TOMORROW’S PEOPLE
Universities building Scotland’s future
Executive summary

Universities are a key engine of the Scottish economy, leading innovation, nurturing entrepreneurship and enabling thousands of graduates year on year to develop the skills they will need for careers in a changing workplace. There is strong evidence that in general more graduates leads to more productivity in the workforce. Universities have a key role in progressing towards an inclusive economy that promotes fair work and good-quality jobs. For smaller economies such as Scotland, high-level skills are a necessity in order to ensure we can continue to compete in a globalised context where artificial intelligence, data science, robot technologies and digital drive innovation. It is very difficult if not impossible to predict the precise skills needs for a given industry - let alone the Scottish economy as a whole. Even if we could, people will need to adapt to different roles and skills over time. Moreover, knowledge and experience matter as well as skills - economists know the whole package as human capital.

Subject or attribute?

What Scotland will really need is graduates who have the breadth of skills and attributes to thrive in diverse and ever changing roles of our future economy. For many employers, subject choice is becoming increasingly secondary to the need for graduates to have a wider set of attributes and skills such as communication, problem solving and team working - whatever the industry. Scotland’s approach to skills development needs to recognise this. This is an important trend but subject specialism will still be important to many careers and it will stay important to students because it is what sparks an individual’s passion and energy for learning. Universities are constantly adapting their courses, qualifications, modules and approaches to learning to suit different skills needs, and the input of employers is a vital in order to inform this process. We would welcome further discussions at the national, regional and local level in order to help inform our approach and ensure a shared understanding of emerging issues.

Going meta

With its focus on creating adaptive learners and promoting success, the meta-skills model has much in common with well-established graduate attributes. We want to work with Skills Development Scotland (SDS) and the Scottish Funding Council (SFC) as they develop thinking around meta-skills and we continue to develop and refine established graduate attributes, ensuring we can learn from each other’s work and secure the best outcomes for graduates.

Real lifelong learning

As we move toward a world where individuals may have multiple careers in their lifetime, learners must have access to lifelong learning opportunities. SDS states “the notion of lifelong learning must shift from rhetoric to reality” and we agree. We would like to see the Scottish Government recognise its importance with an explicit commitment to funding lifelong learning at our universities. This could take the form of a learning account enabling people to invest in upskilling/reskilling when they need to, without relying on their employer.

Equally, there should be help for employers, particularly small and medium sized enterprises (SMEs), to invest in their employees, for example, an incentive or voucher, particularly since employers based in Scotland cannot directly access the apprenticeship levy monies. In particular, we would like to see the Enterprise and Skills Board develop incentives for employers to invest in management skills for their leaders and staff. This could have a transformational impact on Scotland’s SME-based economy. As Working Collaboratively for a Better Scotland notes, there is evidence that this could increase productivity by as much as 30%.

Increasingly, we are using our expertise to offer shorter opportunities for learners to gain specific skills. We are ambitious to develop further opportunities for higher education to contribute to the up-skilling and re-skilling of the workforce, including through these short, flexible courses. Universities have a great deal to offer here; flexibility to decide how to use resources for upskilling and the ability to test new ideas and approaches as see what works best across different contexts will help increase the opportunities in the years ahead.
The next wave of apprenticeships

We would like to see Graduate Apprenticeships develop further to address implementation issues that institutions have identified and to increase responsiveness to both employer and learner needs. We are especially interested in how we can refine the model to work for SMEs. We welcome the move to introduce more flexibility and we would like to see a further development of that, increasing opportunities to create a truly bespoke apprenticeship for an employer, perhaps including modules from multiple disciplines. We would welcome additional resources to broaden the programme to include more disciplines and perhaps more postgraduate opportunities.

A fairer society and more equal workforce

Finally, we believe the emphasis on the link between the economy and wellbeing will lead to a fairer society and more inclusive growth. We want to work with the Strategic Board, the Scottish Government and others to tackle equality issues, tracking progress against Scotland’s National Performance Framework and supporting employers to identify and address challenges to sustainable and inclusive growth. We want to see our graduates flourish; and develop the skills they will need over the course of their working lives through all our degrees. We want to see fair access to universities for people from all backgrounds and for young and old, and we want this to lead to fair work that produces sustainable economic growth. Across the sector, we want to have a range of different routes to different qualifications/credits to suit the needs of learners.

