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

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

Highlights this quarter include:

- A new section on AI in education, with research, debate and guidance reflecting both excitement about its potential and anxieties about the risks.
- In-depth analysis of the impact of AI on the workplace, as well as a continuing focus on green skills and jobs, including four contrasting scenarios posited by a European foresight project.
- A focus on the experience of HE students: their mental health and wellbeing, engagement and 'belonging'; the cost of living; the shortage of accommodation; the impact of funding cuts; a fall in graduate employment and an analysis of underemployment.
- Alongside this, an international study showing clear themes in the challenges facing all HE leaders.

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

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

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16–19 EDUCATION

The OECD published [*Managing choice, coherence, and specialisation in upper secondary education*](#), providing a framework for countries to assess how well their system supports such goals, along with examples from across the OECD.

- With a far greater share of the student cohort progressing into upper secondary education than in previous generations, modern upper secondary systems need to accommodate a wider variety of student interests, aspirations and learning levels.
 - To respond to these needs, countries need to balance choice and specialisation to promote coherence: systems that provide too risk hindering coherence; those with too little risk hindering students from identifying their interests and deepening the relevant skills.
- Countries design their systems in different ways, making comparison challenging; the analysis aims to develop a common language, categorise how systems are organised and identify benefits and strategies to mitigate risks.
 - Two tables set out types of diversity in upper secondary programmes and aspects of curriculum structure and their respective implications for policymaking.
- Systems can be organised into three broad categories:
 - **Personalised**: with a limited set of core compulsory subjects leaving a large degree of choice (e.g. Ireland, New Zealand, UK).
 - **Structured**: offering far less scope to adapt individual study programmes, since the programme itself is one of the main vehicles for providing choice and specialisation (e.g. Austria, the Netherlands, Switzerland).
 - **Intermediate**: combining various degrees of personalisation and structure, with specialisation frequently a key feature (e.g. Finland, Norway, Sweden).

The OECD published [*PISA Vocational Education & Training \(VET\): Assessment and analytical framework*](#).

- The PISA-VET assessment, which is still under development, will assess learners nearing the end of initial formal VET programmes.
 - They will be in upper secondary and post-secondary, non-tertiary education (L3/4), including school-based programmes and those combining classroom and work-based learning (e.g. apprenticeships).
 - It is likely that most learners will have started their programmes at age 16/17 and will be aged 18–20 at the time of taking the test.
- It covers professional knowledge and skills in five occupational areas: automotive technician; business & administration; electrician; nursing/healthcare assistant; and hotel receptionist.
 - It also evaluates employability skills, including literacy, problem solving, task performance (conscientiousness) and collaboration with others.

The OECD published [*What progress have countries made in closing gender gaps in education and beyond?*](#), part of its Education Indicators in Focus series of briefings.

- Despite numerous measures, gender stereotypes about abilities in maths and reading persist in schools, affecting both boys' and girls' schooling and educational choices.
 - Inequalities also persist outside the classroom, where women, despite greater educational attainment, experience lower employment rates and often receive lower salaries than men with similar levels of education.
- The many measures taken by countries have brought some encouraging signs of progress, but more work is needed to ensure that improvements in education are reflected in improvements in the world of work.

SCIENCE, TECHNOLOGY, ENGINEERING & MATHS (STEM)

The Royal Academy of Engineering (RAEng), in partnership with the National Engineering Policy Centre, published three reports to support [The Engineers 2030 project](#), which will work to set out a new vision for the engineers of the future.

- [Rethinking engineering and technology skills for a world in which both people and planet can thrive: Vision and principles](#) considers a future where engineers lead the charge in creating sustainable solutions for the planet's pressing challenges.
- [Sustainability in Engineering Higher Education](#) highlights the urgent need for further action to ensure sustainable design becomes a foundational element throughout engineering education.
- [Report of Futures Workshops](#) summarises the outcomes of two stakeholder workshops.

The ultimate aim of the project is to determine whether systems, policies and cultures in place currently in the UK are fit for purpose to support the engineering and technology workforce now and for the next 25 years.

The Institute of Labor Economics (IZA) published [Computer Science \[CS\] for All? The impact of high school computer science courses on college majors and earnings](#), based on US data.

- Findings include:
 - Taking a CS course at school increases students' likelihood of choosing to study CS at college or university by 10.2ppt and of receiving a CS degree by 5.5ppt.
 - Access to CS coursework raises students' likelihood of being employed and raises their early career earnings.
 - Students who are female, of low socioeconomic status or Black experience larger benefits in terms of CS degree attainment and earnings; however, the lower take-up rates of these groups in CS courses highlights the need for targeted efforts to increase their participation.
 - Possible reasons for how exposure to high school CS coursework impacts students' choice include: students' interest in the subject is increased; they develop the knowledge and skills they need to be better prepared for further studies; they have peers interested in similar fields of study.

EMPLOYABILITY & CAREERS

[The Prince's Trust NatWest Youth Index 2024](#) was published, based on a YouGov survey of 2,239 16–25 year-olds in the UK in November–December 2023.

- Young people said the following would help them achieve their career ambitions: help securing work experience or training (32%); building their skills (28%); help with CV and interview skills (28%); improving their qualifications (27%); having a mentor (23%); help applying for jobs (23%).
 - 57% worried about not having the right experience to get a job in the future, 48% about not having the right skills or qualifications.
 - 40% of young women vs 32% of young men said a lack of confidence was one of the biggest barriers to them achieving their career goals.
- Happiness in work, education, with qualifications and with money were all at all-time lows.
 - 49% said the cost of living crisis had had a worse impact on their life than the pandemic.
 - Poor mental health was a threat to their employment and aspirations, and those who were unemployed had the lowest overall wellbeing.
 - Due to mental health issues, in the past year: 21% had missed school or work; 18% hadn't applied for a job; 12% hadn't attended an interview.
 - 35% worried their mental health would stop them achieving their career goals; 41% said worrying about this had made their mental health worse.
 - Having a job made young people feel: they had stability in life (75%); confident for the future (68%); they had a sense of purpose (65%).

The Institute for Employment Studies (IES) published [The Good Youth Employment Benchmark: Creating an evidence base of good youth employment practice](#), a review of existing frameworks for employers, commissioned by Youth Employment UK.

- A range of frameworks and toolkits exist, covering topics such as: employing apprentices; how to develop and implement health and wellbeing toolkits; and how to embed organisational cultural changes.
 - Two main categories of frameworks and charters are reviewed: those focused on a specific geography and developed locally; and those targeting a specific theme and supporting employers to understand and embrace it.
- Findings include:
 - There are common challenges around awareness and take-up of the frameworks and toolkits, and a lack of evidence on their effectiveness.
 - Few toolkits are based on robust research and most also lack systematic means of collecting data; there is little longitudinal data to see their impact on practice and the lives of those targeted.
 - The current Youth Friendly Employer Award Framework and the Good Youth Employment Charter are based on practices that generally have good research evidence for their positive impact.
- Recommendations for a Good Youth Employment Benchmark include for it to be accessible to employers and engaging once they have registered.
 - A benchmarking tool should encourage employers to: take on the best-evidenced practices; self-assess how they are progressing in delivering those practices; collect data on the reach of the practices; and ultimately make a difference to supporting young people into good employment.

The OECD published [Beyond literacy: The incremental value of non-cognitive skills](#), a review of large-scale surveys from multiple countries.

- All the studies use the global 'Big Five' framework to assess non-cognitive skills: extraversion*; agreeableness; conscientiousness; emotional stability; and openness to experience.
- Non-cognitive skills can unequivocally predict life outcomes over and above cognitive skills and the Big Five personality domains contribute most to explaining outcome variables; in particular:
 - Openness and conscientiousness predict education success (attainment/grades)
 - Emotional stability predicts health/life satisfaction.
- There is further evidence that non-cognitive skills beyond the Big Five, such as vocational interests, can also predict several life outcomes.

**A personality trait typically characterised by sociability, high energy and/or talkativeness.*

The OECD published [Challenging Social Inequality Through Career Guidance: Insights from International Data & Practice](#), drawing on new analysis of PISA and PIAAC adult skills survey data and building on its OECD Career Readiness Indicators.

- It asks how schools guidance systems can best respond when there is strong evidence that groups of students with shared characteristics face greater barriers in successfully progressing through education into employment.
 - It considers inequality by socioeconomic status, gender and migrant background.
- In the competition for employment, relative success is widely understood in terms of the comparative human capital, social capital and cultural capital possessed by individuals in relation to their career ambitions.
 - Across these three fields, guidance systems can encourage and enable students to: make good investment choices in their education and training; build human capital through internships or volunteering; build social capital, engaging with people working in occupations of interest who are well placed to provide trusted advice and practical support.
 - In-school programmes, career talks and job fairs can both enable such engagement and help students to build understanding of different work cultures and progression pathways, underpinning an assured understanding of distinct social and cultural norms (cultural capital).
- Through these means, students can be seen to form the sense of personal agency that allows informed and confident progression through education into desirable employment.

The report features the innovative Career Education Framework developed by New Brunswick, Canada, which integrates OECD career readiness indicators to systematically address inequalities within school provision.

The OECD also published [Career guidance, social inequality and social mobility: Insights from international data](#), a policy brief drawing on evidence from its Career Readiness project.

- It explores two questions:
 - How does socioeconomic status (SES) shape the career development of young people?
 - How can schools challenge social inequality and enhance social mobility through guidance interventions?
- Young people from low-SES backgrounds face additional barriers as they seek to convert their qualifications and experience into successful employment, particularly if they want to go into high-status jobs.
 - The barriers can be categorised as: economic; human; and related to social and cultural capital.
- Settings can help through career guidance programmes, but need to actively respond to issues around access to trusted information and useful experiences.
 - Low-SES students are also less likely to engage in most commonplace career development activities.
- Equitable systems will target greater provision at low-SES students and aim ultimately to provide personalised provision for all students.

The Institutional Landscape

THE FURTHER EDUCATION (FE) & SKILLS SECTOR

The Centre for Skills, Knowledge & Organisational Performance (SKOPE) and the Education Policy Institute (EPI) published [Comparing policies, participation and inequalities across UK post-16 Education & Training \[E&T\] landscapes](#).

- Post-16 E&T in the UK now looks significantly different in each nation, although there is a growing trend for Scotland, Wales and Northern Ireland to converge in their policy, while diverging from England.
 - Six areas of convergence and divergence: purpose; coordination and governance; funding; the relationship between FE and HE; employer engagement; and qualifications.
- Different policy choices, as well as variation in pre-16 provision, student backgrounds and preferences, and local context, result in quite different student experiences in each nation, including, in 2022:
 - 11% of 16–18 year-olds in Wales were NEET vs 9% in Scotland, 8% in England and 5% in N. Ireland.
 - 79% of 16–17 year-olds in Scotland and 60% in N. Ireland were in school sixth forms rather than colleges, and therefore more likely to study for academic qualifications; in England it was 45% and in Wales, 35%.
 - A large amount of college participation in Scotland and N. Ireland is due to partnerships with schools, which are much less common in England and Wales.
 - Only 20% of English and Welsh apprentices are aged 16–18 vs 37% in Scotland and 52% in N. Ireland; 30% of starts in England were at L4+ vs 17% in Wales, 12% in N. Ireland and just 8% in Scotland.
 - 80% of young adults in England and Scotland were qualified to L3+ vs 70% in Wales and N. Ireland; 50% in England and Scotland had a degree-level qualification vs 40% in Wales and N. Ireland.
 - Young adult employment was about 80% in England and Scotland, 75% in Wales and 75% or lower in N. Ireland, with lower levels in Wales and N. Ireland regardless of parental background.
 - 56% of young people in Wales from working-class backgrounds held A level-equivalent qualifications vs 60–65% elsewhere in the UK; 71% in Wales were in employment vs 74–78% elsewhere.
 - 30% of 18 year-olds go on to HE in Wales vs 37% in England and 38% in Northern Ireland.

- In England, 20% of those from the most deprived areas go on to HE vs 15–16% in Scotland and Wales, but only 13% in N. Ireland.
- All four nations have seen:
 - A vast range and a changing set of goals for the post-16 system, making it difficult to set priorities; a high level of policy churn, emphasising the view that the system is at best flawed and at worst failing.
 - Different data definitions and incomplete data; gaping differences in educational outcomes, with particularly concerning outcomes in Wales.
- Four interim recommendations focus on: a new stable settlement and a period of policy stability; better, more comparable data and statistics, focused more on inequalities; policy focused more on inequalities; more active and urgent action in Wales.

The Edge Foundation published [Curriculum in FE Colleges \[FECs\] over time: Illustrations of change and continuity](#), focusing on England but with wider relevance.

- Although they vary in size, structure and character, FECs share the challenge of designing teaching and learning that will attract and meet the needs of learners from adolescents to pensioners with a wide range of capabilities, prior educational experience and attainment and life experience.
 - They have to navigate the fluctuating requirements of local communities, employers, governments, funding agencies, inspectors and qualification awarding bodies.
 - Due to their breadth of activity, they continue to act as local and regional 'anchor institutions'.
 - They are affected by and contribute to national and global meta-concerns about the human condition, most recently 'greening' and 'decolonisation of the curriculum'.
 - They have soaked up innumerable waves of policy and regulatory interference to an extent that their very resilience and adaptability has been cited as both key to their survival and a barrier to autonomy.
- The paper briefly discusses the concept of 'curriculum' in FE, following sections on:
 - Meeting individual and employer demand
 - State-led qualifications and 'reform'
 - Balancing occupational specialisation with general education.

HIGHER EDUCATION (HE): APPLICANTS & ADMISSIONS

The House of Commons Library published [Higher education student numbers](#), looking at trends both overall and for different types of students and courses in UK institutions.

The House of Commons Library published [Student support for undergraduates across the UK](#), a briefing outlining the systems and related recent policy debates in each nation.

- The report includes a comparison of student fees and support packages, plus accommodation and living costs in the four UK nations.

HE: THE STUDENT EXPERIENCE

England's Office for Students (OfS) published [Evaluation of the Mental Health Funding Competition: Using innovation and intersectional approaches to target mental health support for students](#).

- 18 university/college-led projects were funded by the Department of Health & Social Care (DHSC) and England's Department for Education.
 - Overall, the programme supported 3,241 students and trained 316 staff.
 - Approaches included: peer-to-peer mentoring; awareness raising campaigns; connecting with NHS services; and digital solutions such as virtual reality experiences.
- Findings include:
 - 64% of students involved in project development agreed that the support now available was more relevant to student needs.
 - There has been a considerable improvement in staff knowledge of the barriers faced by target groups as a result of staff facilitating student co-creation activities or receiving training.

- Short-term outcomes suggest that the programme has had a broadly positive impact on students engaged in interventions, including: early positive improvements in mental health or wellbeing; improved equity of access to support; increased confidence to disclose and seek help for mental health issues; and improved sense of belonging and perception of support services.

Separate documents cover: [learning for practitioners and providers](#) and [learning for sector leaders, researchers and other organisations involved in student mental health](#).

A [blog](#) by the OfS Head of Student Equality & Welfare reflects on a growing pool of evidence on what works to support student mental health.

Advance HE published [Embedding Wellbeing into the Curriculum: A global compendium of good practice](#), a collection of case studies featuring HE teaching approaches and ideas on themes such as connection, empathy and compassion.

- Some set out to improve student wellbeing as an explicit learning outcome of their modules; others have evidence that the approach, structure and assessment of their modules had an unintended and positive impact on the wellbeing of their students.
 - Some of these modules are examples of university-wide initiatives with large-scale reach, but others have been introduced by individual lecturers into their subject areas.

The full report is available to Advance HE members.

The UPP Foundation published [Student Futures Commission: Two Years On](#), mapping today's student experience in England against six themes set out by the Commission in 2022.

- It is based on a poll of 1,682 students, eight in-depth interview with institutions and eight focus groups with home and international students; among the findings:
 - 79% agreed that their university had given them all the support they needed to prepare for the start of term.
 - 74% were working at or above the academic level they expected to be at.
 - 74% said they felt happy at university and 63% that they belonged.
 - 57% agreed that university had positively impacted their mental health overall, although 22% said it had negatively impacted it; 60% were confident their university would be able to help them if they were struggling with mental health.
 - 44% experienced loneliness during their time at university.
 - 44% were less engaged with extracurricular activities than they were expecting to be, and 25% had never engaged at all.
 - 27% would feel uncomfortable seeking mental health support from their university.
 - 50% said they hadn't had specific conversations or guidance about future careers; 72% felt their universities could do more to integrate workplace skills into the curriculum.
- While much is being done to support students to engage and succeed, there are a number of emerging challenges facing university communities in England:
 - A growing gap between expectations of the student experience and reality: students frequently reported feeling underwhelmed by the university experience, particularly international students.
 - A growing sense of apathy and a lack of agency over the university experience, fostering a reluctance to participate in both academic study and extracurricular activities.
 - The pressures of the cost-of-living crisis and the insufficiency of maintenance support, which leave students struggling to engage with the basics, never participating in wider student life.

The Quality Assurance for Higher Education (QAA) launched [Preparing for student-staff partnerships: A toolkit for staff](#), based around key themes for establishing successful partnerships, it includes material on setting expectations, trust, empowerment and impact.

HEPI published [Student Accommodation: The State of the Nation in 2024](#), explaining the changes in the market that have led to higher rents.

- It considers factors including: the UK-wide growth in student numbers and pressures on university finances as well as on purpose-build student accommodation (PBSA), and what this means for supply and demand.
- With rents rising faster than maintenance support, particularly in England, it sets out a possible new approach, including:
 - Introducing an adjustable energy supplement on rents, encouraging better use of energy

- Organising flats in clusters of 12–20 students, around a central kitchen/leisure area
- Smaller pod-sized rooms, perhaps of around 10m², including an en-suite
- Good communal lounge and study spaces – particularly important when rooms are smaller
- Buildings of around 300–350 student beds, to try and get the best fit on running costs
- Mixing up room sizes and facilities within one building, with rooms differentially priced.

Much of the data and all of the examples are from England.

The Russell Group published [Cost-of-living support for students](#), outlining the financial and non-financial support its members across the UK are providing to help address ongoing pressures.

- A survey of Russell Group students at the start of 2023 found that: 94% were concerned about the cost-of-living crisis; 25% were regularly going without food and other necessities, rising to 30% among the most disadvantaged; over half had stopped participating in extracurricular activities.
 - In England, students will be almost £2k worse off in 2024/25 than if maintenance loans had risen in line with inflation since 2020/21; if the parental threshold – frozen at £25k since 2008 – had risen in line with earnings, it would now be £35k.
- In terms of non-financial support, Russell Group members are offering:
 - Food-security initiatives: food pantries or food banks (a third of members); free breakfast programmes; reduced-cost meals on campus, and access to kitchens for students to cook.
 - Physical and wellbeing support: keeping study and social spaces open longer; offering free period products and free access to on-campus showers.
 - Access to financial information: guidance on keeping costs down; information on financial assistance available; and access to trained money advisers.
 - Mental health support: all offer a range of information, advice and mental health services.
 - Other: free or reduced-cost transit; long-term technology loans; working with local councils and MPs to support student accommodation needs; offering free social events.
- Alongside existing widening participation initiatives, many Russell Group universities have ringfenced financial support or initiatives for students from under-represented backgrounds.

IZA published [What Works? Interventions aimed at reducing student dropout in higher education](#), based on analysis of 38 (quasi-)experimental relevant studies; findings include:

- Interventions that manipulate peer group composition, particularly those adjusting for gender and ability, show the most promising outcomes; student–faculty mentoring programmes also tend to show significantly positive effects.
- Some dropouts are productive, however, e.g. those students who go on to complete alternative education may yield possibly higher productivity, and the reduced time spent in the educational system may lead to earlier labour market entry for those students.
- Despite the importance of the subject and a relatively large number of studies, existing evidence is still surprisingly weak, and it mostly shows small and insignificant effects; there is a particular shortage of research that distinguishes between study, institution and system dropout.

IZA published [College Course Shutouts](#), exploring what happens when first-year students are unable to enrol on their preferred courses, based on an experimental study in a US university.

- Institutions faced with increasing budgetary pressure in many cases are reducing course offerings, causing more courses to be oversubscribed and increasing the number of students who are unable to enrol in (shut out of) courses they want to take.
- Being shut out from a course in a student’s first term changes the types of courses taken and can even cause a change in the student’s major subject choice.
 - Compared to students who are assigned a requested course, those who miss out are 40% less likely to ever take the oversubscribed course and 30% less likely to ever take a course in the same subject.
- Although a course ‘shutout’ is equally likely to occur to female and male students, shutouts are much more disruptive for female students, including decreasing the credits they earn and their GPA.
 - Shutouts increase the probability of females dropping out in first year, decrease the probability that they choose STEM ‘majors’, result in worse grades and longer time taken to graduate.

