*, including a short section on skills.

- Shortages of specialised skills for industrial development and a general shortage of working-age people to provide necessary public and private services is already a concern and is likely to grow in importance.
- Recommendations include:
  - Invest in municipal infrastructure, services and housing to facilitate population increases in hotspots for the green transition.
  - Ensure that Public Employment Service reform contributes to a holistic approach to the supply of people and skills with cooperation between municipalities, universities and industry.
  - Strengthen incentives and support to raise the contribution of universities to regional knowledge, innovation and skill supply.

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www.careersandenterprise.co.uk

CBI (Confederation of British Industry)
www.cbi.org.uk

Cedefop (European Centre for the Development of Vocational Training)
www.cedefop.europa.eu

CEPS (Centre for European Policy Studies)
www.ceps.eu

Chartered Association of Business Schools (CABS)
charteredabs.org

Chartered Institute of Personnel & Development (CIPD)
www.cipd.co.uk

City & Guilds
www.cityandguilds.com

Cogent Skills
cogentskills.com

COVID Social Mobility & Opportunities (COSMO)
cosmostudy.uk

Demos
demos.co.uk

Department for Education, England
www.gov.uk/government/organisations/department-for-education

Department for Science, Innovation & Technology (DSIT), UK
www.gov.uk/government/organisations/department-for-science-innovation-and-technology

Department for the Economy (DfE), Northern Ireland
www.economy-ni.gov.uk

Department of Further & Higher Education, Research, Innovation & Science (DFHERIS), RoI
www.gov.ie/en/organisation/department-of-higher-education-innovation-and-science

Economic & Social Research Institute (ESRI), RoI
www.esri.ie

Economic and Social Review
www.esr.ie

Economy 2030 Inquiry
economy2030.resolutionfoundation.org

Edge Foundation
www.edge.co.uk

EDSK
www.edsk.org

Emerge Education
emerge.education

EngineeringUK
www.engineeringuk.com

Environmental Policy Forum
www.envpolicyforum.org.uk

European Commission
ec.europa.eu/commission/index_en

European Education & Culture Executive Agency (EACEA)
www.eacea.ec.europa.eu/index_en

European Training Foundation (ETF)
www.etf.europa.eu/en

Eurydice
webgate.ec.europa.eu/fpfis/mwikis/eurydice

EY Foundation
eyfoundation.com/uk/en/home.html

FE Collective
www.fenews.co.uk/fe-collective-hub

Federation of Small Businesses (FSB)
www.fsb.org.uk

Financial Services Skills Commission (FSSC)
financialservicesskills.org

Fraser of Allander Institute, University of Strathclyde
fraserofallander.org/publications

Gatsby Foundation
www.gatsby.org.uk

Green Jobs Foundation
greenjobsfoundation.org

Harvard Business Review
hbr.org

Higher Education Policy Institute (HEPI)
www.hepi.ac.uk

Higher Education Statistics Agency (HESA)
www.hesa.ac.uk

House of Commons Library
commonslibrary.parliament.uk

Institute for Fiscal Studies (IFS)
www.ifs.org.uk

Institute for Public Policy Research (IPPR)
www.ippr.org

Institute of Labor Economics (IZA)
www.iza.org

Institute of Physics (IoP)
www.iop.org

Institute of Student Employers (ISE)
ise.site-ym.com

Institute of the Motor Industry (IMI)
tide.theimi.org.uk

International Higher Education Commission (IHEC)
ihecommission.uk

Jisc
www.jisc.ac.uk

Kingston University
www.kingston.ac.uk

Learning & Work Institute (L&W)
www.learningandwork.org.uk

Lifelong Education Institute *(formerly Lifelong Education Commission)*
www.lifelongeducation.uk

Lloyds Bank
resources.lloydsbank.com/insight

Making the Leap
makingtheleap.org.uk

McKinsey & Company
www.mckinsey.com

Migration Advisory Committee (MAC)
www.gov.uk/government/organisations/migration-advisory-committee

MillionPlus
www.millionplus.ac.uk

Ministry of Education & Culture, Finland
okm.fi/en/frontpage

National Centre for Universities & Business (NCUB)
www.ncub.co.uk

Nesta
www.nesta.org.uk

Nominet
www.nominet.uk

Northern Ireland Statistics & Research Agency (NISRA)
www.nisra.gov.uk

OECD (Organisation for Economic Cooperation & Development) iLibrary
www.oecd-ilibrary.org

Office for Institutional Equity, University of East London
uel.ac.uk/about/professional-services/office-institutional-equity

Office for National Statistics (ONS)
www.ons.gov.uk

Office for Students (OfS), England
www.officeforstudents.org.uk

Ofsted, England
www.gov.uk/government/organisations/ofsted

Open University (OU)
www.open.ac.uk

Policy Connect
www.policyconnect.org.uk

Prince's Trust
www.princes-trust.org.uk

Prospects Luminate
luminate.prospects.ac.uk

PwC
www.pwc.co.uk

Quality Assurance Agency for Higher Education (QAA)
www.qaa.ac.uk

ScreenSkills
www.screenskills.com

Skillnet Ireland
www.skillnetireland.ie

Skills Development Scotland (SDS)
www.skillsdevelopmentscotland.co.uk

SOLAS (Further Education & Training Authority), RoI
www.solas.ie

SQW
www.sqw.co.uk

Sutton Trust
www.suttontrust.com

UCAS
www.ucas.com

Unit for Future Skills, England
www.gov.uk/government/groups/unit-for-future-skills

Universities UK (UUK)
www.universitiesuk.ac.uk

Universities UK International (UUKi)
www.universitiesuk.ac.uk/International

University College London (UCL)
www.ucl.ac.uk

Welsh Government
gov.wales

Wonkhe
wonkhe.com

Work Advance
workadvance.co.uk