For Scotland to be a successful economy, we must compete internationally – and graduates with the high-level skills that our universities are uniquely positioned to deliver drive our competitiveness.

The key things we want to see to help achieve this are:

1. A flexible skills system that recognises the higher-level skills and attributes Scotland’s graduates will need to enable them to thrive in diverse roles in a changing economy.
2. Discussions on skills needs with employers, providers and agencies to understand emerging needs.
3. Flexible incentives for institutions to develop new approaches to upskilling and to lifelong learning. For example, developing ‘micro-credentials’ that can be stand-alone skills driven modules or be part of a postgraduate qualification.
4. Explicit commitment from the Scottish Government to fund lifelong learning opportunities so that people can upskill and reskill as they navigate through their evolving careers.
5. Scottish Government incentives for employers to invest in developing their staff, particularly in leadership and management skills and capabilities and for staff in SMEs.
6. Further development of Graduate Apprenticeships to address implementation issues highlighted by institutions and increase responsiveness to both employer and learner needs, with a particular focus on SMEs.
7. Work with partners to tackle equality issues and create sustainable and inclusive growth.
8. Strong university involvement in the further development of meta-skills to join up with existing work on graduate attributes.
The workplace is changing, probably faster than it ever has before. Gone are the days of a single career or a single employer; today’s young people will need to adapt to different roles over the course of their working lives. Therefore, it is important to equip people with the capabilities to adapt over the course of time and not just with the skills for the particular job and/or career that they start in.

- A recent survey saw 79% of UK employers predict growth in higher skills jobs in their companies.\(^6,7\)

- In Scotland 63% of employers were not confident about being able to fill their vacancies for high skilled employees pointing to continued strong demand for graduates.

Future predictions are that higher order cognitive skills will only become more important in the economy, but that graduates will need broad based knowledge alongside these skills.\(^8\) Furthermore, “These [high skilled] jobs demand better levels of education and skills, so raising standards among all young people will be essential if they are to be able to take advantage of these growing opportunities.”\(^9\)

A range of metrics show that employers value the full range of capabilities that graduates have developed, not only the subject knowledge they have gained.

- Graduates have a greater positive economic impact than non-graduates,
- they continue to have higher levels of employment,
- lower levels of economic inactivity and,
- higher average earnings compared to non-graduates.\(^10,11,12\)

All this is a testament to the benefits that graduates bring to the Scottish economy.\(^13\)

Two surveys of graduate vacancies have shown around 80% of adverts don’t specify a particular degree subject.\(^14\) The Scottish financial services sector sees a good degree and work readiness as key requirements and so recruits from a wide range of subject disciplines, not just financial ones.\(^15\)

In one survey\(^16\) 90% of the employers responding rated graduate attitude and aptitudes amongst their top three factors for graduate recruitment. Indeed, for over half of respondents it was the most important factor in graduate recruitment. When graduates have these capabilities, they keep learning and so can master the specifics for many different roles – which is vital for career progression and especially when that involves moving between different careers.
Equipping graduates for any & all careers

Universities have a long history offering professionally orientated degrees such as medicine, nursing, engineering, law, accountancy, and life sciences. Students on these courses gain both the subject knowledge and skills they will need for a career in a related industry, but also the capabilities and attributes to adapt wherever their career takes them.

This is also true of our non-vocational courses. The British Academy looked at the skills students develop in arts, humanities and social sciences and identified a set of transferable skills under three broad headings:

- communication and collaboration;
- research and analysis (including decision making);
- and attitudes and behaviours (including problem solving, independence, adaptability and creativity).

The report showed that these skills allow graduates to confidently enter a wide variety of jobs including in the financial sector, social work and creative industries. Moreover, they found that the graduates were able to handle career changes and adapt to different industries over the course of their working lives. In 2015, 58% of the Chief Executives at FTSE 100 Index companies were graduates of the arts, humanities and social sciences.

