FOCUS ON: GRADUATE SKILLS

Graduates' and Employers' Views of Graduate Skills Development

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Introduction

QAA Scotland's [Focus On](#) projects aim to help higher education institutions and students' associations with work in their key priority areas. Topics are chosen based on recommendations and commendations from [Enhancement-led Institutional Reviews (ELIR)](#). Focus On ties these outcomes to developmental activities, resources and events with which the whole sector can get involved. These are designed to be timely and practical, and help colleagues make a real difference in a short space of time.

With debate on apprenticeships and skills high on the agenda in higher education, Focus On: Graduate Skills is relevant and timely. This project builds on previous work, including the [Graduates for the 21st Century Enhancement Theme.](#) QAA Scotland commissioned [AGCAS Scotland](#) to conduct research into the views of employers and graduates in order to gain a better understanding of employers' and graduates' views of the skills developed by students at Scottish higher education institutions (HEIs), up-to-date examples of good practice, insights into gaps in provision, and areas for development.

A key aim of this research was to understand the perspectives of graduates in all degree disciplines, specifically to examine access to skills development opportunities and understand whether a range of degrees offer appropriate digital skills and prepare graduates to live and work in a global society.

This project surveyed 247 recent graduates of Scottish HEIs, primarily those who graduated in 2017-19, along with 30 employers from a range of sectors and company sizes.

Report structure

This report offers a summary of respondent characteristics and key findings, and then explores each research question:

1   What is the sector doing well?
2   How is the sector ensuring that appropriate digital skills are developed by graduates in all disciplines and subject areas?
3   How is the sector ensuring that all students (irrespective of background and different characteristics) are able to access the full range of skills development opportunities offered in higher education?
4   How is the sector ensuring that graduates are equipped to live and work in a global society?

Each sector first outlines responses from graduates, then employers. Finally, the report offers a summary of recommended areas for development.

Survey design and analysis

Data was collected entirely by electronic survey to guarantee ease of access and anonymity, encourage open and honest responses to challenging questions, and allow the widest number of respondents. Employer respondents could choose to include their company name, but no identifying information was taken from graduate respondents. The survey was open for one month.

The survey received a disproportionately high number of respondents from two institutions, which were able to distribute the survey via their alumni networks. For this reason, no claim is being made that the findings are representative of the entire Scottish higher education sector.

To ensure common themes were captured effectively (and for ease of analysis), qualitative responses were reviewed for common themes, categorised, and assigned a numerical code. By adding a key for each qualitative question, this process limited the chance of error, and allowed analysis against any other characteristic or survey response. This was particularly important for questions that focused on individual interpretation, for example graduate respondents' own definitions of digital skills, what their HEI did well, areas for improvement, and so on.

The Digital Capability Framework developed by Jisc was used to formulate questions relating to digital skills.

Distribution approach

Working with careers and alumni teams in Scottish HEIs, the Graduate Survey was distributed via email and social media. The study is limited by the aforementioned weighting of respondents from two institutions, but reflects pockets of geographically significant participation throughout Scotland.

Alongside distribution to employers through the ScotGrad Programme to ensure representation of small to medium-sized enterprises, Scottish HEIs also supported the distribution of the Employer Survey to companies they already worked with. The survey was sent to over 160 companies. Thirty employers, with a broad range of characteristics, chose to respond.

Acknowledgements

Respondent characteristics

Graduate respondents

- All participants graduated from a Scottish HEI
- **81%** graduated in the last two years (2017-19)
  - o **16%**: 2015-16
  - o **3%**: 2014 or earlier

COURSE CATEGORY

| Category	Value
Sport	2
Social studies	19
Publishing, media, and information management	12
Psychology	7
Physical sciences	11
Medicine and allied subjects	10
Mathematical sciences	4
Law	19
Historical and philosophical studies	3
English	2
Engineering and technology	30
Education	8
Creative arts and design	11
Computer science	17
Business, management, and administrative studies	67
Biological sciences	15
Architecture, building, and planning	10

The categories for 'graduate destination' are taken from the Destination of Leavers of Higher Education (DLHE) survey. Respondents were offered the full survey definition to allow them to make an accurate selection:

- Working **full-time** (including employed, self-employed/freelance, voluntary/unpaid work, developing a professional portfolio/creative practice, internship/placement)
- Working **part-time** (including self-employed/freelance, voluntary/unpaid work, developing a professional portfolio/creative practice, internship/placement).