- In contrast for male students, shutouts have no effects on short-run credits earned, dropout rates, majoring in STEM, cumulative GPA or four-year graduation.

The OECD published [Cultivating the next generation of green and digital innovators – the role of higher education](#), providing analysis and case studies on how degree programmes can develop important competencies.

- Four key areas of action:
 - **Tracking and assessing competencies:** enhancing the capacity HE systems to track demand for and supply of competencies that support innovation, through improving anticipation and assessment methods.
 - **Curriculum development:** updating programmes and curricula to ensure they target the necessary knowledge and skills, encompassing relevant transversal and discipline-specific competencies.
 - **Student engagement:** increasing interest and motivation to develop key competencies, which may involve improving incentives and greater attention to designing engaging learning experiences.
 - **Private sector partnerships:** strengthening partnerships with innovative businesses and industries to align HE provision with their human capital needs.
- Case studies include: connected approaches to skills anticipation in Finland; assessing HE students' competencies in Ireland; identifying green study programmes and learning outcomes in Denmark; an innovative one-year interdisciplinary honours course for students at all academic levels in Belgium.

The OECD published [Fostering higher-order thinking skills online in higher education: A scoping review](#), focusing on creativity and critical thinking, an area where there is a growing body of research but scope and generalisability remain limited.

- Current evidence suggests that, for most students and contexts, in-person learning yields better or equivalent outcomes than fully online learning.
 - However, blended and flipped learning show promise and, in some cases, may be more effective than in-person learning.
- Success in helping students develop the skills online has been linked to: active and interactive online learning; well-structured project-based learning; disciplined questioning; students labelling relevant dimensions of their thinking; and regular, quality instructor and peer feedback.
- Policy implications include the need to integrate attention to higher-order thinking skills into professional learning, innovation funds, national networks and quality assurance to support effective online teaching of these skills across HE systems.

IZA published [Peer Creativity and Academic Achievement](#), a study of the impact of the creative abilities of randomly assigned study peers on students' academic achievement at university.

- Students' creativity is positively associated with their own grade point average (GPA); however, the creative ability of study peers can influence students in at least three ways:
 - Students who work with creative peers may learn from the questions their creative peers ask or from discussions with them, and may learn strategies and techniques that help them improve their performance.
 - Students may become more motivated and engaged from experiencing creativity from their peers, e.g. when they make learning more fun and challenging, leading to increased study effort.
 - A direct effect from creative students who stimulate their peers to 'think outside the box', resulting in improved creative ability and improved study performance.
- The positive impacts strengthen the case for creativity training to be part of an academic curriculum; at the same time, making students aware of the advantages of studying with more creative peers may encourage them to do so.

HE: WIDENING PARTICIPATION

Consultancy Public First published [A review of collaborative support for improving equality of opportunity in access to higher education](#), commissioned by England's OfS as part of its evaluation of its Uni Connect programme and consideration of future models.

- The research identifies a clear case for preserving some form of centrally funded collaborative outreach arrangement in England.

- However, Uni Connect could be more consistently effective and impactful:
 - Access gaps haven't narrowed during its lifetime and there is little evidence of a reduction in the participation gap between target areas and the rest of the country.
 - Evidence of causal impact is only available for a small minority of activities.
 - There is anecdotal evidence of transformational impact but also evidence of less positive experiences; some stakeholders compared their experience unfavourably with that of other outreach providers; some schools see it as a useful default when there isn't a more tailored option available.
 - The extent to which partnerships are coordinating a truly collaborative approach is mixed.
- Any new model must address challenges that include:
 - A lack of shared understanding of Uni Connect's strategic purpose
 - Dispute over the efficacy or desirability of focussing on raising attainment
 - Lack of central support functions and subsequent lack of consistent visibility of regional performance
 - Low visibility among some non-HE stakeholders
 - Single-year funding allocated at short notice.
- In designing a reformed model, OfS should seek to achieve three overarching objectives:
 - Provide clarity about the ambition for long-term impact and the role of collaborative outreach in achieving it.
 - Give collaborative outreach practitioners and their partners the support and infrastructure they need to maximise impact.
 - Ensure it has the levers it needs, both to hold regional partnerships to account for impact and to be responsive to national priorities.

A decision-making framework outlines the key questions to be answered, with recommendations where the evidence points strongly in one direction.

HEPI published [Cracks in our foundations: Evaluating foundation years as a tool for access and success](#).

- Foundation years are an additional year of study at the beginning of an HE course, designed to prepare students for degree-level study.
 - Proponents say that giving students an extra year of study to catch up with their peers boosts access.
 - Critics, including in government, argue that many are low-quality and unnecessary.
- Key findings include:
 - Enrolments have risen from 8,500 in 2011/12 to over 69k in 2021/22.
 - Nearly 30% of foundation year students possess no prior qualifications and 64% are mature students; however, 73% study at low-tariff institutions and just 4% at high-tariff institutions.
 - Enrolments are dominated by Business & Management (51%), in contrast to the 13% of undergraduates who study Business courses.
 - Only 74% of foundation year students proceed directly to degree-level study or qualify, compared with 91% of full-time undergraduates.
 - Some institutions may be using foundation years to inflate their tariff scores artificially; however there is no evidence of institutions pressuring students to take them.
 - Business courses are the only classroom-based foundation years that could still be economically viable; courses in science, technology and engineering may often be loss making.
- Recommendations include:
 - Student finance should be withdrawn from foundation year courses that don't result in excellent student outcomes.
 - High-tariff institutions should consider using foundation year courses to increase access.
- An annex investigates 'international foundation years', which have been heavily criticised for allegedly admitting students with lower grades than home students; due to a lack of data, findings only relate to foundation years that are integrated with a full degree.

- In 2020/21, no more than 14% of students on integrated foundation years were international.
- 60% of international students studied in London and the East of England; 44% of them Business.
- 71% continue to HE or qualify – an even lower proportion than for home students.

Jisc Prospects published [The career planning motivations and behaviours of taught postgraduate students from widening participation \[WP\] and non-widening participation backgrounds: A cross institutional study.](#)

- The study involved careers advisors, consultants and academics from six English universities; key findings include:
 - Non-WP and WP students have similar career planning needs, slightly different motivations, and very different career planning behaviours.
 - Intrinsic motivating factors are more dominant than extrinsic motivating factors in making the decision to do a postgraduate taught (PGT) award.
 - PGTs' opportunity awareness (capability to research job opportunities) is lower than their self-awareness (what career they want to go on to).
 - 71% of all PGTs are working alongside their studies; 18.5% are in full-time employment; nearly 70% of those currently in work want to go on to secure a professional role.
 - 11% of all PGTs want to go on and do a doctorate within five years of finishing their award.
 - PGT WP status has a statistically significant relationship with careers provision engagement: international PGTs are more likely to attend careers events than home-domiciled; those with caring responsibilities and/or who are first in family in HE are most likely to engage with career support provision within their programme.
 - Business & Law and Science & Engineering students engage with the careers service provision more than PGTs in other faculties.
 - All PGTs want a careers service provision that: is accessible to them and recognises that they are at different stages of the career trajectory; offers exploratory, life-wide skills developments; and centres them in the provision.
 - Communications strategies and targeted support need to recognise diverse needs but not adopt deficit positioning of WP students, who are work ready, but can experience 'imposter syndrome' and confidence issues.

The University of Edinburgh published [Class in Classics 2024](#) on behalf of the Network for Working-Class Classicists, the Council of University Classical Departments and the Classical Association.

- The report analyses class and socioeconomic inequality in studying classics, based on 1,206 responses to a survey of UK classics undergraduates, academics and school teachers undertaken between October 2022 and January 2023.
- Main findings include:
 - Those with managerial and professional backgrounds are heavily over-represented among classics students, especially among academic classicists and classics teachers.
 - Working-class classicists face barriers when they are expected to fit into the middle-class paradigm that dominates the field, with exclusionary norms pushing working-class staff and students out of the subject.
 - There are 'gaps' in the classics pipeline that disproportionately affect working-class students, e.g. in schools due to lack of funding and unchallenged perceptions among that classics is 'not for us'; at university, financial constraints and feelings of not fitting in lead to higher rates of drop-out.
 - Outreach activities bring students in but more 'inreach' is needed to support them as they enter what are overwhelmingly middleclass spaces.
- Nine recommendations include: collecting full student demographic data; increasing classics in state schools; investing in outreach; and recognising class background as a key factor in determining student experience and progression.

HE: INTERNATIONAL STUDENTS

The British Council published [*The outlook for international student mobility: amidst a changing global macroeconomic landscape*](#), based on a study by Oxford Economics looking at 30 countries with the highest student flow to the UK.

- The findings are intended to support UK universities in developing their international recruitment strategies and in allocating resources across selected markets in the medium term (to 2030).
- The projection is made possible by a new indicator that has identified the correlation between world gross domestic product (GDP) growth and outbound student numbers per nation.
 - Slower global economic growth is likely to result in international student growth slowing from 5.5% p.a. prior to the pandemic to an average of 4.2% p.a..
- China and India are likely to remain the leading senders of international students in that period.
 - Bangladesh, Indonesia, Philippines, Vietnam are 'rising stars' due to their favourable macro environments and low/moderate risk profiles
 - Kuwait, Malaysia, Nepal, Saudi Arabia, Sri Lanka, Thailand, UAE and the US are in the 'middle ground'
- High-income advanced economies including Canada, France, Germany, Hong Kong (SAR), Ireland, Italy, Japan, Singapore, South Korea and Spain combine relatively low growth prospects with benign market risk profiles, consistent with slow but steady growth as senders.
- Brazil, Ghana, Mexico, Nigeria and Turkey face a range of macroeconomic challenges that weigh against growth over the medium term, and their risk profiles suggests that growth mobility can be quickly reversed.
 - However, some are major senders and will remain important recruitment markets for the UK, though primarily in the context of winning market share from alternative study destinations.
- Amid a more competitive international environment to 2030, continued growth in recruitment will depend on a more strategic and risk-based approach to targeting of markets and allocation of resources.

British Council East Asia published [*Five trends to watch in 2024 in international student mobility and recruitment, including implications for UK HEIs*](#).

- Post post-Covid: growth in new enrolments of international students will slow across major host destination markets in 2024, led by the UK.
 - In all four major host markets – Australia, Canada, the UK and US – the number of international student enrolments has already surpassed pre-pandemic levels.
 - New enrolments will likely increase more slowly in 2024 (and beyond) as these markets revert to the steady but unremarkable long-term growth rates that preceded the pandemic.
 - UK institutions, will need to focus on quality rather than quantity in student recruitment while accepting higher per-student recruitment costs.
- Migration policy will remain a hot topic in the UK, Australia and Canada, making student recruitment more challenging for HEIs.
 - The challenge for UK HEIs in East Asia will be presenting a welcoming face to international students amid questions around what – if any – further restrictions will be introduced.
- In contrast to the tightening policies of the UK, Australia and Canada, recovery in the US market is partly due to greater support from the government; the country has already issued more F1 student visas in 2023 than in any year since 2016.
- Rising youth unemployment in China will motivate increasing numbers of students to enrol overseas.
 - This trend means Chinese students will put more emphasis on post-study work in the UK, as well as the possible advantage of having a UK degree when they return to China.
 - UK HEIs will need to speak directly to the employment anxieties of these applicants, and recruitment managers will need to stay informed about how UK policies compare with other major host destinations.
- A strong currency in the UK will cause a growing number of international students to reconsider applying to UK HEIs; this will be felt most acutely in some of the UK's largest student markets: Nigeria, Turkey, Pakistan and Ghana.

Universities UK published [The economic impact of the expansion of post study work rights and the Graduate route](#), analysing London Economics data to demonstrate the economic contribution of international students.

- Growth in international student recruitment since the launch of the 2019 International Education Strategy (IES) has boosted the UK economy by over £60b.
- However, a UUK survey suggests numbers are declining following a peak in 2022/23; numbers of PGT students in particular are reported to be down ~40% following changes to immigration rules.
- In another poll, 37% of international applications said that the Government's intention to review the Graduate visa meant they were now reconsidering their plans to study abroad or were inclined to choose another destination.
 - 45% would probably change their destination if the post-study work period was shortened.

Jisc published three briefing papers to help UK HEIs better support international students, as part of its [research into their digital experience](#).

- [Facilitating holistic conversations about the student experience with international students](#):
 - Over the past decade research has illustrated a reluctance of students outside of their home country to leave negative feedback via mechanisms such as institutional surveys or focus groups.
 - This is often because they are unsure how such disclosure could be used or what could happen to them as a consequence.
 - The process Jisc used to engage with the students is outlined in detail.
- [Supporting international students' digital experience: A checklist for providing an equitable and inclusive experience](#), for those responsible for supporting international students on their courses.
- [Comparing international and UK-domiciled student responses in Jisc's digital experience insights \(DEI\) survey](#):
 - Up to 34% said their previous use of digital technologies to support learning was 'very different and impossible to compare' with the UK.
 - International students were significantly more likely than UK-domiciled students to have problems with off-campus access, e.g. due to having no suitable computer/device or no safe area to work.
 - They showed a preference for mainly on-campus teaching, valuing face-to-face learning interactions and learning within diverse groups as drivers for choosing to travel and learn on site.

GRADUATES & GRADUATE EMPLOYMENT

High Fliers Research published [The Graduate Market in 2024: Annual review of graduate vacancies & starting salaries at the UK's leading employers](#), based on a study of 100 leading UK graduate employers in January 2024.

- There was an unexpected drop in graduate employment: 3,500 planned graduate vacancies were cut or left unfilled in 2023.
 - Around 50% of firms reduced their graduate intake and recruitment fell in 11 of 15 key sectors.
 - The biggest falls were in accounting & professional services, retail, investment banking, Armed Forces and technology.
- 60% had received more graduate applications this season than last; applications were up 27%.
- In 2024, graduate vacancies are only expected to increase by 1.5%.
 - Accounting & professional services firms are expected to further reduce recruitment of trainees.
 - However, engineering & industrial firms are anticipating significant increases, and the public sector is expected to be offering additional graduate places.
- Graduate starting salaries at UK top firms are set to rise to £34k (+13.3% on 2020).
- Over 80% of employers used on-campus careers fairs for recruitment; 75% hosted their own recruitment events at universities.
 - Employers actively targeted 27 universities on average (unchanged from 2022).
 - Over 50% used campus brand ambassadors; 40% sponsored student societies, clubs or sports teams.

EngineeringUK published [Graduate outcomes – engineering and technology](#) [E&T] using the latest Higher Education Statistics Agency (HESA) data to explore activity 15 months after graduation.

- E&T graduates are more likely to be in work than graduates in other subjects.
- Over two-thirds went on to work in E&T jobs, but this is higher for men than women; graduates working in E&T roles are earning more than graduates in other jobs.
- E&T graduates are more likely to think their degree was relevant to their job, and to feel 'on track' with plans for the future.
- Women, those from a lower socioeconomic background, and Black/Black British (Caribbean) young people continue to be under-represented in E&T degrees.

The *European Economic Review* published [The effect of foreign students in higher education on native students' outcomes](#) by University College London (UCL) and the Universities of Surrey and Essex.

- There is no evidence of international students affecting the probability of 'native' students graduating successfully or of graduating with good grades.
 - Nor is there any evidence of international students affecting the type of job that native graduates have six months after graduation.
- EU-domiciled students do increase the probability of native students staying in a non-STEM degree vs. changing to a STEM degree and of changing from a Russell Group to a non-Russell university.
 - The magnitude of these effects is large in proportion to students switching degrees and universities; however, such switches are rare overall.

The Burning Glass Institute and Strada Institute for the Future of Work published [Talent Disrupted: College graduates, underemployment, and the way forward](#), exploring how those with a four-year degree in the US fare in the jobs market.

- The online career histories of tens of millions of graduates and census microdata for millions of graduates were analysed.
- Key findings include:
 - **Underemployment is a large and persistent problem**, with 52% of graduates underemployed a year after graduation.
 - **The first job after graduation is critical**: those who start out in a college-level job rarely move into underemployment, with 79% remaining in a college-level job five years after graduation, 86% after 10 years.
 - **Underemployment is sticky**: 73% of graduates who start out underemployed remain so 10 years after, making them about 3.5 times more likely to be underemployed than those who start in a college-level job.
 - **Underemployment carries a heavy financial cost**: a recent graduate in a college-level job typically earns ~88% more than a high school diploma holder vs ~25% more for an underemployed graduate.
 - **Underemployment rates vary greatly by degree subject**: those that involve a substantial amount of quantitative reasoning, e.g. computer science, engineering, maths, finance & accounting, and education or health graduates have the lowest rates; graduates in public safety & security, recreation & wellness or general business (e.g. marketing) tend to face much higher underemployment rates.
 - **STEM is not a silver bullet** – the reality is more nuanced: graduates in computer science, engineering or maths tend to experience very low underemployment, while life sciences graduates tend to face higher rates.
 - **Employment rates are higher for those who complete an internship**: 48.5% lower underemployment for graduates who had at least one internship vs those who had no internships.
 - **Institution type, race/ethnicity, gender and geography matter** – but typically not as much as the subject or internships.

IZA published [The Labour Market Returns to Graduation: Reconciling administrative and survey data estimates](#), examining the earnings returns to university graduation in England.

- The study is based on Next Steps, a longitudinal study following a cohort born in 1989/1990 and comprising eight waves of data up to the age of 25/26.

- Recent evidence suggests a zero return to graduation for men and positive returns to graduation for women in annual earnings at age 26; however, once hours worked are taken into account – typically not available in tax data – returns to graduation are zero for women too.
 - Graduate women work more hours than comparable non-graduate women, explaining their annual earnings return, but average returns to graduation in terms of hourly wages at this early career stage are around zero for both sexes.

The findings highlight the importance of using both survey and administrative data sources when estimating the returns to university graduation.

HE: FUNDING, QUALITY & INSTITUTIONAL STRATEGY

The QAA published [The missing link: Higher education funding and quality](#), as part of its policy series on [The future of quality in England](#), but with UK-wide relevance.

- The declining unit of resource and potential impacts on quality risk undermining the UK HE sector as a national, cultural, social and economic asset on the world stage at a time when international competition has never been tougher.
 - Coupled with the lack of transparent, up-to-date information about English HE providers in the current system, international concerns about the quality of English – and, by proxy, UK – HE are potentially exacerbated.
- Recommendations:
 - Policymakers should work with the sector to develop: a stable and sustainable funding environment that allows for sustained investment in staff, facilities and research; a costed HE strategy that addresses long-term ambitions for the sector, how it can contribute to economic growth, and how this can be funded.
 - Policy developments/priorities should be accompanied by ring-fenced, sustainably funded support for teaching quality enhancement.
 - The policy environment should support alternative income streams, such as international student recruitment and international partnerships, while maintaining a focus on quality of provision; e.g.: a positive, collaborative global outlook to maintain UK HE's international reputation; aligning England's quality system with internationally recognised good practice; avoiding decisions that would further harm the UK's ability to recruit international students.

HEPI and Buckinghamshire New University published [What is wrong with franchise provision?](#), a debate paper setting out its benefits and challenges in the UK*, along with proposals for greater levels of assurance on quality and management.

- The benefits include enhancing choice and flexibility and widening participation and ultimately promoting social mobility.
 - While there are legitimate questions to be asked about student outcomes, the real challenge is to be found in the requirements of the Government and England's OfS for institutions to act in competition.
- The solution is a strong sector-wide and sector-owned code of practice that requires HEIs to work together in the wider interests of students and stakeholders, including government and regulators.
 - This would see HEIs establish effective consortia for each franchisee, simplifying and coordinating the multiple demands they place on them, and strengthening the requirements to enhance quality and promote stability.
- Consortia aren't a barrier to effective competition, but rather support the Higher Education & Research Act (2017) requirement to encourage competition that is in the interests of students and employers, while also having regard to the benefits for students and employers that result from collaboration.
- Perhaps the focus on competition has actually been unhealthy and the best way of managing the health of the HE sector is to support new entrants more effectively, creating stable conditions under which they can establish themselves and the quality of their provision.

Although the report refers frequently to the UK, it mainly focuses on policy and regulation in England.

HESA published [Inclusive growth: Can data support policymakers and the higher education sector \(to\) meet this objective?](#), exploring the association between education provision, skill level within the local population and productivity.