Subject knowledge continues to be important, but it’s equally important that students develop their broader skills and capabilities as they study. Universities design our learning and teaching methods to support that. *Graduates for the 21st Century* was a sector-wide project led by QAA, which began in 2008 and looked at the academic, personal and transferable abilities students need to fulfil their career ambitions. Scottish universities developed their own graduate attributes, which remain fundamental today. The development of graduate attributes involved individual universities working with a range of employers and professional, statutory and regulatory bodies (PSRBs). These attributes aren’t just about skills, but also about the graduate attitudes and approaches necessary to succeed in the workplace, help people adapt to change and bring about economic success. This is a key part of developing our students into global citizens who are creative, entrepreneurial and highly sought after by employers.

Graduate attributes are not an added extra for our students; they are a core part of the student experience, built into the curriculum and into how we teach (and not just in special modules on careers). Students develop these attributes throughout their whole student experience, both in the formal curriculum and in work, social, voluntary and sporting activities. The work that started to develop the attributes ten years ago has never stopped and we continue to develop the curriculum and to help students reflect on the skills they are gaining.

Just this last academic year QAA Scotland ran a project on graduate skills, working with institutions across Scotland to stimulate thinking especially with relation to readiness for work, equality and diversity and global skills. All our universities are committed to providing learners with these opportunities.

At Abertay University, students have the opportunity to think about their employment options, in the popular module Career Management in the 21st Century.

Ondrej Dlask took this module during the 2nd year of his BA (Hons) Marketing & Business degree. He says: “The module was generally very beneficial in terms of improving my self-presentation, whether it was a written application or an interview. In fact, the knowledge I gained in the module helped me significantly during the application process of an internship role I got for this summer. Having the opportunity to go through the process of the video interview was also very helpful as I have never done that before. I already had some idea about my future before, but the module helped me to identify, organise and plan the steps necessary to meet the objectives I set for myself.”

Cameron Allan, University Partnerships Recruiter at FDM Group, who was involved in developing the module, says, “Having this module built into the curriculum allows students to build and nurture their skills that will be needed when they approach the corporate environment, whether that is CV building or Video Interview preparation and skills. By continuously building and adding to your toolkit, you are already having a positive influence on your future career. The module reminds the students why they are working so hard and keeps the end goal in sight.”

The University of the West of Scotland’s Employer Mentoring Programme has extensive SME involvement, and, as well as finding mentors for students, it builds links with employers and encourages them to take on graduates. The programme has been running since 2012, with 76 students taking part this year and almost all participants reporting they were either very satisfied or satisfied with their experience.
The UK Quality Code for HE expects universities to involve employers (and where relevant PSRBs) in the design and review of courses. SFC requires all institutions to carry out institution-led review of all subjects and support departments over a (maximum) six year cycle. These reviews involve detailed considerations of the courses offered and what they are delivering and this includes whether courses are suitably embedding skills in courses and often include views from employers. One of the reference points, institutions use in both reviews and developing courses are QAA subject benchmark statements that define what knowledge and skills employers can expect a graduate of a given subject have. Employers have input into the development of these benchmark statements. Universities also use the Scottish Credit and Qualifications Framework as a reference point.

In some subjects, professional bodies accredit degrees. What this means depends on the subject: an accredited degree is an entry requirement for some professions; while in others it might mean the degree will count instead of some professional exams; and in yet other subjects, it gives an edge to graduates as they enter work.

In 2017-18, there were 140 PSRB engagements across the sector accrediting over 319 programmes. Typically, PSRB accreditations are valid for several years, so there will be many, many more programmes accredited in the sector.
Every one of Scotland’s universities organise work placement opportunities for their students. This is not just limited to students on more vocational courses. Work placements offer the chance to develop a deeper understanding of industry, build their confidence and apply their skills. As is the case with graduate jobs in general, work placements do not necessarily require a particular degree. We believe these opportunities should be paid, or credit bearing and accessible to the greatest number of students, regardless of background.

Work-related learning is another route, used by universities, to help students prepare for work. Students can work on a project from the ‘real world’, act as consultants to business, and take part in a simulated work place (e.g. a law court). These might involve teams of students from different disciplines and sometimes different years working together.

We are always looking to offer different routes to a degree so that students can chose one that suits them so we have been pleased to work with SDS and with employers to create graduate apprenticeships.