- Existing literature suggests that raising skills and qualifications is one of the factors that can contribute to boosting productivity.
 - With financial restraints, empirical analysis is needed to identify areas that could benefit most from investment in education.
- 38 local authorities (LAs) across the UK have the lowest productivity levels and proportion of residents with qualifications at level 4 or above.
 - School-level attainment is also often below the national average.
 - 44% of small/output areas within these LAs also represent some of the most deprived communities across the country.
- The vast majority of these areas don't have any HE provision or are served by a single establishment.
 - They tend to have a manufacturing, mining or industrial legacy and continue to see an outflow of graduates.
- Adding these data to HESA records could help policymakers to determine how education investment could increase productivity in areas that have faced relative economic decline in recent decades.

Includes an interactive map of UK LAs.

The Russell Group of published [The economic impact of the Russell Group universities' R&D activities](#) by London Economics.

- The 24 universities generated £37.6b for the UK economy in 2021/22 and supported over 0.25m UK jobs through their research and innovation activities alone.
 - Research activities accounted for £14.3b.
 - The impact of more than 1,200 UK spin-out companies currently operating thanks to research and support from Russell Group universities is estimated at £17.8b.
 - The impact of wider knowledge exchange activities, from contract research, consultancy services, IP income, business and community courses and facilities and equipment is estimated at £5.5b.
 - For every £1 of public money invested in their research, £8.50 was generated for the economy.
- A further £30.5b may be generated in terms of positive productivity spillovers, i.e. where knowledge generated the research activities of one agent enhances the productivity of other organisations.

A map shows the regional distribution of this impact, including for Northern Ireland, where Queen's University Belfast generated £2,376m and supported 19,570 jobs.

Elsevier published [View from the top: Academic leaders' and funders' insights on the challenges ahead](#), based on contributions from over 100 institutional leaders and funders from five continents.

- Universities around the world operate under inherently different conditions, but in an increasingly fractious and interconnected world, their vantage points converge in many ways, particularly around the biggest challenges they face and some of the ways they are tackling them.
- Research is the top priority (89%); challenges include the increasing pressure to show the broader impact of research and the time, money and expertise required to craft effective strategies with appropriate performance metrics.
 - Institutions are expected to: show societal impact and long-term health outcomes; illustrate how they help social mobility; and demonstrate how their work aligns with global frameworks like the UN's Sustainable Development Goals (SDGs).
- Funding (84%) is second only to research; it has the greatest influence on how effectively other challenges can be addressed.
 - Many universities face budget constraints and the constant need to compete for funding, not only to fund research and tuition, but to maintain and enhance their infrastructure; 78% consider the provision of facilities a high priority.
 - This pressure is leading some institutions to embrace financial sustainability strategies, such as lowering pension debts and collaborating with other institutions or the private sector
 - 66% believe that funding is set to become a greater challenge in the next five years.

- Talent is a priority in itself (76%) and is closely related to the ability to address other hurdles; it is an issue that includes academic roles, managers, administrators and technical staff.
 - 67% expect the challenge to grow over the next five years; 93% seek more funding to attract the best talent.
- In many countries, declining populations are often correlated with declining student numbers, although student numbers also appear to have been falling in countries with population growth.
 - Many leaders face pressure to increase the student body while maintaining quality and managing the impact on their physical location and their local communities.
- The demand for keeping up with the latest political, technological and regulatory changes is currently a low priority (35%) but 65% believe it will become a much greater challenge over the next five years, potentially compounding funding, talent and research issues in a variety of ways.
- A more widespread awareness of and sensitivity to the way in which specific groups have been marginalised and excluded over time means leaders must increasingly show how they are addressing the need for social equity.
 - Their institutions are now striving to ensure that research and study opportunities are accessible to all regardless of race, gender or socioeconomic status, and to create an inclusive culture where diversity is valued and respected; 76% say ensuring EDI at their institution is a high priority.
- The effects of Covid-19 are still being felt and universities are still dealing with the financial fallout and adapting to new ways of working and learning; they are also managing the transition to open science, the demands of increasing digitalisation and the development of AI and its associated benefits and risks.

WORKFORCE ISSUES

HEPI published [*Show me the money: An exploration of the gender pay gap in higher education.*](#)

- UK HE has a smaller gender pay gap than the national average (median gap 11.9% vs 14.4%), with significant improvements since 2017.
 - On average, the sector will take 14 years to close its gap, compared to 18 years for all UK sectors.
- Disparities persist between institutions, with some leading the way towards gender pay equity, while others lag behind; median gaps range from 0% to 41%.
 - Overall, progress in reducing the pay gap may be slowing, indicating the need for renewed focus and strategy.
- The report ranks HEIs by their current median and mean gender pay gaps, as well as progress over time.
 - 28 institutions will never reach pay parity at their current rate of progression as they have been moving in the wrong direction.
 - On their current trajectory and according to the most recent comparable data, the University of Leeds and Loughborough University could take over half a century to close their gender pay gaps while the University of Oxford will take 680 years to close its.
- The structural barriers to pay equity include: employment structures; bonus culture; and intersectionality; recommendations for HEIs include:
 - Increase part-time and flexible working opportunities, particularly in senior roles.
 - Review and overhaul recruitment metrics, particularly those that lead to further inequity; ensure that recruitment panels are gender-diverse.
 - Avoid inquiring about salary history in recruitment processes, to mitigate historical pay biases.
 - Encourage and normalise the uptake of paternity leave, shared parental leave and flexible work for fathers.

Reporting requirements are different in the devolved nations; several Welsh and one Scottish university choose to report their gap, but none in Northern Ireland.

Advance HE launched [*The Equality Charters – Good Practice Initiatives*](#), an updated database drawn from successful applications to Athena Swan and the Race Equality Charter (REC).

- The database includes initiatives to: support academics returning from parental leave; increase female students in STEM subjects; create pathways to promotions for women; support the future

success of Black women academics; and address ethnic minority and intersectional under-representation at a senior level.

The University & College Union (UCU) published [Support for research staff](#), drawing on HESA data and responses to Freedom of Information requests to 103 UK HEIs.

- Around 66% of research staff are employed on fixed term contracts, including 88% at Oxford University and 96% at King's College London and the London School of Economics.
- 30% of universities couldn't say whether research staff were redeployed at the end of their contract; of those that could, redeployment levels were as low as zero.
- Most paid only statutory redundancy pay to research staff dismissed at the end of a fixed-term contract.

None of the universities in Northern Ireland responded to the FoI request.

HEPI and the British Academy published [The lives of early career researchers](#), a set of 11 essays written by researchers, offering solutions to the challenges they face.

- Essays include: The PhD Parenting Penalty; The Impact of Biased Student Evaluation of Teaching on Early Career Researchers; Getting in, Getting on or Getting over a PhD; and Imposter Phenomenon and the Early Career Researcher.

The OECD published [The state of academic careers in OECD countries: An evidence review](#), providing an overview of available data, research evidence and examples of policy and practice.

- Key concerns for academics and policymakers include: working conditions; an increasing reliance on precarious and casual contracts; high workloads and negative impacts on work-life balance.
 - Career incentives currently tend to favour research output, often side-lining teaching, engagement, and other duties.
 - Initial academic training generally fails to prepare academics comprehensively for their roles, and more continuous professional learning will likely be needed to support academics to exploit the potential of increasingly digitalised learning environments.
 - Although flexibility in academic career paths has been promoted in some HE systems, academics tend to remain in academia, with limited inter-sectoral mobility.
- There is a persistent under-representation of – and challenges confronting – women and marginalised groups in academia.
 - Despite the growth of international mobility and collaboration, the participation of academics in internationalisation activities varies considerably within and between institutions and across systems.
 - A troubling decline in academic freedom over the past decade raises substantial concerns.

AI & TECHNOLOGY IN EDUCATION

England's Department for Education published [Generative AI \[GenAI\] in education: Educator and expert views](#), drawing on insights, interviews, data, literature and a call for evidence.

- It covers: how the sector has responded to and adopted GenAI technology; applications and opportunities, impact and benefits; barriers to adoption and risks; support the sector wants from government.
- GenAI is seen as having the potential to transform education, helping save time by automating tasks and improving effectiveness by personalising learning; there is also considerable concern about the risks and scepticism about whether these can be mitigated.
- Key findings include:
 - By November 2023, 42% of school teachers in England had used GenAI in their role; lack of knowledge about how to use GenAI and poor digital skills and infrastructure are limiting further use among teachers.
 - Educators are using GenAI to create lesson resources, plan lessons and streamline administrative processes.
 - 74% of online 16–24 year olds in the UK have used a GenAI tool; data show that between 14% and 67% of students have used GenAI for schoolwork and studies.

- Reported benefits for students include increased engagement and better support for those with special educational needs & disabilities (SEND) by personalising learning materials.
- There is considerable concern around GenAI-enabled academic malpractice, student overreliance on GenAI, as well as ethical, safety and data privacy risks of use; negative media coverage affects some perceptions and raises concern about the threat to job security.
- There are concerns about the potential for GenAI to widen educational inequalities and that the benefits for education will never be fully realised due to barriers to adoption.
- There is little robust evidence on the impact of GenAI in education; an impartial evidence base is needed to better understand the impact.
- There is appetite for government support to ensure GenAI adoption in education is safe, effective, and aligns with good pedagogy; government should also share guidance and best practice and ensure student data protection and privacy.
- Experts and educators also highlight the need for a longer term strategy for AI in education that is future-proofed to keep pace with its evolving nature.
- Recommendations are made around:
 - Establishing a long-term strategy; developing stakeholder forums; promoting evidence building
 - Academic malpractice, assessment and curriculums; workforce requirements
 - Safety, privacy and data protection; deployment; and intellectual property (IP) and publishing.

Experts interviewed in universities included one from the University of Ulster.

The UK Parliamentary Office for Science & Technology (POST) published [Use of artificial intelligence in education delivery and assessment](#), a briefing on how AI tools can be used by educators and learners in schools, FE and HE, the benefits and limitations.

- Key points include:
 - AI tools have the potential to provide different ways of learning and to help educators with lesson planning, marking and other tasks.
 - However, GenAI tools such as ChatGPT are increasingly able to produce text capable of passing some exams, which risks undermining the validity of some assessment methods.
 - Some stakeholders have expressed concerns that over-reliance on AI could diminish educator-learner relationships.
 - Concerns also relate to potential negative impacts on learners' writing and critical thinking skills.
- The successful implementation of AI in education will require:
 - Evidence demonstrating where AI can be effective in supporting educational outcomes
 - Training and guidance for educators
 - Further clarity surrounding the legal frameworks that control how AI collects and uses educator and learner data
 - 'Digital divides' to be tackled, otherwise AI tools may not be available to disadvantaged groups and may exacerbate inequalities.

The Centre for Progressive Policy (CPP) published [AI in Education: Can it raise us up or will it divide us further?](#), a discussion paper.

- Low educational attainment underpins entrenched economic disadvantage in deprived communities in the UK.
 - On top of lost human potential and a weakened economy, reduced social mobility contributes to political polarisation and social division.
- Technology has often been seen as a way to break this pattern by increasing access to high-quality education, reducing educational inequalities and raising living standards.
 - However, the history of EdTech has been disappointing, with patchy evidence and inconsistent uptake.
- Advances in AI have, with good reason, renewed hopes that technology can significantly improve the efficacy and efficiency of education systems, but consideration must be given to how policy might help to achieve this.
- Two propositions:

- Personalised AI tutoring tools should be adopted across the education system, but this must be accompanied by the creation of capability within the education sector to monitor their impact.
- AI should be used to personalise and integrate government services that help people with careers advice, lifelong learning and finding work.

HEPI and Kortext published [Provide or punish? Students' views on generative AI in higher education](#), a policy briefing based on a survey of 1,250 undergraduates via UCAS in November 2023.

- Findings include:
 - 53% had used GenAI to help them with assessments, 36% as an 'AI private tutor'.
 - 35% of those who had used GenAI didn't know how often it produces made-up facts, statistics or citations ('hallucinations').
 - 66% considered it acceptable to use it for explaining concepts, 54% for suggesting research ideas, 53% for summarising articles, but only 3% in assessments without editing.
 - A 'digital divide' in AI use may be emerging: 58% of those from the most privileged backgrounds had used it for assessments vs 51% from the least privileged backgrounds; those with Asian ethnic backgrounds were much more likely to have used it than white or Black students; males used it more than females.
 - 63% said their institution had a 'clear' policy on AI; 65% thought it could spot AI-generated work.
 - HEIs have not radically changed their approach to assessments – only 9% of students said the approach had changed 'significantly' while 24% said it had stayed the same.
 - 30% believed their HEI should provide AI tools; only 9% said they currently did so.
 - Only 22% were satisfied with the support they had received on AI.
 - 73% expected to use AI post-university: 33% for translating text; 37% for enhancing written content; 33% for summarising text.
- Recommendations include:
 - HEIs should develop clear policies on what AI use is acceptable and what is unacceptable.
 - Where AI has benefits, HEIs should teach students how to use it effectively and how to check whether the content it produces is of high quality.
 - To prevent the 'digital divide' from growing, HEIs should provide AI tools for those who cannot afford them when they have been identified as benefitting learning.
 - Governments should urgently commission reviews to explore how academic assessment will be affected by AI.

The QAA published [Navigating the complexities of the artificial intelligence era in higher education](#), as part of its [Quality Compass](#) series helping institutions respond to future challenges and opportunities.

- GenAI has the potential to democratise education through:
 - Enhanced accessibility: transformative support for students with disabilities
 - Support for diverse learning needs: personalised assistance to students with ADHD or in remote areas
 - Educational productivity: instant different formats of educational resources.
- But there are potential challenges:
 - Digital divide: the cost of advanced GenAI tools could exacerbate inequalities.
 - Infrastructure limitations: effectiveness depends on reliable internet.
 - Emotional intelligence: GenAI lacks this crucial requirement for a caring educational environment.
 - Equity of access: the financial barriers to accessing premium AI need to be addressed.
 - Managing AI integration: informed management and stewardship are needed to leverage GenAI towards educational equity without exacerbating systemic biases or deskilling students in critical thinking and research.
- The paper also considers how GenAI might: support student inclusion; enhance the learning experience; save time for the sector; develop work-related skills; promote academic integrity; support assessment; and help providers focus on their purpose and role.

- It calls for: creativity and critical thinking; 'a healthy dose of mistrust, questioning and an acute awareness of its risks'; and a sound understanding of the technology.

The Scottish Funding Council (SFC) published [The Future of Learning and Teaching: Defining and delivering an effective and inclusive digital/blended offering](#), by Education Scotland, QAA Scotland, Student Partnerships in Quality Scotland and College Development Network (CDN).

- Post-pandemic, learners in colleges and universities continue to value the flexibility of blended learning, and this is unlikely to change; institutions are rebalancing resources to ensure that face-to-face provision is enhanced by digital provision.
- However, how can institutions respond adequately to the variety of learner preferences to get the blend right?
 - Other important contextual factors include: environmental sustainability; opportunities for greater internationalisation; staff and learners having the relevant skills to use the technology; learners' expectations about access to technology.
- Research included staff and student surveys, interviews, desk-based studies, analysis of college engagement with HM Inspectors of Education and findings from HE Quality Enhancement and Standards Reviews.
- Key findings for colleges and universities:
 - The focus should be on getting the blend right; active blended learning is becoming the norm and 'digital' is a tool for delivering this.
 - All provision should be accessible and inclusive: there are specific challenges in terms of blended provision, such as digital poverty, which is widely recognised and is being addressed.
 - Learners' sense of belonging is key to encouraging their engagement regardless of mode; active and peer learning are essential to promote and sustain this.
 - Staff and learners need clear information about what 'blended' means in their institution.
 - The ongoing promotion of digital literacies is vital for staff and learners; staff development must include a focus on pedagogical understandings of digitally enhanced learning spaces rather than on how to use different technologies.
 - There is tension between institutional estates and learning and teaching, both in terms of current delivery (e.g., in scheduling) and future development (ensuring that learning spaces are aligned with learning and teaching strategies).

CDN published [Digital Progression in Scotland's Colleges: An insight report](#), featuring case studies on learning technologies, student–industry engagement and staff training/CPD.

- The report offers an insight into the processes colleges apply to scope, develop and implement digital initiatives that have a positive impact on the areas they were brought in to support.
- Reflections and common themes include:
 - Investment in technology solutions should not precede the full consideration of stakeholder needs and pedagogical approaches to learning.
 - All of the case studies involved collaboration and co-design of the curriculum with learners before the implementation of any digital solutions.
 - Having highly skilled learning technologists in colleges presents opportunities for greater innovation and many colleges are investing in digital learning hubs to support the development of staff and students; however, the sector will find the acquisition and retention of learning technologists an ongoing challenge.
 - There is a strong track record across the sector in the development of staff through various collaborative communities of practice; however, there should always be scope for bespoke solutions to suit the local context at the institutional level.
 - Partnering with software development and tech companies can produce highly effective solutions; to be successful, colleges need staff with skills and experience in e.g. funding and managing projects with external stakeholders.
 - While there are benefits to using AI in learning and assessment, the challenge is to ensure the authenticity of student work; protocols supported by the assistance of technology such as Turnitin's AI detection tool are needed to uphold the sector's reputation for quality.
 - Colleges must be prepared to continually invest in cyber security resilience through strategic investment in infrastructure and the development of staff.

The University of Glasgow's Scoping Extended Educational Realities research group published [XRed: Preparing for immersive education](#), and a 'white paper' summary, part-funded by Meta.

- The research explores the benefits and challenges of extended reality (XR)* to inform policymakers and funders, and includes recommendations for the XR industry, government and education.
 - The research is based on: the experience of researchers and users of XR technology in different education settings; literature reviews of potential applications of XR and future developments; workshops and discussions with education practitioners, accessibility specialists, politicians and technologists.
- It addresses the following questions:
 - What types of learning experiences are made possible with XR?
 - What specific features and capabilities will have a transformative role in learners' experiences?
 - What learning theories and frameworks apply to XR environments?
- Recommendations for the education sector are made under the heading: 'prepare, align, integrate and lead'.
 - Anticipate widespread XRed and start now to prepare teachers, curricula and classrooms.
 - Educators need to engage with research and develop best practice guidelines, outlining where and when there is alignment between learning outcomes and the capabilities of XR technology, and where XRed can support new, ambitious learning objectives that were not possible before.
 - Educators should develop techniques for transitioning in and out of XR within lessons, and integrate the technology into practice in an inclusive way.
 - The sector must take the lead to ensure XRed is built to enable and support practitioners.

**XR is an inclusive term for immersive technologies, i.e. virtual reality (VR), augmented reality (AR) and mixed reality (MR).*

HEPI published [Technology Foundations for Twenty-First Century Higher Education](#), a collection of essays by academics and others on how technology is already improving HE and how much more it could do to transform the student experience for the better.

- Essays cover topics including: governance and leadership; risks and challenges of AI; future-proofing HE; the landscape of 21st century learning; data as a foundation for the future of education; and student-centric approaches to the university of the future.
- The aim is to demystify technology – which for many leaders remains something of a black box – and provide some insights to 'elevate the discourse to a strategic level'.

The Workplace

RECRUITMENT

England's new Skills for Life service – funded by the Department for Education – published the [2024 Skills Horizon barometer](#), a snapshot of the SME recruitment & skills landscape for 2024, gleaned from 1,500 SME decision makers in England.

- The top five concerns are: increased running costs (51%); staff wellbeing linked to the cost of living (41%); increased wages (35%); staffing challenges (35%); increased supply chain costs (32%).
 - However, on average SMEs expect to grow 26.4% over the year, up from 26.1% in 2023; the most significant growth is expected in: finance & insurance (33%), retail (31%) and healthcare & pharmaceutical (27%).
- 71% plan to invest in their current workforce, +3.5% on the year; finance & insurance (86%), technology (78%), manufacturing (77%), retail (76%) and construction (76%) are the top five sectors.
- There is a rise in the number of SMEs that would consider employment schemes that would allow school leavers to train on the job, e.g. apprenticeships (53% vs 50.9% in 2023).
- The top skills that would stand out to a recruiting SME in 2024 are: good work ethic (38%); team player (37%); quick learner (31%); confidence (27%); ability to work under pressure (26%); qualifications are now last at 14%.

The Burning Glass Institute published [Skills-Based Hiring: The long road from pronouncements to practice](#) with Harvard Business School Project on Managing the Future of Work, exploring whether despite dropping degree requirements, US employers are changing how they hire.

- A longitudinal, role-based dataset was constructed by analysing posts for the same job at the same firm over time, based on Lightcast's data of 316m online job postings in the US since 2012; and a sample of 11,300 roles at large firms were studied, using the Institute's database of the career histories of 65m US workers.
- Findings include:
 - From 2014 to 2023, there was an almost fourfold (3.6%) increase in the annual number of roles from which employers dropped degree requirements, albeit down from a peak in 2022.
 - On average, firms increased the share of workers hired without a degree by about 3.5ppt; however, the shift applies only to roles that dropped the requirement during the period, resulting in only a 0.14ppt increase in hiring of candidates without degrees.
 - Nearly all the change in hiring was driven by 37% of the firms that removed degree requirements.
- Three categories of firms were identified, based on the actual hiring outcomes of policy changes:
 - **Skills-Based Hiring Leaders:** made real change, increasing their share of workers hired without degrees in the roles analysed by almost 20%.
 - **In Name Only:** ~45% removed degree requirements from their postings but made no meaningful difference to their actual hiring behaviour.
 - **Backsliders:** ~20% made short-term gains in realised job accessibility after they dropped degree requirements, but the change didn't stick; they ended up hiring a smaller share of workers without degrees.
- Conclusions and recommendations include:
 - Firms need to implement robust and intentional changes in their hiring practices – and change is hard.
 - Skills-based hiring boosts retention among workers without degrees hired into roles that formerly required degrees: non-degree workers have a retention rate 10ppt higher than their degree-holder peers; the non-degree workers also experience a 25% salary increase on average.
 - The occupations most ripe to remove degree requirements are those where there is a significant disparity between the qualifications sought and the profile of the current workforce, e.g. construction managers, sales supervisors, web developers and IT help desk specialists.

APPRENTICESHIPS & TRAINEESHIPS

The Learning & Work Institute (L&W) published [Enabling better outcomes: A wider view of apprenticeship success](#), the second report on apprenticeships in England commissioned by the St Martin's Group. *Some findings are relevant to other apprenticeship systems.*

- It explores the barriers apprenticeship employers face, employer support for completion and how 'best outcomes' are defined by different parties in the apprenticeship system, drawing on a survey of 800 apprentice employers.
- Almost all view completion as important but only a third report completion rates of over 75%.
- Support offered to apprentices, particularly in relation to off the job training and pastoral care, leads to higher completion rates.
 - Only 47% offer time for off-the-job training and study and 37% pastoral support; arranging time off for training was identified as one of the biggest barriers to supporting completion.
 - Supporting apprentices is seen as a joint responsibility between employers and providers, and their relationship is seen as crucial to success.
- Financial support for completions and to cover the costs of off-the-job training would help employers the most; some also identified the need for additional, easier-to-navigate guidance.
- Employers identified a range of wider apprenticeship success indicators beyond completion, most commonly: progression within the organisation; gaining knowledge and skills relevant to business needs; improved staff retention; and reduced skills gaps.
 - Training providers identified skills and knowledge and career progression.

- Apprentices associated success with gaining skills relevant to their job role or to equip them for new positions elsewhere.
- While completion rates offer a simple and standardised way of measuring success, this could be supplemented with additional measures such as industry retention, wage progression, progression into further learning and development of wider skills.

The [first report](#) (2022) explored the experiences of apprentices who complete and those who don't.

QAA published [Degree Apprenticeship: Voices from the Frontline – Impact, Policy and Good Practice Guide 2024](#), the final report from a Collaborative Enhancement Project led by Staffordshire University.

- 99% of employers consider the apprenticeship levy crucial for programme sustainability; 68% would discontinue degree apprenticeships (DAs) without it.
 - 95% believe that DAs contribute to achieving their strategic goals; 93% that they play a pivotal role in fostering their future growth; 89% that they are effective in attracting new talent; 92% that they lead to more engaged employees; 89% that they improve staff retention; 84% that they contribute to a more diverse workforce.
- 77% of employers and 66% of the apprentices report that their assessments are contextualised for their work environments; 44% of employers have someone contributing to apprentice teaching.
 - However, larger employers seem to have more influence on training providers, possibly at the expense of smaller employers.
- 82% of the apprentices report that their DA is facilitating career progression; 80% are satisfied with teaching quality; 66% believe they are developing the knowledge, skills, and behaviours they need to excel at work; 80% say they are able to use their academic knowledge and skills in their workplace.
- 55% of providers offer dedicated additional academic support for apprentices over and above what they offer to non-apprenticeship learners; 55% use different teaching methods for DAs and never co-teach apprentices and non-apprentices.
 - Only 44% of providers offer dedicated training for line managers to ensure they fully understand the academic requirements.
- 60% of apprentices feel they manage work-life balance well and 69% find employer support helpful.
 - However, 30% feel they don't get enough off-the-job time and 30% feel employers lack understanding of these requirements.
- Key areas for improvement include: a clearer understanding of course requirements; flexible learning models; closer alignment of curriculum with industry demands; better integration within the university environment; more work on enhancing the perception of DAs.
 - Only 5% of the apprentices received support for applications from their school/college.

Degree-level apprenticeships are available in different forms across the UK. The report focuses on England, but findings can be applied more widely. See also a further QAA report on the subject [on p 47](#).

The Scottish Apprenticeship Advisory Board published [How do we make apprenticeships more accessible and attractive to care experienced young people?](#) by an employer-led working group.

- Apprenticeships can be especially valuable for care-experienced individuals, offering paid work and opportunities to: build confidence; gain industry insight; and develop valuable skills that employers need.
- Young people from care-experienced backgrounds are less likely to choose apprenticeships and their apprenticeship participation levels and achievement rates are lower than their non-care experienced peers.
- Contributing factors include:
 - Lack of access to opportunities; entry-level qualifications; ambition; limited peer support; lack of positive role models/champions; personal finance; accommodation costs.
 - Some of the difficulties are challenges from within the system itself, e.g.: lack of effective collaboration across policy and service areas for care-experienced young people; no consideration or framework for cost avoidance; and a failure to collaborate and intervene effectively at an early stage.
 - Almost 40% of employers don't have programmes in place for under-represented groups.

- Recommendations include:
 - Expanding the Care-Experienced Students Bursary to include those undertaking an apprenticeship.
 - Employers embedding more flexible recruitment practices and developing a care-experienced policy with access to support, e.g. mentoring.
 - SDS developing mentoring guidelines and ensuring mentoring support is available.
 - LAs offering continued, supported accommodation for such apprentices.

TRAINING & DEVELOPMENT

The Centre for Vocational Education Research (CVER) published [Immigration and Vocational Training: Evidence from England](#), using records of participation in publicly funded, substantial on-the-job training to investigate whether the increase in migration over the 2000s might have reduced training among local workers.

- There is evidence of a negative affect both on participation and on intensity; however, it is concentrated on types of training and on groups for which training is less costly and less beneficial:
 - NVQ qualifications, but not apprenticeships
 - Older workers, where the returns are lower, but not younger workers.
- Concerns about the effect of migration on training are therefore partly warranted, but the economic effects are not likely to be great.
 - It is possible that 'training' for the affected groups was used by some employers as a source of cheap labour and migration provided an alternative source.
- Even if migration affected the training provided to locals, it may nonetheless have increased the total supply of skilled workers in the economy, easing bottlenecks and providing benefits to workers in other occupations.

IZA published [Recessions and the Labor Market Returns to Cognitive and Social Skills](#), examining how the influence of changes in unemployment rate has varied across workers with different levels of skills over time.

- The study uses the US's National Longitudinal Survey of Youth 1979 and 1997 data to compare cohorts aged 18 and 37 who entered the labour market in the early 1980s versus the early 2000s.
 - For each cohort, the relationship is estimated between changes within the region (or state) over time in the unemployment rate, interacted with cognitive skills and social skills, and labour market outcomes.
- Findings include:
 - Although recessions negatively affect labour market outcomes, those with greater cognitive skills have been less affected by recessions since 2000 compared to those in the 1980s and 1990s.
 - This occurs despite a decrease in the returns to cognitive skills over the last few decades, on average.
 - The relative return to cognitive skills during recent recessions can be attributed in part to changes in the provision of employer-paid training, due to lower training costs and enhanced labour productivity.
 - Firms provided more training to workers with higher cognitive skills during post-2000 recessions.
 - Firms are more likely to invest in training workers with high cognitive skills as labour productivity is increased.
 - Jobs that require high cognitive skills tend to be less sensitive to economic downturns, which implies that individuals with higher cognitive skills are less affected.

SKILLS GAPS & SHORTAGES

Edge published [Skills shortages in the UK economy 2024](#), a summary of its 2024 Skills Shortage Bulletins, which cover a range of recent research; a chapter is devoted to each of the key findings.

- Overall labour market conditions remain challenging
- Profound changes to patterns of employment are intensifying

- Skills shortages are numerous and have grown significantly
- The rate of skills investment is in decline
- Skills shortages have significant costs for UK businesses, the economy and the environment
- Employers prize work experience and broader transferable skills when recruiting
- Young people lack confidence in their future ability to meet skills requirements
- The education system struggles to respond to skills needs and is under-resourced.

It also includes sector summaries for: engineering, digital, creative, health & social care, construction, teaching and 'green'.

Awarding body NOCN and the Cross-industry Construction Apprenticeship Task Force (CCATF) published [Boosting routes into industry: An employers' perspective](#).

- The construction & built environment sector faces four major challenges that need to be addressed by 2030:
 - Reduce the major skills shortages of circa 250k skilled personnel up to 2027 to match the demands of a sustainable economy, by tackling recruitment and reversing the steady historical decline in the number of trade and craft apprentices in certain occupations.
 - Upskill the workforce to improve productivity through the use of digitisation, different materials, new products and new methods of working.
 - Skill the workforce to support the UK in constructing a net zero and sustainable housing and infrastructure while adopting new ways of working and materials that reduce carbon emissions in the construction process.
 - Ensure compliance with the legal requirements of the Building Safety Regulator, by improving the level of competency of the workforce.
- Findings from a survey of employers and an analysis of skills datasets include:
 - Employers use three main existing vocational training routes for the trade and craft occupations: apprenticeships, where numbers have been declining in some occupations; existing NVQs; and labourer cards
 - 442k people have a labourer card (level 1 or no qualification) and general competency standards are low; this needs to be tackled if the industry is to comply with the regulator's legal requirements.
 - It is essential that the main route to professional, technical & managerial occupations – higher and degree apprenticeships, traditional academic university courses and existing NVQs – are retained and properly funded; BTECs and T Levels need to have level 4+ occupations as their main destination.
 - Over the last ten years, skills policy and the skills system have become more fragmented across the UK and different policy areas, including even the definitions of what occupations there are; this makes recruitment and skills development more challenging.
 - There has been a decline in skills funding over the last ten years, alongside increased complexity in funding streams, which holds back recruitment and upskilling.
 - The industry has used the single carding Construction Skills Certification Scheme (CSCS) as the mechanism for verifying competency, but it needs to be better integrated into the overall skills system as well as developed to ensure it helps address all the key challenges.
 - Despite using a number of approaches for recruitment, the industry continues to struggle to attract sufficient people into the workforce.
- The report makes a number of recommendations, including on: establishing a single, UK-wide skills system for construction crafts and trades; using a common list of occupations and a common core of standards; and more flexible funding and a simple, combined levy for apprenticeships and training.

Sector skill body Cogent Skills published a [UK Life Sciences workforce factsheet](#), based on new figures from the Office for Life Sciences, covering 2016–17 to 2021–22.

- There was a 17% rise in those entering the sector in the period, including a 5.4% increase in the most recent 12 months.

- The number of people employed across the UK rose from 259,901 to 304,190, including 118,810 directly involved in manufacturing and 107,003 working in R&D; the sector generated more than £108b in turnover p.a. across almost 8k sites.
 - In Northern Ireland, 6,912 people were employed, generating £1.3b across 147 sites.
- The fastest-growing subsector was advanced therapy medicinal products (ATMPs), with an average annual employment growth of 24%.
- Jobs in digital health increased by 59% over the period, driven by a number of advances in mobile health technology and applications, highlighting the increasing demand for data and digital skills.
- On average, the sector sees more than 1k apprenticeship starts each year; in 2020/21, 28% of apprentices were at Level 6+.

ScotlandIS published [Scottish Technology Industry Survey 2024](#), based on responses from 133 firms between December 2023 and February 2024, 32% with a base in the rest of the UK, 50% located only in Scotland.

- 70% expect to recruit in the next year, down by 13ppt from 2022; 62% of these expect to hire university graduates (-19ppt); 38% college graduates (-27ppt); 34% Graduate Apprentices (-7ppt); 24% Modern Apprentices (-4ppt); and 17% Foundation Apprentices (+3ppt).
 - The most in-demand skills are: sales & marketing (80%, +2ppt), data skills (69%, +6ppt), AI/machine learning (63%, +17ppt), software & web development (61%, no change), cyber security (66%, +1ppt), leadership (55%, -12ppt).
 - The most in-demand technical skills are SQL, JavaScript and Python.
- 46% of firms expect to use upskilling and reskilling of staff to fill their vacant positions (-2ppt).
- 53% expect to host students on work placements (-8ppt).
- The top three areas for new opportunities in 2024 are: AI/machine learning (62%), data analytics (56%) and cybersecurity (49%).

In 2022, 80,785 people were working in digital tech firms in Scotland.

The Scottish Government published [Investing in Planning: A consultation on resourcing Scotland's planning system](#), identifying skills shortages, and challenges with the recruitment and retention of professional planners.

- There are growing demographic challenges for the planning workforce, and the number of those entering the sector will not meet the demand required.
 - 39.6% of the workforce is aged 50+, with reductions in numbers of those in younger age bands.
 - There are similar shortages for planning professionals in other parts of the UK and Ireland.
- Remuneration of professional planners has also not kept pace with inflation and is in sharp decline.
 - Skills shortages extend beyond councils to consultancies and the development sector.
- Planners are increasingly having to develop an understanding of new technologies and their impacts, particularly as a result of net zero commitments.
- Proposals include: continuing to develop a skills strategy for planning; promoting the profession as a career to school, college and university students; and conducting research into how to retain more international students.

The Scottish Government is developing a good practice [Digital Skills Portal](#) with the Royal Town Planning Institute.

SOLAS (Further Education & Training Authority of Ireland) published [Winter Skills Bulletin 2023: Transversal skills in Ireland's labour market \(Q4 2022 – Q3 2023\)](#), outlining the transversal skills in greatest demand in online adverts for jobs.

- Transversal skills are not specific to a particular job, task, academic discipline or area of knowledge but can be used in a variety of situations – and they are increasingly important in today's job market.
- In 400k online job adverts, 28% of the 9m skill mentions were for transversal skills; most frequent:
 - The ability to adapt to change; team work; and task prioritisation – these were similarly relevant across a range of occupational skill levels

- Followed by: show responsibility; assist customers; tolerate stress; manage time; think proactively; apply quality standards; and provide leadership – these were relevant mostly to high- and medium high-skilled occupations.
- Some of the top ten skills were more relevant for certain types of occupation groups:
 - Finance-related occupations featured strongly for: show responsibility; tolerate stress; and to a lesser extent provide leadership.
 - Engineering-related occupations were strong across several transversal skills, including: show responsibility; manage time; and apply quality standards.
 - Jobs requiring interaction with other people (e.g. HR/industrial relations officers, office supervisors, sales) featured: assist customers; and think proactively.

IZA published [What Skills Pay More? The changing demand and return to skills for professional workers](#), analysing the skills demanded and rewarded in the labour market from 2014–2015 to 2018–2020, using job flow data of professionals in the US.

- Labour shortages are not necessarily about a shortage in workers but about a shortage in job-relevant skills.
 - The study considered nine skills groups: two non-cognitive skills (collaborative leadership and interpersonal & organised) and seven cognitive skills (big data, cloud computing, programming, machine learning, research, maths and analytical).
- Findings include:
 - Collaborative leadership increased in importance over time in terms of predicting a positive wage premium; in contrast, interpersonal & organised had a negative wage premium in both periods; the difference in wages is possibly explained by the higher automatability of occupations that require interpersonal & organised skills.
 - As technology is constantly evolving, so too are the skills demanded by those who work in the area, which underlines the importance of continuous learning for professional data scientists, in addition to wage premiums to encourage them to focus on learning the latest data science skills.
 - There is a complementarity between collaborative leadership and research skills; collaborative leaders with access to new technology can foster a culture of innovation and creative problem-solving.
- Implications and recommendations include:
 - With a larger focus on skills-based hiring that reduces the focus on degrees, companies could hire more diversely and inclusively by broadening their talent pool to include skilled non-degree holders.
 - Companies can invest in task-based assessments that focus on the skills they need and those that have been highlighted as relevant.
 - Upskilling in the rapidly evolving field of data science is particularly crucial, with examples including data coding bootcamps or short courses.

Skillnet Ireland and IDA Ireland (the RoI's foreign direct investment [FDI] agency) published [Study of data digital skills for all non-IT roles across multiple industries](#), based on desk-based research, surveys and focus groups.

- The aims were to gather industry leaders' views on: the data and digital skills required for all non-IT roles now and in future; whether school leavers, graduates and employees have these skills; and the applicability of current education and training to the current and future needs of industry in these skill areas.
- Findings include:
 - Increased proficiency is required in: data skills (input, analysis, validation, manipulation and visualisation); digital problem solving; document design and presentation; digital communication and collaboration; and the ability to work confidently with digital technologies.
 - Building and maintaining these skills relies on transversal skills, e.g. a commitment to lifelong learning, resilience to change and having a digital mindset.
 - The foundational skills to develop these core skills need to be in place before a student leaves school.
 - Microcredentials and short online courses directly relevant to work and that minimise disruption to business-as-usual are highly regarded by industry.

- Transversal skills, e.g. resilience to change, an appetite for lifelong learning and having a digital mindset, are key to developing core data and digital skills.
- Recommendations include:
 - **Employers** need targeted talent development strategies to help ensure no one is left behind; and proactively build a culture that reflects the hallmarks of a digitally transformed organisation.
 - **Leaders** need to act as role models and demonstrate proficiency and comfort with data and digital skills and tools; those who actively create a culture that is data-driven and values lifelong learning are best placed to successfully manage their teams through digital transformation.
 - **Educators and trainers** need to provide school leavers and graduates with additional support to develop proficiency in widely used tools in industry or the skills to use data to problem-solve.
 - **Employees** need to: experiment with technology and regard mistakes as opportunities to learn; realise the importance of lifelong learning; seek to upskill regularly; and not assume that their past education and/or extensive work experience will equip them for the future of work.

SKILLS POLICY

BCC published [Boosting Skills: Journey through education & work](#), the second policy document published by its new Business Council as part of the Future of Economy project.

- It draws on insights gathered from recent, regular member surveys to outline a ten-point plan for people and work, comprising:
 - Plan for growth: a long-term, stable Industrial Strategy for all parts of the country, underpinned by national strategies for skills and infrastructure.
 - Better skills planning: a business support service to help employers identify, plan and invest in skills; a coherent, stable national skills system, that accounts for the needs of local economies; long-term investment in (England's) Local Skills Improvement Plans.
 - Get the first steps right: a broad education, where young people master the essential skills for life and work and enjoy more opportunities for applied, digital and technical learning.
 - Work-readiness: investment to make careers information, education & guidance a mainstream priority for school leaders, embedded in every part of the curriculum; support for employers to engage more with education; all-age quality careers advice.
 - Incentivise and reward private sector skills investment: recognise employers who invest in workplace training through the tax system and introduce a skills investment kitemark that is credited in the public procurement process.
 - Boost in-work progression through upskilling: ensure access to apprenticeships and progression pathways; flex the apprenticeship levy, roll out England's Lifelong Learning Entitlement on time and in consultation with employers; promote accredited short courses and modular Higher Technical Qualifications; ensure leaders, managers, and workforces are equipped for a more digital and automated workplace as well as the skills and needs of the circular economy.
 - Remove barriers to work: help people transition successfully from Universal Credit into work, including by boosting the provision and uptake of England's Skills Bootcamps.
 - Promote workplace flexibility and a more equitable workplace culture: encourage greater transparency, extend pay-gap reporting to cover ethnicity; boost the weighting of social value in public procurement; roll out the midlife MOT to SMEs.
 - Support a healthier workforce: including by introducing a business health support service.
 - Make the immigration system work for UK businesses: reduce the burden on employers who need skilled talent from overseas when they can't fill urgent job vacancies locally; ensure more proportionate criteria for SMEs using the immigration system and extend and increase youth mobility schemes.

The European Commission published [What drives workers' participation in digital skills training? Evidence from Cedefop's second European skills and jobs survey](#).

- The policy brief also identifies the characteristics of: the digitally underskilled in the EU workforce; and EU workers undertaking digital skills education and training.
- Key policy messages include:
 - Around 13% of EU workers are affected by digital skills mismatch to a great extent.