- Fourteen of our nineteen universities are now involved with graduate apprenticeships.
- More than 1,300 Graduate Apprenticeship work-based learning opportunities are being delivered by universities in partnership with SDS and industry. These are work-based learning opportunities up to Master’s degree level in sectors such as civil engineering, digital and cyber security and data science.

The University of Dundee’s internship module offers 30-hour micro placements. The Careers service helps students to find an internship. Previous internships providers included: charities, SMEs, financial organisations, universities, political parties, museums, local councils and schools. Alongside the internship, students attend weekly interactive seminars on topics including work place cultures, project management, CVs, interview techniques, presentation skills and career options. Students compile a portfolio to demonstrate what they have learned.

The Royal Conservatoire of Scotland (RCS) provides a ‘proto-professional environment’ that immerses students in similar environments to the professions they are preparing to enter. The 2018 QAA Enhancement-led Institutional Review commended RCS for this initiative which offers work-based learning opportunities with a wide range of companies including the BBC, Scottish Ballet, Royal Scottish National Orchestra and the National Theatre of Scotland. These partnerships give students the opportunity to benefit from work experience, work shadowing, mentoring and other programmes. For example, BA Filmmaking students have worked at BBC studios with leading industry professionals as mentors, been able to access BBC sound dubbing facilities and undertake work placements.

The University of Edinburgh’s School of History, Classics and Archaeology developed a Careers Board and a mentoring project pairing current undergraduate students with alumni. Dr Lisa Brown, Archaeological Science Manager at Historic Environment Scotland, is a mentor on the programme and says, “Personally I have found the programme extremely rewarding, meeting the next generation of people passionate about the historic environment and helping them to find a direction for their future career. For example, if you have an archaeology degree but love working with people and have great communication skills, why not consider working in education and outreach, with a focus on archaeology and history. In some cases, it can lead to volunteering opportunities, allowing the student to get a fuller understanding of a particular role, and learning the skills necessary to carry that out effectively, e.g. object handling or cataloguing of a collection.”

The thinking behind meta skills is very similar to the thinking behind graduate attributes. This common approach, recognising the importance of skills and attitudes, will make it easier for us to work jointly with employers and SDS on apprenticeships.

Likewise, we hope that the Scottish Qualification Authority’s (SQA) work on meta-skills in the Higher National (HN) next generation project will improve the path from college to university.

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Going digital

The Skills Investment Plan for Scotland’s ICT & digital technologies sector points to a need for more individuals with digital skills and predicts particular needs in software development, software engineering and web development.\textsuperscript{30} It further recognises the need for upskilling and the impact of digital skills across different industry sectors.

A report by Deloitte for Scotland Futures Trust estimates that if Scotland becomes a digitalisation world leader, GDP could increase by over £13bn by 2030.\textsuperscript{31} In that scenario, digital skills would be integrated across businesses so all employees would require at least some digital skills.

Our universities are responding to the increasing demand for digital skills, constantly adapting their course offerings to meet the needs of an ever-changing market. All our institutions are working to embed digital skills through the curriculum.

Digital skills are important across the curriculum and throughout the world of work. Some roles will require a more intense level of digital skill and universities have specialist offerings to meet those needs:

- Twelve institutions offer a Master’s degree in data science, focused on enhancing higher-level skills in this important and growing part of the economy.
- Eleven Scottish universities\textsuperscript{32} are involved in The Data Lab MSc\textsuperscript{34}, which includes funding for tuition fees for participating students. So far, there are over 400 MSc graduates.
- Universities have also developed 14 data science online courses (MOOCs) with funding from the Data Lab. Further training courses are also in the pipeline.
- Data science is also offered as a graduate apprenticeship by five of our institutions, with others offering graduate apprenticeships in cyber security.

The University of Aberdeen offers undergraduate students Enhanced Study Options\textsuperscript{35}, enabling students to take courses from other subjects, including digital skills e.g. Computer Programming and Principles, Web Application Development, Data Management and Human Computer Interaction.

The University of Stirling set up a postgraduate course in Data Science for Business to help business leaders and managers develop a detailed knowledge of data analytics and gain the skills and experience needed for data driven decision-making.