- While new digital technologies do not necessarily cause mass unemployment, there is a need for upskilling and reskilling of workers for whom they are likely to cause marked changes in job tasks.
- Policy efforts could be targeted at those reporting a digital skills mismatch but who are not participating in digital skills training, and workers with a higher chance of reallocation due to new digital technologies.
- The strongest drivers of participation in digital skills training are: job-skills requirements (level of skills demanded in a job); and attitudes and perceptions towards technology (e.g. fear of automation).
- Design and implementation of education and training initiatives should take both individual attitudes and specific job-skills requirements into account.

The European Commission, with the European Innovation Council and SMEs Executive Agency, published [*Pact for Skills: Analysing of up- and reskilling policy initiatives and identifying best practices – Final report*](#), by PwC in collaboration with CARSA.

- The study involved: an overview of upskilling and reskilling initiatives involving businesses as active stakeholders in 39 countries; developing a benchmarking framework of indicators; stakeholder workshops to test the indicators.
- Most countries have a dedicated national skills strategy, though the level of priority and ambition given to upskilling and reskilling varies; global trends in upskilling and reskilling policy include:
 - Focus on lifelong learning
 - Strong emphasis on developing digital skills and/or digital tools and approaches
 - Public/private sector collaboration, often involving the co-creation of training programmes, work-based learning opportunities, internships and apprenticeships
 - Recognition of the value of non-formal and informal learning, including online courses, microcredentials and experiential learning, creating mechanisms and frameworks for validation and accreditation
 - Inclusion and equality: addressing barriers to access, such as gender, socioeconomic inequalities and geographic limitations, providing equal opportunities for individuals from diverse backgrounds
 - Continuous monitoring and evaluation: tracking training outcomes; assessing the impact on employability and career progression; and making adjustments based on feedback and data.
- Benchmarking identified 'the best of the best' in specific categories; the initiatives that appeared in most top five lists across different categories included: Skillnet Ireland, Digitalizate (Spain), FutureSkills Prime (India), High Road Training Partnership (US) and SkillsFuture Movement (Singapore).

- Key success factors for upskilling and reskilling initiatives were determined in four aspects:

Stakeholders

- Policymakers typically play a central role, bringing all key stakeholder groups together.
- Large companies have an indirect influence on the design, implementation and evaluation of the initiatives.
- SMEs are often funding recipients and participation allows them to communicate their needs.
- Engagement of all key stakeholder groups at all stages of an initiative are highly beneficial for its performance.

Learners

- Highly flexible training programmes, based on modules, where learners have a high degree of freedom in how they put the programme together.
- Some programmes, especially long-term, are open directly to individual learners with no requirement for direct employer involvement.
- Learners work with dedicated career counsellors to select from opportunities and pathways to reach their specific goals and interests.
- Both analogue classroom format and e-learning courses are offered by multiple successful initiatives; most, however, are provided either hybrid or digitally.

Funding

- Most initiatives are highly dependent on public funding, with several 100% publicly funded.

- Private funding was in many cases highly desirable and crucial for feasibility; it secures company buy-in and increases their motivation to organise dedicated training activities.
- Most don't involve co-funding with learners; in some, learners may be paid to further facilitate their engagement; however co-funding is used in some to increase learner engagement.

Regulatory frameworks

- Successful initiatives are well embedded in the overall national skills strategy/agenda.
- They often contribute to the digitalisation of the economy by employing digital tools and approaches for training other types of skills.
- They often contribute to the preparation of specialists for the greening of the economy.
- New initiatives often need full-scale promotional campaigns to reach the target audience.
- Eight policy recommendations:
 - **For stakeholders:** the continuous upskilling of policymakers engaged in upskilling and reskilling policies; stimulating the involvement of the private sector in initiatives in different forms; encouraging the engagement of all key stakeholder groups in the design and implementation of policies; establishing a framework for collaboration.
 - **For learners:** simplifying and accelerating the skills accreditation process by leveraging technology.
 - **For funding:** increasing the role of private funding; diversifying funding types.
 - **For regulatory frameworks:** including 'green' components in initiatives.

SKILLS FORECASTING

The Pissarides Review into the Future of Work & Wellbeing published [Old skills, new skills: What is changing in the UK labour market?](#) based on skill requirements in job adverts between 2016 and 2022 provided by Adzuna.

- Approximately 1.4m job vacancies per month were analysed, encompassing 3.5k different skills.
- Most of the skills becoming obsolete and the new ones emerging to take their place are related to IT.
 - In 2016, these were e.g. working with Microsoft, telemarketing and web navigation; in 2022 they were more specialised, e.g. Amazon web services, cybersecurity, and AI and machine learning.
- However, the most popular skills remained throughout as: clear communication; high-quality client services; efficient office management; and effective customer relations.
- The occupational group that has lost the most skills and gained the most new skills is science, engineering & technology professionals and associates.
- The magnitude and pace of skill change varies considerably across occupations.
 - The fastest changing occupations include: computer system and equipment installers; electrical trades professionals; aerospace engineers; and cybersecurity professionals.
 - The slowest changes in skill requirements are among: teaching professionals; textiles, printing and other skilled trades; and transport operators.
- Policies need to encourage continuous learning and skills development, particularly in technology.
 - It is important to review educational programmes to equip future workers with the most relevant skills but also to provide ongoing updating support for adults and transitioning workers.

The [review](#), funded by the Nuffield Foundation, is run by the Institute for the Future of Work with Imperial College London and Warwick Business School.

Cedefop (European Centre for the Development of Vocational Training) published a policy brief on [Next generation skills intelligence for more learning and better matching: Skills anticipation trends, opportunities and challenges in EU Member States](#), building on its monitoring of skills anticipation systems and practices in the EU-27, Norway and Iceland.

- Skills intelligence helps translate megatrends and the aspirations of key stakeholders into labour market trends and skill needs.
 - With megatrends accelerating and labour market tensions increasing, countries are stepping up efforts to leverage the full potential of skills anticipation.

- Countries increasingly acknowledge the value of skills anticipation as a strategic and transversal policy decision tool, likely driven by the green and digital transition; sectoral organisations have become more active.
- Skills anticipation is used to identify labour market shortages, in career and vocational guidance services, to allocate continuing training programme subsidies and in migration policy.
 - Skills anticipation activities aiming at capturing the implications of the twin transition are gaining traction.
- No single skills anticipation approach, method or tool can sufficiently capture and comprehensively anticipate labour market needs and skill trends.
 - In the EU, econometric models relying on skills proxies are widely used to provide an image of future skill demand and supply.
 - Technological and skill foresight is booming because it captures the idea that there may be different futures for economies, labour markets and societies.
 - For skills anticipation and intelligence to make a difference, it must be part of a well-functioning skills ecosystem.
- Stakeholder collaboration is at the core of efficient skills anticipation: partnership approaches are developing to tackle skill challenges stemming from twin transition, demographic decline and the fluid geopolitical landscape.
- Skills governance is a collaborative process that can help overcome fragmented policymaking; Cedefop's framework helps identify bottlenecks, potential accelerators and improvement opportunities.
- Lack of political awareness is a key challenge in advancing skills anticipation for the green transition.
 - It isn't the number of methods but the level of coordination between them that matters, while giving stakeholders a seat at the table supports skills formation and matching and promotes fairness and social inclusion.

The European Training Foundation (ETF) published [*The Future of Skills in ETF Partner Countries – Cross-country reflection paper: A multifaceted innovative approach combining big data and empirical research methods.*](#)

- Skills analysis often focuses on the changing content of existing jobs, some of which might not exist in the future.
 - ETF has developed a methodology to provide detailed evidence of emerging skills needs, mainly focused on identifying the technical and non-technical skills people will increasingly need in the future.
- The multi-faceted methodology implements natural language algorithms to extract information on emerging skills needs in selected sectors from patent and bibliographical databases.
 - It is a step up in the use and analysis of data, complementing traditional empirical methods.
- The methodology has been tested, improved and applied in a series of case studies in selected countries and sectors:
 - Israel – Agri-tech; Morocco – Agri-food; Tunisia – Energy; Albania – Energy; Türkiye – Automotive; Ukraine – Healthcare; Armenia – Construction; and Egypt – Energy.
- Key findings include:
 - Human capital development needs to become a central element in sectoral and industrial policies, as it is a central driver for sustainable economic growth and social wellbeing; improving skills is one of the most effective antidotes to growing inequality and increasing anxiety about the future.
 - As new skills demands emerge due to technological, green, demographic, economic and political factors, developing and transition countries need to ensure that the workforce is prepared to grasp new opportunities and upskill and reskill, when needed, to perform new tasks.
 - Technologies driving future skill demand show commonalities across sectors, particularly in the demand for digital skills, such as AI/robotics and data collection/analysis; the adoption of digital technologies opens doors to data analysis, which improves production system efficiency and creates a demand for these skills in various industries.
 - Factors influencing technology adoption include: exposure to competition; climate change and environmental concerns; and finding alternative sources of energy.

- Uncertainties surrounding technology adoption stem from macroeconomic instability and the availability of necessary skills for the implementation and exploitation of new technologies; these issues were significant in all case study countries and sectors.
- Across sectors, many new jobs will emerge and only a few old jobs will disappear but most jobs will be done in a different way, with specific tasks – and the skills needed to perform them – changing.
- Medium- and low-skilled professions will also be required to expand their skill sets; at the same time, the impact of technological advancements is not limited to technical jobs: business and sales roles are affected as well.
- There is a tendency to search for backgrounds that are vertically specialised in a specific technology or area but have the capacity to apply it transversally over different jobs, with a horizontal knowledge of many disciplines (i.e. a 'T-shape' profile).
- The level of competence required by each worker will increase and become broader, shifting the occupational structure towards more highly skilled backgrounds; workers will need to have extensive knowledge of more than one discipline; job descriptions will become more fluid and will change constantly, as will the related skills.
- Soft skills are a common factor across all sectors, equipping workers with the necessary tools to adapt to rapidly changing needs; the skills most sought after include: teamwork, communication, empathy, collaboration, open-mindedness, flexibility, curiosity, entrepreneurship, responsibility and persistence.

GREEN SKILLS & JOBS

UK POST published [Green skills in education and employment](#), a briefing including a definition of green skills, their importance for net zero, the challenges and opportunities for skills development and related policy issues.

- Stakeholders suggest that the quality and uptake of VET are important factors for developing green skills in the workforce.
- There is regional variation in demand for, and access to, green skills; stakeholders have identified opportunities to align skills policy with the levelling up agenda to reduce regional disparities.
- Policy certainty is seen as a key lever to promote upskilling; frequent changes to government policies and targets can inhibit investment in skills.
- There is low public awareness of green skills and the available training options, attributed to inconsistent definitions for green skills.

The UK Government's Green Jobs Delivery Group plans to publish a Net Zero and Nature Workforce Action Plan in the first half of 2024.

PwC published [Green Jobs Barometer: Green jobs and opportunity: In pursuit of a competitive and equitable green jobs market](#), its third annual picture of the pace and spread of the UK's transition to a cleaner economy.

- The tool provides an evidence base tracking five 'pillars' for the 12 regions and nations of the UK: job creation; wider employment benefits; sunset jobs to disappear; carbon intensity of employment; and worker perceptions of the transition.
- The number of green jobs advertised has fallen from the record levels in 2022, although by less than the overall number of UK jobs advertised; 2.3% of all jobs advertised were green (+0.1ppt) UK-wide, 2.4% in Northern Ireland (+0.5ppt).
 - Northern Ireland saw increases in information & communication (63.1%), financial & insurance (50%) and professional, scientific & technical (20.2%) sectors; however there were reductions in other sectors including accommodation & food services (-77.8%) and manufacturing (-54%).
 - Scotland was the best performing of all the regions and nations in the UK and leads in green job creation (4.04% of jobs advertised were green).
 - London and the South East had the largest number of vacancies (33% of all new green jobs).
- Seven of 18 sectors saw a proportional increase in their demand for green skills.
 - At least 50% of green jobs require non-degree level, post-compulsory education; almost 40% require a degree or equivalent work experience.

The National Audit Office published [Decarbonising home heating](#), commissioned by the House of Commons, including the impact of the shortage of required skills.

- The skills and capacity of suppliers may be limiting factors in the transition to decarbonising, as workers don't have the expertise to install the required scale of low-carbon home heating.
 - The UK Department for Energy Security & Net Zero (DESNZ) wants 600k heat pumps to be installed per year by 2028.
- DESNZ is providing a £5m Heat Training Grant to support up to 10k heat pump and heat network training opportunities from 2023–24 to 2024–25; however it will need to ensure training opportunities continue and expand to reach the number of installers needed in later years.

Enginuity and Green Edge published [Human Capabilities for Sustainability](#), a 'white paper' investigating the cognitive, emotional and social qualities needed to think and act in a sustainable way, particularly for the engineering sector.

- Key issues explored include:
 - Human capability frameworks: comparing e.g. meta-skills as defined by SDS and their interplay with traditional skills; the Human Capability Standards Reference Model by the Institute of Working Futures in Australia (which allocates a domain to leadership); the European Commission's DigComp and LifeComp frameworks
 - Enhancing collective capabilities: building effective collaborations with external stakeholders
 - Changing mindsets and mindshifts – from short- to long-term thinking, denial to climate action, competition to cooperation, anthropocentrism to ecocentrism, inequality to social equity, technocentrism to nature-based solutions – involves education from early years and throughout a career, plus policy, legislation, inclusive dialogue and general awareness
 - The critical role of engineering and manufacturing and the need to help engineers to embody sustainability values: these are not necessarily supported by the engineering education they received.

Skillnet Ireland published [Building our Potential: Ireland's offshore wind skills and talent needs](#), produced by BVG Associates for Green Tech Skillnet and Wind Energy Ireland.

- Findings are based on an annual offshore wind deployment projection in Ireland up to 2050, and an in-depth supply chain analysis of the sector activities likely to be conducted.
 - Key metrics assessed include: track record in offshore wind; capabilities in similar sectors; benefits of local supply; current skills availability; investment risks; and the size of opportunity.
- There is limited direct experience in offshore wind in Ireland, however there is some relevant capability in most parts of the supply chain, particularly where: there is a track record or capability in parallel sectors (e.g. onshore wind, engineering and maritime, and project management); there is logic in supplying Irish projects from Ireland; and the investment risk is low.
- Significant investment in training and skills development will be needed to maximise the economic benefit from the development of offshore wind farms; skills shortages include:
 - Development and project management phase – management skills and senior roles; electrical; engineering
 - Manufacturing phase – skilled trade workers; offshore qualifications; construction management skills
 - Operations, maintenance and service phase – maritime training; health & safety expertise; electrical skills.
- Key recommendations include:
 - Establish a skills development fund for targeted investment in private–public training partnerships and third-level investment, guided by industry expertise to ensure the skills outputs match sectoral demands.
 - Attract workers, particularly Irish nationals, from abroad to plug short-term skills shortages through initiatives such as relocation grants.
 - Ensure offshore specialisms are covered in public education, and that private training providers equip future workers with the necessary skillsets to participate in the sector.
 - Build expert knowledge in transmission systems to address the severe skills shortage in electrical system expertise (HV and HVDC), both domestically and internationally.

ATHENA Research Centre published [Twin Skills for the Twin Transition: Defining green digital skills and jobs](#), in collaboration with PwC Greece and Huawei.

- The white paper focuses on identifying the new set of green digital skills needed in order to develop and deploy net zero technologies.
 - It analyses EU policies and reviews industrial sectors, and aims to guide the education sector in integrating these skills into curricula to meet industry demands.
 - A novel classification model is created, utilising the European Skills and Competences framework, to identify key green and digital skills.
- Findings include:
 - The demand for occupations with a high green and digital score has significantly increased from 2015 for all sectors, particularly for the ICT, energy, professional services, manufacturing and finance & insurance sectors.
 - Skills classified as the most digital or jointly digital and green are among the most demanded skills for all occupations.
 - Filling the gap in the need for green and digital skills will accelerate the transition to net zero.
- Recommendations include:
 - The involvement of TVET systems and universities is crucial to successfully implement the 'Green Digital Skills' taxonomy and to close current skills gaps in digital and green fields.
 - Greening of TVET and university curriculums should be further reinforced sector by sector.
 - Investment is needed in specialised training for disadvantaged groups in the labour market, providing them with targeted support to develop their knowledge and skills for green jobs.

Futures4Europe published [Futures of Green Skills and Jobs in Europe in 2050: Scenario and Policy Implications](#); a 'deep dive foresight study' conducted for the EC by the Foresight on Demand consortium, offering four scenarios.

- **Green technology-intensive Europe – Struggling to fill the green jobs:** the EU has advanced in a society-wide green transition and has gained global leadership in green technologies, exporting its accumulated green know-how.
 - Although past emissions continue to heat the globe, the world has avoided reaching major tipping points and the climate is gradually recovering.
 - The population has aged and shrunk, resulting in a lack of labour, including green skilled workers; jobs in renewable energy, green construction and sustainable urban planning are hard to fill.
- **Apocalypse Soon – Fighting skills mismatches in a degraded environment:** after failed policy efforts, a sharp deterioration of the climate and the multiplication of extreme events, the environment is in a critical state; Europe plays a leading role in green tech with booming exports.
 - However, society is polarised between: high-performing, export-driven innovative businesses, meeting global needs and employing highly educated people; and less dynamic businesses, focused on non-green internal markets and serving a population facing deteriorating standards of living and suffering from the damage caused by natural disasters.
 - Due to a lack of resources and the lack of a skilled workforce, the non-green companies are trapped in vicious cycles and falling behind in integrating green solutions in their operations.
- **Feeling the pain – a workforce left behind in a non-green world:** increasing environmental pressures haven't been effectively addressed; the EU is not a leader, but a follower of the strategies, timescales, actions and programmes set by others.
 - The majority of green industry titans are in countries such as China, India and the USA and the European ability to set any form of industry standards is limited.
 - Technological capacity fails to meet the level of the global forerunners; people are dealing with rising temperatures, accelerated loss of biodiversity and nature, increased pollution and more adverse weather events.
 - A significant number of green jobs concern themselves with adaptation to system pressures and even systems breakdowns and EU employers have little demand for green skills; people have invested in green skills, believing that they would be in demand, but many are now redundant or outdated, resulting in an oversupply of green-skilled labour.

- **Green leapfrogging: old, mismatched Europe surrounded by new green giants:** third countries and regions have left Europe behind; there have been geopolitical shifts, but also an improved environment.
 - Young people leave the EU to work in countries with positive green agendas; companies and individuals use non-EU green skills systems and individuals find informal ways to acquire the necessary skills.
 - European companies have transferred to other regions, limiting the EC's effective control, while the global community adopts more cooperative approaches to enabling a just transition for all; EU countries begin to align themselves with non-EU green leaders.
 - Skills systems are out of sync with global developments and strange new demographic combinations arise to match old and new skills gaps.
 - Towards 2050, the EU is in 'catch-up mode' trying to restructure the economic and skills ecosystems to align within planetary boundaries and the green, global development trends.
- Overall conclusions:
 - There will be no green transition without a strong, VET skills base; green skills should be developed for low-, medium- and high-technology professions.
 - Our shared understanding of what green means is reconfigured over time; R&D policy must include mechanisms for continuous reassessment to avoid overinvesting in technologies and solutions that are no longer seen as green by the time they are market-ready.
 - The talent base for green skills must be expanded, due to a decreasing population; gender balances should be addressed; promoting inclusiveness should be key.
 - Green transition requires European and international cooperation, with much of its fate dependent on the developments in the Global South and emerging economies outside Europe.
 - Green development paths are shaped by emerging technologies and emerging technologies should also be shaped by green skills; the trajectory and impact of new technologies such as AI are one of the unknowns across all scenarios; at the same time, integrating green skills and concepts of greenness in technological development and in orchestrating technological uptake is recommended.

AUTOMATION & AI

IPPR (Institute for Public Policy Research) published [Transformed by AI: How generative artificial intelligence could affect work in the UK – and how to manage it](#), a 'first-of-its-kind' report based on an analysis of 22k tasks in the UK economy, covering every type of job.

- With existing technologies, but especially with those currently in the development phase, almost every aspect of knowledge work could in some form be aided by GenAI.
- Four potential phases:
 - Phase 0: the current experimentation phase, with companies and governments testing which types of task AI models can correctly perform and how they can be introduced in workflows while ensuring quality and oversight.
 - Phase 1: implementation in organisations that will likely target 'low hanging fruit', where GenAI programmes are relatively easily plugged into existing IT processes; this would heavily impact ~11% of tasks; back-office, entry-level and part time jobs will be most exposed and women significantly more affected; a third of administrative jobs could be displaced.
 - Phase 2: GenAI becomes more deeply integrated into existing organisational processes, with access to proprietary data and the ability to execute tasks; ~59 per cent of tasks are exposed, including high-paying jobs; who gains and who loses will depend on policy and organisational factors; not all organisations will adopt the technology at similar rates, leading to inequalities.
 - Phase 3: processes built around GenAI, transforming further tasks and jobs, but only if societal changes occur that make it acceptable – e.g. key social and communications jobs mediated by avatars.
- 'Augmentation' means GenAI is used to boost worker productivity to produce more or better output; 'displacement' means it is used to lay off workers with less boost to output.
 - 'Full augmentation' means zero job displacement and an estimated economic boost of 13% of GDP; 'full displacement' means 8m jobs could be lost with no GDP gains.
 - In a central scenario, 4.4m jobs disappear, but there is a 6.4% boost to GDP.

- Positive scenarios can only be realised through a three pronged 'job-centric industrial strategy for AI': protect existing jobs and ensure gains for workers; boost creation of new tasks and jobs and support job transitions; address the fallout from lower labour demand.
 - A policy worth considering is 'ringfencing' tasks from full automation, thereby requiring a continued degree of human involvement, achieved via a combination of bottom-up classification of tasks and government policy incentives.
 - Other policies include: aligning regulatory and tax incentives so that they benefit job-augmentation; forward-looking competition policy to ensure a broad-based job-centric adoption of AI; in some sectors work time reduction might be an important option to consider too.

The Burning Glass Institute published [Generative Artificial Intelligence and the Workforce](#) in partnership with the Society for Human Resource Management, on how GenAI will impact industries, companies and jobs, and reshape the economy.

- Early adopters of GenAI will see increased productivity as roles are automated, augmented or transformed; however, there is unlikely to be a corresponding growth in demand for goods and services, leading to overstaffing in many industries.
 - Business leaders must prepare mitigation strategies (such as hiring freezes) to minimise the disruption.
- Price cuts and new jobs created by GenAI will drive increased demand and employment will rebound, at least somewhat.
- As hiring slows, fresh recruits will become rarer; the average age of the workforce will increase, which may impact organisations' ability to adapt to further technological disruptions.
- GenAI will cause broad transformations across nearly all categories of white-collar roles, while blue-collar work will remain shielded from major disruption.
 - Occupations at high risk include: financial analysts, actuaries and accountants; auditors; software developers; admin roles; marketers, writers, journalists and graphic designers; HR professionals.
- Recommendations for business leaders include:
 - Evaluating their organisation's composition and exposure to GenAI
 - Determining what learning and development investments can be made to build skills in areas that will become more important as GenAI adoption accelerates
 - Considering their talent pipeline and evaluating how GenAI may affect talent shortages or surpluses in markets of interest
 - Beginning to plan ways to leverage GenAI's productivity benefits and prepare for disruptions to the workforce through investment in upskilling and reskilling programmes.

The Federation for Small Businesses (FSB) published [Redefining Intelligence: The Growth of AI Among Small Firms](#), based on a nationwide survey of 816 members.

- 20% say they use one or more AI-related technologies in their business, rising to 37% of small businesses in professional, scientific & technical activities and 34% in information & communication, but only 12% in accommodation & food services, 11% in wholesale & retail and 1% in construction.
- 55% believe AI could provide potential business benefits, including: working more efficiently (40%); being able to automate tasks (29%); and developing/improving products and services (24%).
- 73% have concerns about how AI might potentially impact their business; the top three are: lack of knowledge/skills to utilise AI successfully (46%); ability to manage AI securely/manage security risks (31%); large businesses have more resources to better utilise AI (29%).
- 35% have plans to make further use of AI in the next two years, including undertaking a course to improve skills/knowledge (16%).
 - Of the businesses planning to grow rapidly in the next 12 months, 60% have plans to make use of AI in their business.
 - 26% don't believe that AI is appropriate for their business, rising to 51% in construction.

The report makes a number of recommendations for different parts of government to support skills for AI adoption.

IZA published [AI Unboxed and Jobs: A novel measure and firm-level evidence from three countries](#), estimating how exposure to AI developments affects labour demand in companies, using data from Denmark, Portugal and Sweden over two decades.

- The countries differ in e.g. labour market rigidity, industrial structure, productivity, digital intensity and AI adoption, enabling an exploration of how different economies are affected by AI advances.
- The study divided AI into nine applications or sub-fields in three areas:
 - Games: abstract strategy games; real-time video games
 - Vision: image recognition; image comprehension; image generation
 - Language: reading comprehension; language modelling; translation; speech recognition.
- Findings include:
 - Exposure to the advances of AI is associated with workforce upskilling: firms that are more exposed reduce their employment of blue collar workers and increase their employment of high-skilled white collar workers.
 - Importantly, the impacts across subdomains of AI differ substantially, with AI advances in image classification and language modelling increasing labour demand for high-skilled white collar while decreasing demand for blue collar workers.
 - For AI advances in images and languages, the associations are negative and significant for blue collar workers in Denmark and Portugal, while in Sweden the links are only present for languages.
 - For workers in Sweden, video games AI is positively linked to demand for blue collar labour: advances in video game technology can be used for remote control of tasks previously done manually, e.g. remote operation of machinery on construction sites and in mines; AI therefore facilitates the work and increases both the demand and attractiveness for those workers.

The Centre for Economic Performance published [Are we yet sick on new technologies? The unequal health effects of \[workplace\] digitalization](#).

- Using German data, it quantifies the relationship between the increasing use of frontier technologies – e.g., the Internet of Things, AI, Big Data – and workers' health outcomes between 2011 and 2019.
- Theories from fields such as organisational science and psychology have long emphasised that workplaces changing due to increasing technology dependence may induce 'technostress'.
 - On the other hand, digital technologies and automation hold the potential to shift workers away from physically strenuous tasks, enabling them to engage in less demanding and healthier activities on the job.
- Key findings:
 - Digitalisation in the workplace comes with increasing work complexity, time and performance pressure and more service-oriented tasks.
 - While the health of workers who initially already performed cognitive tasks remains unaffected by these changes, the health of manual workers is significantly deteriorating.
 - Digitalisation is exacerbating pre-existing health disparities between manual and cognitive workers; at the same time, since manual workers, on average, have lower education levels than cognitive workers, it also amplifies the well-documented health gaps between education groups.
 - There is some evidence that manual workers in firms with a more supportive culture and more IT-related training suffer less from workplace digitalisation, suggesting that policies to assist workers in coping with technology shocks may be an effective means to prevent negative health outcomes.

ADULT & LIFELONG LEARNING

Cedefop published a briefing note on [Microcredentials: Striving to combine credibility and agility](#).

- It investigates: microcredentials' evolving purposes, roles and effects in relation to European qualifications systems; the preconditions for users to trust them; and the support users need to engage with and benefit from them.
- Microcredentials hold promise for connecting people's skillsets with labour market demand in a rapidly changing world of work.
 - They have proliferated in recent years across economic sectors and education levels, reinforcing European and national efforts to understand and develop them better.

- They can increase the provision of labour-market-relevant VET, supporting national, regional and sectoral upskilling and reskilling strategies, offering learners targeted training for better employment prospects, and helping employers improve employee retention and productivity.
- They support the modularisation of qualifications and the validation of prior learning, enabling the inclusion of the most vulnerable and lifelong learning at all levels.
- However, significant policy progress and research is needed to ensure that microcredentials offer end-users real value.

QUALITY OF WORK

The Productivity Institute published [Part-time work and productivity](#), exploring the role played by different types of part-time work in the UK's productivity problem.

- Types of part-time work range from jobs designed mainly to retain higher skilled staff to jobs used to target paid working hours around variable demand.
 - In the middle, are more regular part-time jobs with more stable hours though offering low pay and limited career prospects.
- Productivity effects have been mainly assessed at the firm or workplace level but without reference to whether part-time work is a help or hindrance to leading productive lives.
 - 'Productive lives' mean not only the opportunity to learn, develop and utilise skills and talents to the full, but also opportunities to avoid work contexts that may cause stress and ill-health.
- Improving long-term UK productivity means focusing on individual worker development and well-being, not just short-term gains, particularly those that come at the expense of decent working conditions and insecurity over both financial rewards and working time.
- There have been improvements in the opportunities to continue in career-type jobs through part-time work, especially for those with higher qualifications.
- Part-time work may be becoming rather less of a dividing factor in the segmentation of the labour market due to:
 - Greater integration of part-time work into sectors with quality jobs
 - The lack of opportunities for progression among full-timers in the service and elementary occupations where part-time work tends to dominate, although variable and insufficient hours mean that working part time still comes with significant disadvantages.
- Overall, the positive developments in part-time work come with three main caveats.
 - The transition to part-time work still has a depressing impact on careers and pay progression and ultimately economic productivity.
 - Opportunities for job mobility are restricted for those in part-time jobs both because of a lack of rights to work flexibly and shortages in the supply of quality local part-time jobs.
 - While opportunities have improved to some extent for those in middle to higher level jobs, the quality of jobs for lower skilled part-time workers may even be deteriorating; for those in service occupations, higher productivity achieved through more variable scheduling and reductions in paid working hours comes at the expense of decent working conditions.
- The heterogeneity of part-time work means that there is no one policy initiative that could assist all.
 - However, improving access to and reducing the costs of childcare comes close to universal help for all working parents, bridging the gap between those who can afford formal childcare and those who can't, investing in future generations and enabling women to plan to continue in their pre-motherhood jobs and career paths.
- Other policy changes that could help by creating a convergence between full- and part-time workers include:
 - Changing practices such as unhelpful expectations of long and unsocial full-time hours, thereby expanding the supply of quality part-time jobs.
 - Protecting workers from cost-reducing but uncertainty-provoking practices within part-time jobs in service occupations.

The OECD published [Breaking the Vicious Circles of Informal Employment and Low-Paying Work](#).

- Informal workers make up nearly 60% of the global workforce and 90% in low-income countries.
- New evidence from the Key Indicators of Informality based on Individuals & their Household (KIIbIH) shows that informality often displays a two-tier structure:
 - The lower tier comprises workers with earnings below 50% of their country median; they make up 54% of the informal workforce on average and up to 80% in some countries.
 - A relatively small number of workers in the upper tier enjoy relatively higher earnings, are more skilled and more productive.
- Compared to both formal workers and upper-tier informal workers, lower tier workers and their household members face a greater probability of falling into poverty and encounter greater health-related and old-age hardships.
- Transitions between formal and informal employment remain limited, and the combination of informality and low-paying work is particularly persistent.
 - If transitions to formal employment happen, they don't necessarily result in improved income for the poorest workers; in contrast, those in the upper tier find it easier to access formal jobs and improve their incomes, largely because of their higher education levels.
- 45% of informal workers have at best a primary level of education, compared to 7% of those in formal employment.
 - Informal workers also have very limited opportunities to upgrade their skills, whether through employer-provided training, public programmes or other forms of learning, typically because these aren't adapted to their needs.
 - As a result, economies with large informal employment display sizeable skill mismatches, hampering the adoption of new technologies and productivity, perpetuating informal employment and a vicious, intragenerational circle of informality.
- Children in households where all family members are informally employed have a lower chance of securing a formal job as they grow up because: their school attendance is low; less money and parental time are devoted to their education; and school-to-work transitions are longer and more uncertain for them.
- The vicious circle of informality, especially for workers in the lower tier and for their children, can be broken by extending social protection coverage to all workers and their household members.
- Policy recommendations include creating specific skills development opportunities, with employer-sponsored training and public skills programmes tailored to their needs.

EQUALITY, DIVERSITY & INCLUSION (EDI)

The Young Foundation published [Beyond buzzwords: Embedding a systemic approach to EDI across the UK's professions](#), with research conducted on behalf of 12 professional membership and regulatory bodies.

- 73% of professionals surveyed reported experiencing barriers to progression in their career and 72% discriminatory behaviour in the workplace.
 - Negative experiences are more common among those with more 'marginalised characteristics'.
 - 53% have considered leaving their profession and/or organisation due to EDI-related issues.
- Ultimately, scepticism is growing among professionals about the capacity of EDI efforts to enact change, with a widespread perception that there is lots of talk but little meaningful action.
 - Disillusionment with the practice of EDI could mean that progress to date is at risk of backsliding: 22% believe EDI receives too much focus compared to other issues within their profession.
- 'What works' will depend on organisations negotiating numerous factors, e.g.: demonstrating commitment to short-term change, while ensuring change aims to have longer term impacts; involving those with lived experience, without burdening them with the responsibility to drive change; building coalitions and alliances across groups, while appropriately recognising their differences.
- A new approach that reframes how EDI is understood is required:

- Equality, diversity and inclusion must be guiding principles for all decision-making, not just for specific initiatives.
- Interventions must focus on changing the systems that underpin marginalisation.
- Professional bodies have the capacity to 'raise the bar': EDI must be at the heart of what it means to be a professional; higher standards must be set; professionals must be involved in change; they must become role models for good practice.

BCC published [Workplace Equity Commission: Interim Update](#), summarising the evidence.

- Firms that have taken steps to improve fairness in the workplace have seen tangible benefits and there is a lot of good practice in local business communities across the country.
- Fair recruitment practices are critical to making equitable workplaces.
- The main barriers for firms are knowing where to go for information and a lack of time and resource.
- Fear of saying or doing the wrong thing can lead to paralysis, which doesn't benefit the employer or the workforce.
- Businesses are aware that skilled people are being forced to leave the workforce because of the cost and availability of care/childcare.
- SMEs value opportunities for peer learning with organisations of similar size or within their sector.

The Commission will now develop practical recommendations for SMEs, to be published in September.

BCC also published [findings](#) from a poll of employees, exploring their experience of workplace equity.

- 93% said they understood the term 'equality, diversity & inclusion'; 6% didn't understand it or weren't aware of it.
- 73% said they understood the term 'workplace equity'; 28% didn't understand/weren't aware of it.
- 75% agreed that everyone in the workplace has the same access to opportunities, resources and treatment, while 25% disagreed.
- 28% of respondents said they felt they'd unfairly missed out on a workplace opportunity in the past two years.

There is no methodological information on the survey.

Business in the Community (BITC) published [Voices from the Race at Work Surveys](#), a report on the issues hindering UK businesses from achieving race equality, based on analysis of the 2015, 2018 and 2021 surveys.

- Black, Asian, Mixed Race and other ethnically diverse employees face more unfairness and favouritism in interpersonal relationships due to workplace politics than their white counterparts.
- Career progression within organisations can be hindered by where a person is located, biased decisions and discrimination.
- Many respondents felt that recruitment and selection processes were often unfair, and communication around promotion opportunities was often unclear.
- The report calls on employers to:
 - Increase transparency in hiring and advancement by monitoring each stage of the recruitment and selection process.
 - Embed EDI principles into organisational systems and review employee survey data to monitor the impact of changes introduced, holding all levels accountable.
 - Make diverse representation in senior management a priority to promote inclusive decision-making; build a culture that promotes constructive feedback and encourages allyship.

UNISON published [findings](#) from a survey of 44k women working in the public sector, exploring access to flexible working.

- 30% have had requests to work flexibly denied, 25% of them multiple times.
 - 47% have requested some flexibility so they could achieve a better work-life balance: 37% to look after their mental health; 36% to fit around childcare; 29% for physical health reasons.

- They were given a range of explanations as to why it wasn't possible: 42% that it would affect the quality of service provided; 28% that there wouldn't be enough colleagues to cover their duties; 20% that it would prompt colleagues to ask for similar working patterns; 15% were given no reason at all.
- This April, a new flexible-working law comes into effect in England, Scotland and Wales, giving employees the right to request flexible working from their first day at work, rather than having to wait six months.
 - However, employers will still be able easily to turn down requests.

The Phoenix Group published a report by the [50 PLUS Choices Employer Taskforce](#), arguing that flexible work should be a priority for the over-50s and for business.

- New research by the Chartered Institute of Personnel & Development (CIPD) found that part-time working was the most common form of flexible working among over-50s (33.2%), although it varies considerably by sector.
 - 22.4% of the 50+ workforce work from home, while 12.9% use flexible time.
- Recommendations for government:
 - Lead by example by monitoring uptake and effectiveness of flexible working, broken down by age
 - Provide a range of practical examples, including case studies, to help illustrate how flexible working can be used to aid retention, retraining and recruitment of over-50s
 - Ensure resources on HR support are available to help SMEs implement flexible work legislation, including issues such as phased retirement
 - Review the Job Centre Plus and Department for Education skills and training offers to ensure they can be undertaken on a flexible basis
 - Back the Centre for Ageing Better's [Age-Friendly Employer Pledge](#).
- Recommendations for business:
 - Actively promote the availability and range of flexible options to new and existing employees, monitoring uptake and effectiveness
 - Offer support to people managers to better support flexible workers of all ages
 - Include promotion of flexible work in all job adverts and/or discuss this early in the recruitment process
 - Ensure training and skills opportunities can be taken flexibly
 - Actively adopt and sign the [Age-Friendly Employer Pledge](#).

The taskforce comprises: CIPD, BCC, Institute of Directors, FSB, Recruitment & Employment Confederation (REC), UK Hospitality, MakeUK and BitC.

Phoenix Group CEO Andy Briggs is the Government's Business Champion for Older Workers.

City & Guilds published [Championing & supporting neurodiversity in the workplace: Neurodiversity Index 2024](#) with Do-IT Solutions.

- Key findings from a survey of 93 employers and 573 employees undertaken between September and December 2023 include:
 - 52% of employers have adapted their recruitment processes to accommodate neurodiversity (+11ppt on 2022).
 - 42% of neurodiverse employees have disclosed their condition at work with a good/OK response (-16ppt).
 - 72% of organisations had general awareness training in the last year (+14ppt).
 - 21% of HR professionals (-2ppt), 33% of senior leaders (+5ppt), 28% of managers (-) had specific training relating to neurodiversity.
 - More organisations have neuroinclusion strategies (44%, +10ppt); however this isn't necessarily leading to action, e.g. reductions in those having neurodiversity champions (43%, -6ppt) and in those with a peer mentoring programme (28%, little change in two years).

The OECD published [*Enhancing opportunities by design: Exploring people's views of what should be done to fight inequality*](#), drawing on data collected as part of its 2022 Risk that Matters survey, including messages related to skills.

- Survey respondents were particularly supportive of policies aimed at fostering equal opportunities – such as improving equal access to education (46%).
- Over a third believe that the private sector should address wage inequalities, create jobs and invest in their workforce.
- While most respondents support measures aiming to enhance the outcomes and opportunities of the most vulnerable, their preferred mix of policies varies depending on the level of inequality and mobility in the country they live in.
 - In contexts with higher poverty and inequality, respondents tend to prioritise policies that specifically target low-income households, such as improving equal access to education.
 - In countries with high intergenerational mobility, they support policies aimed at middle-income households, such as re-training the unemployed and workers affected by structural changes.
 - In countries with higher minimum income benefits and greater interpersonal trust, respondents strongly support measures aiming to enhance what people bring to the labour market, such as education and skills.

The World Economic Forum (WEF) published [*Innovating for Equity: Unlocking Value for Communities and Businesses*](#), a report by the Schwab Foundation for Social Entrepreneurship offering social innovation solutions for integrating racial equity into business practices.

- Innovative founders and collectives are building successful commercial solutions to the structural challenges presented by racial and ethnic inequity.
 - These models are creating shared prosperity for communities and businesses and are beginning to shift underlying business practices – from hiring to product design – in ways that drive measurable outcomes and bring about more equitable, just and prosperous economic systems.
- Three pathways for social innovators, based on case studies of innovations with proven impact:
 - **Expanding markets:** centres on social innovators providing products and services that better meet the needs of communities and geographic contexts; innovations feature 'last-mile' delivery models that empower local asset owners and provide access to new, more diverse customer bases.
 - **Unlocking talent:** spotlights social innovators creating more equitable hiring practices, challenging historical models of assessing candidate risk and potential, reshaping employment opportunities at all levels and removing barriers to onboarding high-performing employees.
 - **Broadening networks:** focuses on building more inclusive and diverse supplier ecosystems; successful, grassroots-led efforts to equitably engage with the skills and assets of vendors that have been historically excluded and economically marginalised, redefining who benefits from and is represented in global business networks.

MANAGEMENT & LEADERSHIP

The Chartered Management Institute (CMI) published [*Management and UK 2030*](#), on improving management capabilities to narrow the productivity gap with international peer nations.