Edinburgh Napier University runs a postgraduate course in Data Science for people already working in data-related roles who want to upskill and learn more about analysis tools and techniques.

The University of St Andrews offers an interdisciplinary Master’s course in Digital Health that explores how digital technology is transforming healthcare by improving diagnosis, treatment and monitoring of patients. Links with the NHS gives students a real-world connection to healthcare practice.

A recent QAA Enhancement-led Institutional Review commended the University of Strathclyde for their cross-university, collaborative approach to digital education. This includes high quality online classes and structured staff development on teaching and learning online.
Creating businesses

We are building momentum behind entrepreneurship and our Made it Happen report published last year shows progress has accelerated from a strong starting point as per our 2015 Making it Happen plan. Our goal is to ensure every graduate has had the opportunity to develop attributes such as creativity, drive and resilience – key to building entrepreneurial and enterprising skills. Not only will this benefit those who do go on to start their own businesses; it will prepare all graduates to thrive in whatever roles they have in whatever sector they choose to work throughout their careers.

Since 2015, we have made major progress in embedding a culture of enterprise and contributing to a Can Do nation:

- In 2016-17, QAA Scotland and Universities Scotland ran a joint project on enterprise and entrepreneurship education that resulted in a collection of resources to support teaching staff delivering this agenda.
- We have seen a 53% increase in the number of start-up companies created by students and graduates over the last three years to 661 companies in 2018.

This is a key contribution to business growth – we need to see more companies starting and growing in Scotland as Working Collaboratively for a Better Scotland recognises. Universities recognise the key role that they play and institutions have support in place to drive further improvements.

Almost every Scottish university has entrepreneurship training for staff and graduate start-ups and most deliver entrepreneur-led events and offer on-campus incubator support, while many degree programmes have enterprise and entrepreneurship embedded.

We are keen to explore new opportunities to strengthen partnership working and welcome further opportunities for collaborative working through regional economic partnerships. We welcome SFC’s commitment to ensure universities can connect with employers, industries and economic opportunities.
We expect growth in high skills jobs, but growth isn’t enough on its own. We believe in inclusive growth, fair work and a fairer society. As well as the obvious benefits to individuals, when there is more equal access to opportunities employers can benefit from a more diverse workforce bringing more diverse thinking which leads to more creative ideas. Research from McKinsey showed that increased diversity correlates with better financial performance. This approach should lead to a more inclusive and equitable society for everyone, in which Scotland’s universities offer opportunities that enable people from all backgrounds to achieve their full potential.

We were heartened that the most recent state of the nation report from the Social Mobility Commission showed social mobility increasing in Scotland (in contrast to England), but there is still more to do to ensure students from the least well off backgrounds have the same chances as those from more advantaged backgrounds. We are working hard towards the First Minister’s goal of fair access to higher education and at 15.6% of all entrants to university now coming from the 20 per cent most deprived areas (SIMD20) the sector is within touching distance of the 2021 goal of 16 per cent. But fairness doesn’t end at admissions and we recognise that we need to support access students during their time at university and as they progress into work, given there are likely to be barriers to employment opportunities in wider society.

Although data show that the graduate salary premium is higher for women than for men, there is a gender pay gap for graduates as well as non-graduates. Five years after graduation male graduates from Scottish (and English) universities have higher median earnings than female graduates. This reflects a deep-seated societal issue and while the university sector can’t tackle this alone, we are looking at what role we can play. A Fairer Scotland for Women, published in March this year, sets out how the Scottish Government intends to tackle the gender pay gap at national level. As part of this plan, the University of Edinburgh is working in partnership with the government to develop understanding of the barriers experienced by older workers in relation to the gender pay gap. All institutions have Gender Action Plans that detail work to address gender imbalances and inequalities with the support of SFC.

We have many mature students in our universities who enter to gain new skills, with the latest figures showing 40% of all postgraduate students in Scotland were over the age of 30 in 2017/18. This is a large group of people involved in reskilling and/or upskilling and it is a crucial part of inclusive growth since mature entrants are more likely to be from a widening access background. Universities are also looking at how students who spend less time on campus, because they work longer hours to support themselves or have caring responsibilities, can access skills and careers advice. Some universities have worked to embed this advice in programmes.