- Lightcast and ONS Labour Force Survey data were used to analyse the market dynamics of managerial occupations in some of the UK's sectors and across the World Management Survey's top performing economies.
- Findings include:
 - The UK will need to recruit over 120k extra managers by 2030; it also needs an additional 10% of management job adverts to require high-level management skills if it is to close the gap with the world's most productive economies.
 - If UK management capability was made equal to Germany in the coming decades, the estimated gain to the UK economy would be in the region of ~£127b.
 - In comparison to other sectors, the UK's health sector undervalues skilled managers; e.g. 36% of finance professional job adverts specified management skills, compared to only 23% of health professional job adverts.
- Key recommendations include:

- Upgrade the management capabilities of the government and public sector workforce and those who supply its goods and services; every major public service should adopt a formal management capability framework with clear qualification pathways at all levels.
- Maintain levels of investment in Levels 5, 6 and 7 management apprenticeships, which are proven to increase employer productivity.
- Consider the impacts of HE funding, apprenticeship funding, migration policy and industrial strategies on the UK's business schools and colleges as key institutions for increasing management capacity in the UK.
- Explore the development of flexible and high-quality delivery in all the above skills provision areas, e.g. Skills Bootcamps, modularisation and distance learning to enable more to participate.
- Embed management skills in key government strategies, e.g. future industrial strategy, green transition, innovation policy (emphasising management capability from research grant-led entrepreneurship).
- Incorporate the importance of management capability into devolution deals to ensure that regional growth and public service improvement are supported through better management and leadership.
- Use the tax system to push and incentivise investment in high-level management skills.

CMI published [findings](#) from a Managers Voice Pulse Point Poll on the digital and cyber security skills of 1,006 practising managers in employment in the UK in May 2023.

- 85% of managers think that their own digital skills need improvement.
 - 21% said they had basic or no knowledge of how to use social media platforms such as Facebook, Instagram or LinkedIn for personal or professional use.
 - 31% said they had little or no knowledge of using file management and sharing tools such as Google Drive and Dropbox.
 - 10% said they only have a basic understanding of cybersecurity practices, e.g. using strong passwords and avoiding phishing scams.
 - 29% have at least intermediate knowledge of search engine optimisation techniques and 31% have at least intermediate knowledge of using web analytics.
 - The least common digital skill is programming languages, e.g. Python and Java, with only 11% saying they had at least intermediate knowledge.
- Managers believe that both employees themselves (84%) and the organisations they work for (92%) have a responsibility to develop their digital skills, but that organisations should lead the way in improving the digital skills of their employees.
 - 19% say their organisation has digital basics in place, e.g. social media or remote working, with ambitions to do more; only 5% say their organisation struggles with the basics and generally has low digital skills.

International Comparisons

Cedefop published a 2023/24 update of its [European database on apprenticeship schemes](#), offering the latest, in-depth information on how they are designed, governed and organised.

- It covers EU Members States plus Iceland, Norway, Switzerland and the UK (England and Scotland) and provides information including: types of learner typically enrolled; the qualifications they can obtain and how they can progress; state and social partner responsibilities; how workplace training is organised; and funding and employer/learner incentivisation arrangements.
 - Complementary financing information is provided by the [database on financing apprenticeships in the EU](#).

NORTHERN IRELAND

Northern Ireland Statistics & Research Agency (NISRA) published [Work Quality in Northern Ireland](#), analysing 11 work quality indicators* for employees aged 18+ for the period July 2022 to June 2023; key points include:

- Three new indicators were introduced during the period, focusing on bullying and harassment, line manager support and skill level.
- Most indicators showed a significant increase from 2020 but there were only small increases in job satisfaction and meaningful work.
- Job security has consistently been the most attainable indicator, while flexible working has generally been the least achievable.
- Males report significantly higher proportions in six indicators, however, the largest difference between male and female employees was in flexible working (15ppt), with considerably more female employees reporting flexible work than male employees.
- A significantly higher proportion of 18–39 year-olds reported good opportunities for career progression in comparison to those aged 40+.
- Employees in the least deprived areas generally reported higher proportions in most indicators, especially in earning at least the Real Living Wage.

**Secure employment; neither under nor over employed; meaningful work; earning at least the Real Living Wage; job satisfaction; employee involvement in decision-making; career progression; flexible working; neither under nor over skilled; line manager support; never bullied or harassed.*

Increasing the proportion of working-age people in good jobs is one of the key objectives of the Economic Mission announced in February by new Economy Minister Conor Murphy. The others are: promoting regional balance; raising productivity; and reducing carbon emissions.

The Department for the Economy (DfE) published [Action Plan 2024: The path to net zero energy](#), outlining the priority areas for government this year, including the following planned actions:

- ‘Create an environment encouraging the creation of good jobs, investment and growth of a skills base for the low carbon economy through innovation, support and focusing on our competitive strengths.’
 - DfE will facilitate an industry-led Green Skills delivery plan based on the Energy Skills Audit published in June 2023.
 - The plan will initially focus on the built environment and utilities, with the emphasis on reskilling.

The DfE also published [2023 Action Plan Report](#), including an update on skills-related actions.

DfE published [Understanding Northern Ireland’s Software Capability and Future ‘Windows of Opportunity’](#), the final report of a study undertaken by Steer Economic Development; among the findings:

- 46k people are employed in NI’s software economy; women account for just 27% of employees and only 17% of the NI residents employed in software occupations.
- In terms of skills supply, around 5k students are enrolled on computing courses at NI HEIs – higher than the UK average in terms of percentage of the population, but behind Scotland and London.
 - Participation in computing education at school is very low in NI; e.g. computing’s share of A-level qualifications taken is around half that in England.
- The strongest areas of specialism in NI are FinTech, digital transformation, cyber, data analytics, and sensing, control & automation; there are particularly healthy growth prospects for the first three.
- NI has a ‘window of opportunity’ over the next five years to grow its capacity in three ‘megatrends’ where it is currently falling behind: AI, data science & engineering and cloud.
- The software sector in NI benefits from: a highly skilled workforce; strong personal networks; and areas of specialism.

- However, the limited availability of skilled people is holding back the cluster's further development and there is an urgent need to tackle the constrained supply of skills, by both training local people and attracting talent from elsewhere.
- At the same time, software-intensive businesses are at the forefront of remote/hybrid working and managing this effectively has become a critical management competence.
- Recommendations for DfE and the Department of Education (DE) include:
 - Boosting the funding available for PhDs and post-docs in software-intensive disciplines, especially in AI, data science and data engineering.
 - Researching global best practice in computing education from primary through to tertiary levels and implementing pilots of the most promising approaches.
 - Setting out an ambition for all NI's post-primary schools to equip their students with computational thinking and coding skills.
 - Substantially growing the numbers gaining tertiary computing-related skills and qualifications, through a variety of pathways.
 - Facilitating an increase in the flow of experienced technical and commercial software talent re-locating from GB, RoI and further afield.
 - Facilitating the spread of best practice in remote working approaches across the sector.
- It is also recommended that Software NI [*formerly the Software Alliance*] promote the importance of the sector to the economy by: continuing to stress the need for policy clarity, direction and action; and considering how best to communicate career opportunities to key target audiences.

ENGLAND

The Gatsby Foundation published [*E-Assessment in Technical Education in England: Follow-on report.*](#)

- Its 2021 review of e-assessment's potential in this area concluded that:
 - It's difficult to find technical education assessment methods that are reliable and replicable and at the same time valid and authentic; this issue is reinforced by the need to fit within a wider system of academic credentials and levels of progression while still being credible for employers.
 - The increasing use of digital technologies in the workplace and young people's lives creates opportunities to streamline methods and to address some of the inherent challenges; there are significant barriers and progress has been relatively slow, but there are signs that the disruption caused by the pandemic may have provided a helpful shock to the system.
- The new report outlines specific examples of what is possible, identifies opportunities to do more and looks at practical ways to remove some barriers and create a more supportive framework that encourages innovation and digital transformation.
 - It explores end-point assessment (EPA) in four occupational areas: digital; engineering & manufacturing; marine pilot; and care; it also looks at the wider landscape of technical qualifications, including T levels.
- Four main conclusions:
 - There are limited examples of the potential of digital to transform assessment in the English apprenticeship system and more widely in technical education.
 - Despite its other merits, features of the EPA model make it more difficult to adopt technology for the assessment of apprenticeships;
 - There are no quick and easy solutions but there are steps that Ofqual and the Institute for Apprenticeships & Technical Education could take to encourage more progress;
 - AI is likely to both extend the capabilities of how technology can be used for assessment and undermine conventional assessment models across both technical and academic education.

Prospects Luminate published [*Effective school outreach needs employer collaboration*](#), findings from Institute of Student Employers (ISE) surveys of 91 schools/colleges and 53 employers in England.

- While schools/colleges felt there was the right volume of careers fairs and emails, they called for more one-to-one mentoring and practical guidance, such as help with CVs and interview practice.

- 88% wanted in-person activities at their institution and 67% at the employer's location; only 19% preferred virtual live events and 23% virtual on-demand activities.
- 66% of institutions and 82% of businesses feel employers should come together to provide career activities by sector, skill or career pathway; employers slightly preferred sector-based collaboration, while institutions preferred cross-sector activities.
- Schools/colleges report a lack of student engagement in T levels, apprenticeships and HTQs compared to university.
- 74% of institutions and half of employers report difficulty organising work experience, mainly due to lack of resources and time as well as disconnect between supply and demand.
 - Third party partnerships and long-term employer relationships can make the process easier, as could employer collaboration to provide an experience that simulates working on a real-life project.

The full report is only available to ISE members.

The Association of Employment & Learning Providers (AELP) published [The 5% Club & AELP Employer Summit](#) the report of an event exploring practical ways to improve the apprenticeship system in England.

- A wide-ranging exploration of the issues resulted in a discussion focused around seven themes, identifying issues and proposing solutions including:
 - **Functional & inclusive maths:** allow competent apprentices to pass their programme, with a 'pass' the highest award for those that don't complete Functional Skills (FS); allow senior workers to demonstrate FS competence through their roles; make FS relevant to the job role and life experiences; address the elements of FS that learners are continuously failing.
 - **How to support SMEs:** remove admin burdens; provide support through local/regional bodies; consider using trusted trade bodies and other local bodies (e.g. LAs) to guide them through the process; support levy-payers to provide local support on the levy transfer and onboarding; incentivise providers to recruit/train apprentices.
 - **Standards:** remove obsolete elements now; build in flexibility (e.g. pick-and-mix modules), including around EPA and timescales; ensure clear pathways from one level to the next; include an 'employer-led' unit to cover specifics (e.g. in materials/techniques).
 - **End-Point Assessment:** ensure businesses are feeding back on EPA design and operation.
 - **Devolution:** more information for employers and providers and clarity about the role of regional/local devolved authorities; portability of product and funding across the UK; enable employers to use levy funds not spent in England to train employees in devolved nations.
 - **The role of the employer:** standard training for line managers; strengthen the tri-partite agreement; explore success measures beyond achievement rates.
 - **Careers pathways:** create 'foundation apprenticeships' as a pre-apprenticeship level; define clear pathways between programmes; introduce some flexibility around modules, e.g. being able to include learning to drive in a programme where it's a prerequisite for a standard.

QAA published [Degrees of difference: Delivering on the ambition of quality degree apprenticeships in England](#), part of its series on The Future of Quality in England.

- The introduction and growth of degree apprenticeships over the last decade has resulted in a well-meaning, but highly fragmented system of QA that adds unnecessary burden and, ultimately, risks creating a disincentive that could trickle down to negatively affect the experience of apprentices.
- High quality in degree apprenticeships can be based on the following overarching principles:
 - **Providers** offer tailored provision that: integrates into their wider offering and academic expertise; facilitates good working relationships with employers; and is efficient and sustainable.
 - **Employers** build constructive, symbiotic working relationships with providers to ensure provision that: successfully tackles skills gaps; improves consistent upskilling and staff retention; and supports recruitment.
 - **Apprentices** experience provision that: meets their reasonable expectations; provides a holistic learning experience, recognising the work-based nature of their programmes; incorporates on-the-job training but fosters a sense of belonging within the provider community.
- Recommendations for England:

- Streamline and align the current regulatory landscape to prevent duplication and ensure comprehensive and coherent oversight of apprenticeship provision.
- Any funding review of HE and/or changes to the apprenticeship levy should consider the full HE landscape and the ability to continue funding higher and degree-level apprenticeships sustainably.
- Reconvene the HE Data Reduction Taskforce, ensuring all bodies involved with higher and degree-level apprenticeships are included, and dedicating a specific workstream to apprenticeship provision.
- As apprenticeship standards are revised and updated, sustainable funding and appropriate lead-in time to their introduction must be embedded.

QAA also launched [Higher Education Apprenticeships Toolkit](#) (for QAA members only). See also the QAA item on degree apprenticeships on [p 23](#).

FFT Education Datalab published [Post-16 pathways to employment for lower attaining pupils: are they working?](#), summarising three quantitative investigations in England undertaken with Westminster University as part of a study funded by the Nuffield Foundation.

- It analyses the experiences of different groups of learners between 2011 and 2019 and considers the labour market outcomes of lower attainers.
 - Social background is strongly predictive of attainment at key stage 4 (KS4) and therefore post-16 pathway options.
 - Many lower attainers have 'fractured' post-16 learning pathways and high levels of dropout, particularly those who are 'ever FSM' (i.e. have been on free school meals at any point in the last six years).
 - Post-16 pathways taken by the lowest attaining pupils in the 2011 KS4 cohort don't improve employment outcomes.
- Policies that don't seem to have improved post-16 outcomes for low attainers include:
 - Reforms that followed the 2011 Wolf Review
 - The 2012 Apprenticeship Reforms and the replacement of apprenticeships frameworks with standards from 2015
 - Raising of the Participation Age to 17 in 2012/13 and to 18 from 2013/14
 - The 2014 requirement that students aged 16–18 who don't hold GCSE Grades 9-4 (A*-C) in maths and/or English continue to study these subjects
 - The removal of NVQs from 2015 as part of Ofqual's new Regulated Qualifications Framework.
- Recommendations include: ensure the differentiated purpose of Functional Skills is maintained in practice; increase exam question contextualisation; promote diverse assessment methods and improve recognition of partial success.

The Edge Foundation published [Spelling it Out, Making it Count: Functional Skills qualifications \[FSQs\] and their place in vocational training](#), focusing on the current situation following their reform in 2019.

- Among the findings:
 - Pass rates have fallen significantly in recent years, despite the difficulty of exams remaining largely unchanged; this appears to be linked to reduced contextualisation of exam questions.
 - Funding rates have remained static since 2014 and are now insufficient to cover costs, forcing providers to operate at a loss; FSQs taken within apprenticeships cost up to £440 per qualification.
 - The mandatory requirement for apprentices to pass Level 2 FSQs, continues to hinder completion rates, hampering government efforts to raise them from 52% to 67%; this is despite failure not necessarily reflecting deficiencies in applied skills.
- Seven key recommendations:
 - Maintain the applied, real-world focus of FSQs to differentiate them from GCSEs – they must foster progress rather than hinder it.
 - Increase contextualisation of exam questions; GenAI can ensure personalised assessment in sector-specific scenarios, helping to reduce costs as well as increase learner relevance.
 - Review the structure and breadth of topics in maths exams; intricate scenario questions should be broken down and a comprehensive range of topics covered to foster fair assessment for all learners.

- Promote diverse assessment methods beyond exams and consider moving beyond a binary pass/fail system to recognise proficiency at lower levels; consider sub-skills relevant to job roles.
- Incorporate job-specific FSQ training into apprenticeship off-the-job hours.
- Reconsider FSQs as a mandatory exit requirement for apprenticeships, which is the only 16–19 programme that still requires English and maths qualifications.
- Uprate FSQ funding immediately by at least 10% (to £796) to cover the costs of provision.

The research was undertaken by the Association of Employment & Learning Providers (AELP), with additional research by Warwick University Institute of Employment Research and the Association of Colleges (AoC), supported by the Gatsby Foundation and Edge.

OfS published [Evaluation of the Higher Education Short Course trial](#), the outcome of a challenge competition launched in 2021.

- The aim was to test how providers adapted existing modules at Levels 4–6 to enable students to upskill or retrain and/or progress to full HE qualifications.
 - It also assessed demand for such courses and tested a new loan for participating students ahead of England’s Lifelong Learning Entitlement (LLE) planned for 2025.
- 22 providers received a total of £2m to develop 100+ new courses, with provision mostly commencing in autumn 2022 and projections that over 2k students would participate in 2022/23.
 - 96 courses were actually developed, but, due to lack of demand, only 17 were launched by 10 providers; there were 125 enrolments from 240 applications – including for some courses that weren’t launched.
- The courses were all developed with employer partners by reworking existing degree course content to align with business needs; this often proved more complex than expected.
- Obtaining institutional approval was generally more challenging and time-consuming than expected, as existing processes were designed for degree courses; some courses could only be approved on a trial basis and as non-credit bearing courses
 - The funding duration was very short and announced at too little notice to enable necessary staffing up; for some, the funding period was too late in the academic year to be able to admit applicants in autumn 2022.
- Half the applicants were individuals who paid fees and half employees undertaking CPD, with their employers expected to pay their fees; two thirds were aged 30+; almost all were working full time.
 - 41 applied for the new bespoke student loan – a much smaller number than anticipated; feedback suggested the current process is cumbersome and turnaround too long.
 - The lack of a systematic framework for credit accumulation & transfer (CAT) was a serious weakness in marketing terms.
- Students reported broadly positive study experiences, but few completed during the evaluation.
 - 13 of the 16 employers involved said they were satisfied with their experience; most anticipated that the courses would in time prove valuable for upskilling adults.
- Providers recognised practical weaknesses in their offer and that more activity and time were needed to judge demand.
 - Almost all currently expect to continue to offer their courses and to offer more; two have withdrawn courses as they doubt their financial sustainability.

BCC published [Bridging The Skills Gap: A new dynamic for business, education and skills; linking local action with national strategy](#), evaluating England’s Local Skills Improvement Plans (LSIPs), based on evidence from chamber-led LSIPs.

- Business-led LSIPs are ‘working and beginning to make positive differences for local employers’; however, transformation takes time and continued, long-term investment will be needed.
 - The LSIP process is encouraging more employers to collaborate and engage positively with the skills system and change attitudes and behaviour regarding their role in addressing skills shortages.
 - There is evidence of Chambers engaging employers who had not previously spoken to providers and directly influencing employers to become actively involved in skills solutions.

- LSIPs have posed challenges due to the complexity of the landscape and its numerous stakeholders; barriers were caused by bureaucratic complexities and overlapping jurisdictions with other agencies and institutions.
 - Concerns were expressed about limited employer influence on national and local skills spending priorities; e.g. many LSIPs had identified the need for flexible, bespoke training, but funding was mostly linked to larger, nationally accredited qualifications.
 - At the same time, the Department for Education wanted plans to focus on specific technical skills, but employers repeatedly cited the importance of cross-sectoral skills such as communication and team working.
- The research identified many perceived strengths of a local approach to skills that allows for finely tuned LSIPs, tailored to specific local contexts; but participants also strongly felt that it was important to recognise areas of commonality, as well as hyper-local priorities.
 - Identifying common areas from the rich data sources and active employer engagement represented by LSIPs in order to inform national strategy was felt to be a missed opportunity.
 - Some participants noted that creating this connection would allow the voice of SMEs to be truly heard at national level.

The House of Commons Library published [The Lifelong Learning Entitlement](#), explaining the Government’s plans to introduce it from 2025 and outlining sector reactions and issues raised.

- The removal of equivalent & lower qualification (ELQ) restrictions has been welcomed as an important way to provide access to funding for retraining and careers development and filling skills gaps.
 - However, modular learning needs to become more mainstream and the LLE alone won’t change the focus on traditional undergraduate degrees.
 - The age 60 cap has been described as ageist.

L&W published [Modelling Essential Skills Needs Across England](#), exploring local variations among 16–64 year-olds.

- Disparities within local areas far exceed those between authorities: combined authorities (CAs) with low needs have wards with high needs and vice versa.
 - Just 2ppt separate the area with the highest needs (Tees Valley – 25%) and the lowest (West of England – 23%); in contrast, 16ppt separate York (23%) from its Heslington ward (39%).
- 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. An [interactive map](#) shows data by local authority, ward, upper tier authority and IMD (Index of Multiple Deprivation) score.

L&W published [ESOL* provision in the South East of England: Understanding local capacity](#).