It’s also important that growth should deliver opportunities for people right across Scotland and not only in some geographical areas. Universities are an important part of local economies because of the courses they offer and can be key to attracting new investment in rural areas and ensuring there are opportunities for progression.

Studying at university brings other benefits as well as those for the economy. These include improved wellbeing and happiness, improved quality of life and resilience and self-confidence and greater job satisfaction. The Scottish Government’s National Performance Framework (NPF), launched in June last year, uses the UN Sustainable Development goals and makes the important link between improving wellbeing and boosting growth. Setting out a pathway towards a more successful and inclusive economy, it is an important step in the right direction and the commitment of SDS and SFC to align their work with NPF will help ensure a collective approach to progress. We are keen to work with them and others to support employers in progressing toward these shared goals and welcome Scottish Enterprise’s commitment to explore stronger partnerships and new ways of working, as set out in their recently published strategic framework document.

Inclusive growth in a changing economy
Several universities run programmes where employers mentor students. Institutions often particularly target students from disadvantaged backgrounds who may not have access to as much cultural capital as their peers.

Evaluation of Queen Margaret University’s mentoring programme has shown students from a widening participating background report a greater positive effect on their confidence and assertiveness than students from other backgrounds do.

Earlier this year Robert Gordon University launched the eHub employability app, giving students greater access to employability services.

The University of the Highlands & Islands (UHI) works with NHS to provide pathways for career development for people with low to medium level skills so they can qualify as nurses, midwives or doctors. This approach develops people already in the region, although in other areas universities (including UHI) are part of the case for attracting talent to the region by providing courses to facilitate career development. The recently published skills action plan for rural areas recognises this key role.
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2. Discussions on skills needs with employers, providers and agencies to understand emerging needs.

3. Flexible incentives for institutions to develop new approaches to upskilling and to lifelong learning. For example, developing ‘micro-credentials’ that can be stand-alone skills driven modules or be part of a postgraduate qualification.

4. Explicit commitment from the Scottish Government to fund lifelong learning opportunities so that people can upskill and reskill as they navigate through their evolving careers.

5. Scottish Government incentives for employers to invest in developing their staff, particularly in leadership and management skills and capabilities and for staff in SMEs.

6. Further development of Graduate Apprenticeships to address implementation issues highlighted by institutions and increase responsiveness to both employer and learner needs, with a particular focus on SMEs.

7. Work with partners to tackle equality issues and create sustainable and inclusive growth.

8. Strong university involvement in the further development of meta-skills to join up with existing work on graduate attributes.

Conclusion

For Scotland to be a successful economy, we must compete internationally – and graduates with the high-level skills that our universities are uniquely positioned to deliver drive our competitiveness. The key things we want to see to help achieve this are:

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End notes


2. Over the past 20 years, the three job categories that employ the most graduates (managerial, professional and associate professional) accounted for 85% of the net jobs growth in the UK (Government Office for Science, The UK’s Skills Mix: Current Trends and Future Needs https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/571675/ERS_The_UK_s_Skills_Mix_Current_Trends_and_Future_Needs.pdf). This trend looks likely to continue, with the UK Commission on Employment and Skills Working Futures predicting that by 2024, 46% of all UK employment will exist within highly skilled occupations. These will account for around 72% of all newly created jobs in the UK economy (UUK, How many future jobs will require higher-level skills? https://www.universitiesuk.ac.uk/blog/Pages/how-many-future-jobs-will-require-higher-level-skills.aspx).


5. In 2017/18, 31,965 individuals benefitted from CPD opportunities delivered by Scottish universities, and this number has been increasing year on year (Source: SFC KTG metrics).


7. CBI/Pearson (2018) survey also says 87% of businesses said they were maintaining or increasing their levels of graduate recruitment.


11. 78% of graduates from Scottish institutions go directly into graduate roles six months after graduation and 91% of 2016-17 graduates from Scottish universities were in work or further study 6 months after their course finished. Destinations of Leavers from HE (DLHE) survey 2016-17, HESA, (2018).

12. Graduates of Scottish universities generally earn more than those from other parts of the UK. The median salary for graduates from Scottish universities five years after graduation was £27,100 in 2016/17 while for graduates from GB institutions, the figure was £26,000 (Scottish Government (2019), Longitudinal Educational Outcomes (LEO) from Universities 2016/17 Longitudinal Educational Outcomes (LEO) from Universities: 2016/17: Scotland: https://www.gov.scot/publications/longitudinal-educational-outcomes-leo-universities-2016-17-scotland/).

13. 84% of employers thought Scottish HE leavers were well or very well prepared to work. This compares to 65% of Scottish school leavers Department for Education (2017), Employer Perspectives Survey 2016 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/622343/EPS_2016_UK_Report.pdf

14. A 2015 AGCAS Scotland study of graduate vacancies found that over 80 % of vacancies requiring a degree didn’t require a specific discipline and 2017 Institute of Student Employers manifesto states that 82% of ISE members do not specify what degree an applicant must have. https://cdn.ymaws.com/ise.org.uk/resource/resmgr/files/ISE_Manifesto_2017.pdf


18. Graduates for the 21st Century Enhancement theme, facilitated by QAA Scotland. More information on this work is available: https://www.enhancementthemes.ac.uk/completed-enhancement-themes/graduates-for-the-21st-century

19. https://www.qaa.ac.uk/scotland/focus-on/graduate-skills

20. The quality code says external expertise and employers and PSRBs are an important part of that as detailed in the advice and guidance on course design and approval (https://www.qaa.ac.uk/docs/qaa/quality-code/advice-and-guidance-course-design-and-development.pdf?sfvrsn=d29c181_2) the use of external expertise (https://www.qaa.ac.uk/docs/qaa/quality-code/advice-and-guidance-external-expertise.pdf?sfvrsn=6f2ac181_2)


25. https://scqf.org.uk/

26. QAA Scotland analysis of Scottish HEI institution-led review reports, November 2018

27. 79% offer placements or internships with entrepreneurs and small businesses (Universities Scotland (2018), Made it Happen,https://www.universities-scotland.ac.uk/wp-content/uploads/2019/02/Made-It-Happen-FINAL.pdf)

28. SDS (2018), Skills 4.0: A Skills Model to Drive Scotland’s Future, https://www.skillsdevelopmentscotland.co.uk/media/44684/skills-40_a-skills-model.pdf


32. https://digitalskillspartnership.scot/

33. The universities involved are: Aberdeen, Dundee, Edinburgh Napier, Glasgow, Glasgow Caledonian, Heriot Watt, Strirling, Strathclyde, St Andrews, West of Scotland

34. The Data Lab is an innovation centre that exists to help Scotland maximise value from data. More information on the Data Lab MSc is available here: https://www.thedatalab.com/skills-talent/the-data-lab-msc/

35. University of Aberdeen Enhanced Study Options (students must be on a single Honours programme): https://www.abdn.ac.uk/study/undergraduate/enhanced-study-options-1518.php


38. QAA has guidance for UK universities for enterprise and entrepreneurship designed for use in any subject (https://www.qaa.ac.uk/docs/qaa/quality-code/advice-and-guidance-external-expertise.pdf?sfvrsn=6f2ac181_2)


41. 83 per cent of all Scottish universities now have an on-campus incubator to support graduate & staff start-ups, 89 per cent have embedded enterprise and entrepreneurship within degree programmes and 78 per cent deliver entrepreneur-led events. See Made it Happen for case studies.


46. This study looked at English providers only.


50. The publication highlights small improvements in relation to science, technology, engineering, mathematics and medicine (STEMM). The number of Scottish STEMM departments holding Athena SWAN awards recognising efforts to enhance gender equality rose from 3 in 2012 to 73 by 2017.

51. SFC Ambitions and Priorities: Gender http://www.sfc.ac.uk/access-inclusion/access-priorities/gender/gender.aspx


53. The latest SFC figures show that in 2017/18, 30.3% of full-time first degree students over the age of 30 were from SIMD20 backgrounds compared whereas only 15.6% of full-time first degree students of all ages were from SIMD20 backgrounds. (SFC (2019), Report on Widening Access http://www.sfc.ac.uk/web/FILES/statisticalpublications_sfcst072019/Report_on_Widening_Access_2017-18.pdf)