- Providers are most likely to offer lower level ESOL; most have non-accredited provision as part of their offer; most provision has progression into employment as a key intended outcome.
- Some – but not all – providers collaborate with other providers in planning provision, coordinating timings or levels; nearly all providers collaborate with local stakeholders.
- Nearly all providers report increased demand for ESOL and most feel they’re not meeting it; refugees and those seeking asylum are a significant part of the demand.
 - Some nationalities generally access higher-level courses, but lower-level ESOL is more likely to be oversubscribed.
- Childcare is the most common barrier to participation; other barriers include travel and transport costs and convenience, housing instability, financial insecurity, digital poverty and mental/physical health.
- The six-month residency restriction poses a particular challenge in funding those seeking asylum.
- Recruiting qualified tutors is also a challenge, as contracts are often sessional, zero hour and low paid and many applicants don’t have ESOL qualifications.

*English for Speakers of Other Languages.

SCOTLAND

The Scottish Government published [Scotland's International Education Strategy](#).

- The first strategy of its kind for Scotland has three core ambitions, to be achieved in collaboration with universities and colleges:
 - Inward attraction of international students, staff and researchers, including by: piloting a Scottish Education Exchange in 2023/24; and launching a Talent Attraction & Migration Service in 2024.
 - International education and economic growth – maximising Scotland's social, educational and economic contribution globally, including by growing transnational education.
 - Research and knowledge exchange: deepening global collaborations and engagements.

The SFC published [Financial Sustainability of Colleges in Scotland 2020-21 to 2025-26](#) and [Financial Sustainability of Universities in Scotland 2020-21 to 2024-25](#), based on a review of their latest forecasts.

- Risks to both sectors include:
 - The uncertain macro-economic outlook
 - Increasing staff and energy costs
 - Unanticipated public spending cuts
 - The requirement to invest in public sector net zero targets
 - The impact of reinforced autoclaved aerated concrete (RAAC).

The Institute for Fiscal Studies (IFS) published [Higher Education Spending](#), a chapter of *The IFS Scottish Budget Report: 2024-25*.

- Funding per student per year is down by 19% (in real terms) from 2013-14; universities are ever more reliant on international student fees.
- An overall 3.6% cut in the 2024-25 budget implies lower funding for home students and potential cuts to the number of funded places.
- 'Addressing the real-terms decline in funding for teaching seen over the last 10 years will be more challenging' under the free tuition model; however, 'moving away from this model would see the costs faced by students increase significantly'.

The Scottish Government published [Renewing the Alliance for Fair Access: Annual report 2024](#), the sixth report by its Commissioner for Fair Access, the first by the new incumbent.

- The scale of the challenge is significant: the national target for 2030 is that students from the 20% most deprived areas in Scotland (SIMD20) should represent 20% of entrants to HE.
 - Progress has stalled: in 2023, 16.5% of new HE entrants were from SIMD20, down 0.2ppt from 2022.
 - If current trends continue, the 2026 interim target of 18% will not be achieved.
- 20 recommendations include:
 - Retain SIMD as the central metric to indicate national progress in achieving fair access.
 - Replace the SIMD HEI target with a commitment from each institution to increase (or match its highest) proportion of SIMD20 entrants.
 - Recalibrate the agenda to give equal weight to entry, student experience and outcomes.
 - Examine underpinning the agenda within the school broad general education phase.

WALES

The OECD published [What shapes upper secondary pathways and transitions? Insights for Wales](#), developed at the request of the Welsh Government and summarising insights from a project focused on how OECD countries support pathways and transitions for 14-19 year-olds.

- In particular, it explores how upper secondary education can work in harmony with the new Curriculum for Wales (CfW).

The Higher Education Funding Council for Wales (HEFCW) published [Unpacking the 3Es – a national perspective](#) by Advance HE, providing case studies on how universities and colleges in Wales are including student employability in the HE curriculum.

- Case studies include:
 - An overview of simulated law placements, initially introduced as a response to the pandemic by the University of South Wales
 - The collaborative university-wide framework for improved graduate outcomes introduced at Cardiff Metropolitan University
 - Grŵp Llandrillo Menai's approach in relation to HE students studying in a college setting.

The publication builds on the findings of a [2022 study](#) and complements the community of practice that Advance HE developed with HEFCW funding in response to survey findings.

REPUBLIC OF IRELAND (RoI)

The Department of Further & Higher Education, Research, Innovation & Science published [Global Citizens 2030: Ireland's Talent and Innovation Strategy](#), the RoI's first international strategy to encompass the breadth of tertiary education, and research and innovation systems.

- The strategy comprises six pillars:
 - Talent and innovation at the heart of Ireland's global footprint
 - A first choice destination for international learners, researchers and innovators
 - Global citizens in multi-national, multi-cultural and diverse workforces
 - Enhanced European influence in education and research
 - A new era of collaboration on the island of Ireland
 - Thought leadership in talent, innovation and science policy.
- Flagship initiatives include:
 - An International Education Mark – a statutory quality mark to promote public confidence in the quality of Irish providers running education programmes for international learners.
 - Engaging with the UK on the feasibility of mobility and exchange programmes, based on an inclusive exchange programme for learners, staff, researchers and innovators.

AHEAD (Creating Inclusive Environments in Education and Employment for People with Disabilities) published [ALTITUDE: The National Charter for Universal Design in Tertiary Education](#) – the ALTITUDE project was funded by the Higher Education Authority through its Programme for Access to Higher Education (PATH).

- The aim is to move towards a system where 'inclusion is everyone's business', with all staff involved in ensuring an inclusive educational experience; 'Universal Design' (UD) offers an evidence-based approach to engender the mindset to respond to the rising diversity of the learner population.
 - The Charter recommends key strategic enablers for HEIs to implement over time to support the sustainable implementation of UD.
 - It proposes collaborative action towards goals under four key pillars: learning, teaching & assessment; supports, services & social engagement; the physical environment; and the digital environment.

SOLAS published [Monitoring Ireland's Skills Supply 2023: Trends in education and training awards](#), aiming to show the potential skills available from those leaving Ireland's FE & training (FET) and HE systems.

- The report includes: a summary of the number of awards made to learners by field and National Framework of Qualifications (NFQ) level in 2022; and the profile of the educational attainment of the population based on data from the Central Statistics Office Labour Force Survey.

The Nevin Economic Research Institute published [Measuring 'green' jobs in the Republic of Ireland](#), analysing the various ways of measuring what constitutes a 'green' occupation in the Irish context, to provide a starting point for strategic policy debate.

- Different methodologies for green job measurement come to very different conclusions about the extent of the green economy.

- According to the narrower but commonly used Environmental Goods & Services Sector (EGSS) definition, the latest data show that 'green' jobs make up just over 2% of overall employment.
- There are numerous downfalls in current research into the size of the Irish green economy, resulting in an inaccurate assessment of the current state of play, for example in the agriculture sector.
 - Without proper studies and data, it won't be possible to implement policies to improve the quality of the natural environment without seriously impacting the people who have managed it.

Nevin Institute also published a companion report, [Characteristics of Workers in Green Jobs](#).

- It highlights key differences that emerge when focusing on age, gender, education level, location and employment status of those working in green jobs, using the subcategories offered by the commonly used O*NET framework:
 - 'Green increased demand' (GID) are jobs that aren't subject to any significant change in their work/working environments, but are in increased demand to the overall greening of the economy (e.g. electricians; bus and train drivers)
 - 'Green enhanced skills' (GES) are subject to work/working environment; the purpose of the role remains the same, but specific skills, knowledge or credentials are altered (e.g. farmers, construction workers)
 - 'Green new and emerging' (GNE) are occupations that are created due to the fact that the economy is greening, causing the need for new, unique work/working environments (e.g. waste management occupations, environmental consultants).
- Those in GNE jobs tend to be younger, most likely to live in Dublin or the Greater Dublin Area and have a third-level degree or higher than other green sectors.
 - If the aim is to increase those in GNE jobs, their education level must be considered, as well as their location and job opportunities that are not evenly spread throughout Ireland.
- What all green jobs have in common is that they tend to be dominated by men, with only a handful of occupations being made up of a majority of women.
 - This too will be a key factor in the green transition, especially relating it to gender equity in workplaces.
- Green jobs also differ in their level of employment, with GNE leading the charge and GID following, but GES trailing behind and lower than the national average.
- Whether green workers are considered employees is significant, as it may provide an incentive for non-green workers to move to a more secure job, especially since employment growth has not increased for the whole economy but has for green occupations.

EUROPEAN UNION (EU)

The European Commission published [A Blueprint for a European Degree](#), building on the results of six Erasmus+ pilot projects involving over 140 HEIs from all EU countries.

- Its aims include contributing to Europe's competitiveness by equipping graduates with future-proof skills to master the green and digital transitions.
- A European degree would be:
 - a new type of degree awarded after transnational Bachelor, Master or Doctoral programmes offered at national, regional or institutional level
 - automatically recognised everywhere in the EU
 - awarded jointly and on a voluntary basis by a group of universities across Europe
 - based on a common set of criteria agreed at European level.
- The Commission is proposing a gradual approach for EU countries, with two possible entry points:
 - A preparatory European label: given to joint degree programmes that meet the European criteria, i.e. students receive a European degree label certificate together with their joint degree
 - A European degree: a new type of qualification awarded either jointly by several universities from different countries or by a European legal entity established by such universities.

Cedefop published a policy brief on [Building a European qualifications map: Development of national qualifications frameworks \(NQFs\) across Europe](#), providing insights into their main characteristics, scope, coverage, usage and impact.

- Almost all countries have set their main objective as improving the transparency and comparability of qualifications and are clearly influenced by the European QF (EQF), with eight levels.
 - When compared to qualifications frameworks from other regions of the world, Europe's NQFs can be considered advanced.
- There has been a considerable progress in including qualifications awarded outside formal education and training, with the types included depending on the national context.
 - Linking NQFs with validation of non-formal and informal learning is another way to make frameworks more inclusive.
- NQF and validation policies are often explicitly linked; level descriptors act as a reference point for identifying, documenting, assessing and validating non-formal and informal learning.
- Awareness and use of the NQFs/EQF have increased, although there needs to be more work to increase awareness among citizens and labour market actors.
 - NQF/EQF levels are starting to be used in job ads and/or recruitment procedures.
- Data from country-specific reports show that NQFs have primarily increased the transparency and comparability of qualifications.
 - NQFs don't act so much as drivers of reform as enablers of change in education and training; implementation can often have a positive impact in promoting the use of learning outcomes.
 - The most commonly reported success factor is stakeholder engagement, while positive outcomes can be achieved when there is strong coherence with other relevant policies.
 - The two most common future priorities are: developing more inclusive frameworks and raising awareness.
- Overall, countries have achieved considerable progress in NQF implementation and keep pushing ahead; in particular, the diversification of available qualifications has created a changing landscape.

The European Commission published [Study Supporting the Evaluation of the Council Recommendation of 22 May 2017 on the European Qualifications Framework \[EQF\] for Lifelong Learning: Final report](#).

- The study covers all 38 countries involved in the EQF process, including 27 EU member states, Iceland, Norway, Switzerland – and the UK until February 2020.
 - It also considers how the EQF has contributed to the better permeability of qualifications between EQF countries and those countries not participating in the EQF.
- Further work is needed in implementing the EQF and NQFs to build a framework that offers practical added value for learners, workers and employers; lessons learned include:
 - Secure and maintain trust in the referencing of NQFs to the EQF and in national levelling decisions.
 - Continue work on common qualification descriptions to achieve more consistent descriptions of learning outcomes across education systems and countries to support better take-up and use of the EQF by learners, workers and employers.

Nevin Institute published three reports analysing 'overqualification' among third-level (i.e. tertiary) graduates in 13 high-income EU countries.

- The countries are: Austria, Belgium, Denmark, Finland, France, Germany, Ireland, Italy, Portugal, Spain, Sweden, Netherlands and the UK.
- [Overqualification in high-income EU members](#) provides analysis by: the skill level of the occupation (high, middle, low); sector; gender; age; and field of education.
 - Overall, overqualified tertiary graduate employees as a share of employment is highest in Spain (13.2%), Ireland (11.6%) and the UK (9.1%).
 - In Denmark, Finland, Germany, Sweden, the Netherlands, Portugal and Italy, the share of this category of worker is less than 5% of overall employment.
- [The Expansion of Third level education and Intergenerational Transmission of educational attainment in high-income EU countries](#) includes the following findings:

- Since 1992, every high-income EU member had markedly increased the share of working-age (aged 20–64) adults with tertiary qualifications; with the exceptions of Germany, the Netherlands and Sweden, it had at least doubled.
- Germany is the only country where male graduates outnumber female graduates; for the most part this wasn't the case in 1992 or 1997, with the exception of Portugal, France and Sweden.
- Increasing numbers of female graduates in every country since the nineties have outpaced the growing numbers of male graduates, often markedly so: in Italy, the number increased by 2.9m vs 1.6m for males.
- The share of tertiary-educated women in Ireland (47.9%), Finland (49.2%) and the UK (45.5%) increased by ~30ppt and they are now among the countries where women are most likely to be highly educated.
- Every country had considerably higher shares of tertiary graduates among the under-35s in 2019 than they did in the 1990s: around three times as many in Italy, Denmark, Ireland and Spain and over twice as many in Portugal and the UK; it's the lowest in Italy (22.2%) and Germany (25.9%).
- Rates are higher for females in the younger group in every country: young Italian men have the lowest rate (17.4%).
- By social origin (father's education level), data show similar trends almost across the board: the likeliness of having a tertiary qualification is highest for those with a father in the same bracket, second most likely for those whose father was in the 'middle skill/education' bracket and least likely for those whose fathers had low levels of education.
- In every country, adults whose fathers had relatively low and medium levels of formal qualifications were more likely to have attained some kind of tertiary qualification in 2019, than in 2005.
- Growth in the share of tertiary graduates whose fathers were also highly educated has been slower; in Sweden, it has fallen slightly (63.0 to 61.4%).
- Ireland has the highest share of tertiary graduates in the core working-age adult population and this applies across all three broad categories of father's education.
- In Ireland, an estimated 24% of 25–59 year-olds whose fathers were in the low bracket had tertiary qualifications; by 2019, it was 46.5% – the highest generational transmission of educational advantage in the sample.
- **Labour market outcomes of third level graduates in high-income EU members: Is Father's education important?** presents evidence on: the growing share of tertiary graduates in employment; changing relative rates of employment by educational attainment; the growing importance of tertiary education in securing employment; the growth in 'high-end' employment and as a share of overall employment.
 - Since the 1990's, the share of tertiary graduates in overall 20-64 employment has more than doubled in Ireland, Spain, Italy, Austria, Portugal, Finland and the UK.
 - Italy had the lowest share in 2019 by some margin at 23.4%, followed by Portugal (29.1%) and Germany (30.8%).
 - Ireland had the highest share (49.9%), followed by Finland (47.0%), Belgium (46.9%), the UK (46.8%) and Sweden (44.6%).
 - For each country and in each year there was a strong association between the likeliness of being employed and education level.
 - Tertiary graduates were least likely to be in employment in Italy (78.9%), Spain (80.3%), France (83.3%) and Belgium (83.8%).
 - In Denmark, Italy and Portugal the employment rates was actually lower than in the 1990s, while Ireland caught up from a low base to around mid-table (78.7% to 85.3%).
 - By 2019, Ireland's and Spain's employment rate had yet to recover fully from the effects of the financial crisis of 2008.

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).

Belgium

Cedefop published [Spotlight on VET: Belgium](#), setting out the key characteristics of the three different systems available.

- The Belgian VET system has a high number of responsible bodies, split between the three Regions (Flanders, Brussels and Wallonia) and the three communities (Flemish-, French- and German-speaking), which overlap but don't coincide.
 - Each community has its own education system, while in Brussels both French and Flemish systems coexist.
- The school system is also split into multiple networks (public and subsidised private education), each of which is required to pursue common objectives, including certification, occupational profiles and VET standards, while benefiting from some autonomy.

Eurydice published [Belgium \(DE\): Framework to redevelop career guidance for students](#), a news report.

- Drawing on analysis of surveys from the German-speaking community, OECD recommendations and systems in six other countries, the new framework came into force in September, introducing a range of activities, starting in the 5th year of primary school.
 - Job shadowing will occur from the first year of secondary, building to 3–5 day internships in the fourth year, providing an age-appropriate opportunity to gain insights into a specific profession.

Eurydice published [Belgium \(DE\): The DuO training grant initiative for a skilled workforce](#), a news report.

- Inspired by similar models in Austria, the government of Belgium's German-speaking community has introduced a special interest-free loan worth €350 per month for those in both secondary and tertiary education undertaking studies for shortage occupations.
 - A [list of eligible courses](#) is updated each year.
- The loan doesn't have to be repaid if the recipient pursues part- or full-time employment in the occupation for at least five years within ten years of completing their studies or training.

Estonia

[Development of an instrument to measure NEET-youth self-directed learning \[SDL\] skills](#) by University of Tartu researchers was published in the *International Journal of Adolescence and Youth*.

- The aim of the study was to develop a reliable and valid self-report tool to measure SDL skills in young people who are NEET.
 - The study included a survey of 316 young people in Estonia, 66 of whom were NEET and 250 students/employed.
- Findings include:
 - SDL skills contribute to developing better self-perception, potential, responsibility, motivation etc..
 - The factors best suited to measuring the SDL skills of young people were determined to be: openness to experiences, resilience, attitudes, future orientation, metacognition and responsibility.
 - Comparing the SDL skills of young people NEET with those who are students/employed found that those NEET generally have lower results in all SDL factors, but particularly in future orientation, responsibility and openness to experiences.

Finland

Finland's Ministry of Education & Culture published [Universities receive additional funding for training a thousand new doctoral graduates](#), a news report announcing €255m to pilot new practices in doctoral education in 2024–27.

- It will fund 15 pilots for field-specific education, nine of them in 'flagship' fields; the pilots will be run by university-led consortia that include research institutions and businesses.
 - Flagship sectors include cancer medicine, AI, education & training and social services.
- The aim of the pilot is to increase the mobility of doctoral graduates between universities, businesses, research institutes and other organisation, promoting their employment in different sectors.

Finland's government feels it is lagging behind other European countries in making use of doctoral expertise in the private sector.

Norway

IZA published [Overeducation and Economic Mobility](#), exploring the hypothesis that the decline in intergenerational economic mobility in Norway is attributable to a rising perceived value of education.

- The study is based on administrative data, examining the patterns of education, overeducation and earnings in Norway for cohorts born between 1973 and 1992.
- Education seems to be an increasingly important mediator of intergenerational earnings persistence; declining economic mobility and rising returns to education may be two sides of the same coin.
- Five empirical facts support the hypothesis:
 - The educational earnings premium has risen, but only through the extensive (employment) margin.
 - The earnings premium has increased more when education is measured as years corresponding to completed degrees than when measured as time actually invested.
 - Both educational attainment and the labour market's skill requirements have increased, but attainment has risen faster than requirements, thereby increasing the incidence of overeducation.
 - There is a steep positive social gradient in overeducation: it is more frequent and has risen faster among offspring in upper-class families.
 - There is a steep negative social gradient in non-employment: it is more frequent and has risen faster among offspring in lower-class families.

Sweden

Sweden's state research institute IFAU (Institute for Labour Market & Education Policy Evaluation) published findings from [An evaluation of the city of Stockholm's summer job programme for young people 2012–2018](#) [the full report is only available in Swedish].

- Every summer, the city of Stockholm employs 7k 16–19 year-olds in a programme of holiday jobs including childcare, elderly care and cleaning.
 - The research focused on the summer workers with a relatively strong socioeconomic background, not those who, for social reasons, had been prioritised for jobs.
- In the years after secondary school, this relatively strong group does worse on the labour market than they would have done if they had not had a summer job in the programme.
 - It's worst for men, those who took vocational courses in high school and those who already had part-time jobs before the summer job.
- One reason is that the public summer job programme leads to less experience of jobs in the private sector.
 - Participation may also signal to employers that the participants can't find jobs themselves; and a programme job may disrupt previous personal labour market networks.
- The programme hasn't reduced crime, improved health or affected the likelihood of going on to HE.

The methodology means that the research can't evaluate whether there are positive effects for the young people from weaker socioeconomic backgrounds.

Switzerland

The OECD published [Faces of joblessness in Switzerland: A people-centred perspective on employment barriers and policies](#).

- Open unemployment and joblessness in Switzerland are low compared to OECD standards but, at 12%, a comparatively high proportion of working-age individuals remain weakly attached to the labour market, with unstable jobs or limited working hours.
 - Women, older individuals, lower educated people and migrants are over-represented among the jobless, with a lack of recent work experience a key barrier for many.
- Non-EU migrants are particularly exposed to potential labour market difficulties at younger age, and many of them have low levels of education, poor professional skills or limited work experience.

- The complex and inter-related employment obstacles that hold people back from full participation in the labour market suggest that policies addressing just one employment barrier in isolation may not have the intended effect.

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