The majority of respondents are represented in the graph below.

GRADUATE DESTINATION

- Working part-time 23
- Full-time further study, training or research 26
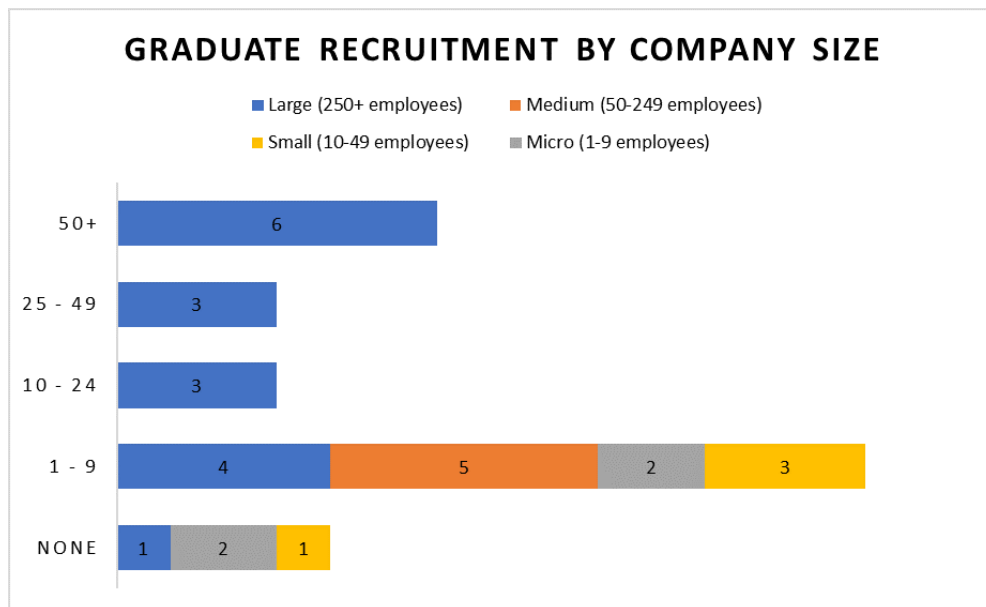- Unemployed 13
- Working full-time 172
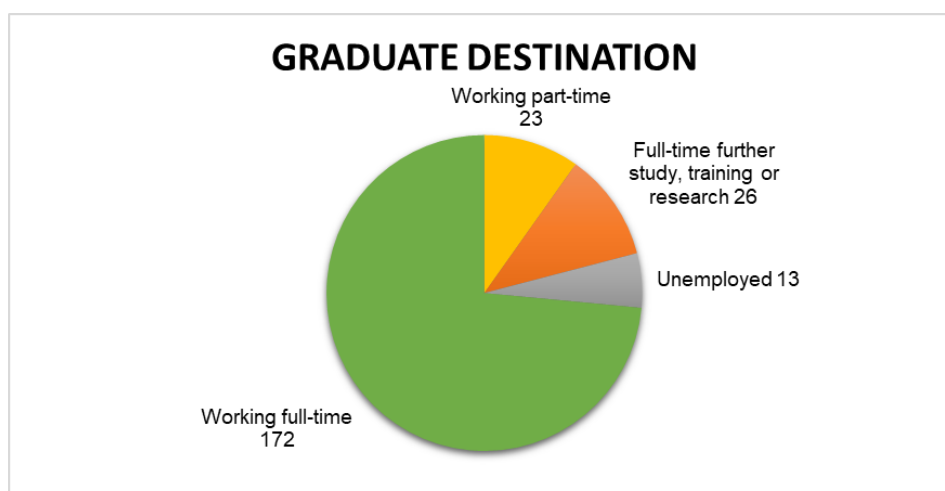
In addition to the above graph:

- Two respondents were due to start a job in the subsequent month
- Three respondents were in **part-time** further study, training or research
- Five respondents were taking time out to travel
- Three respondents were doing something else (for example, retired, looking after home, or family).
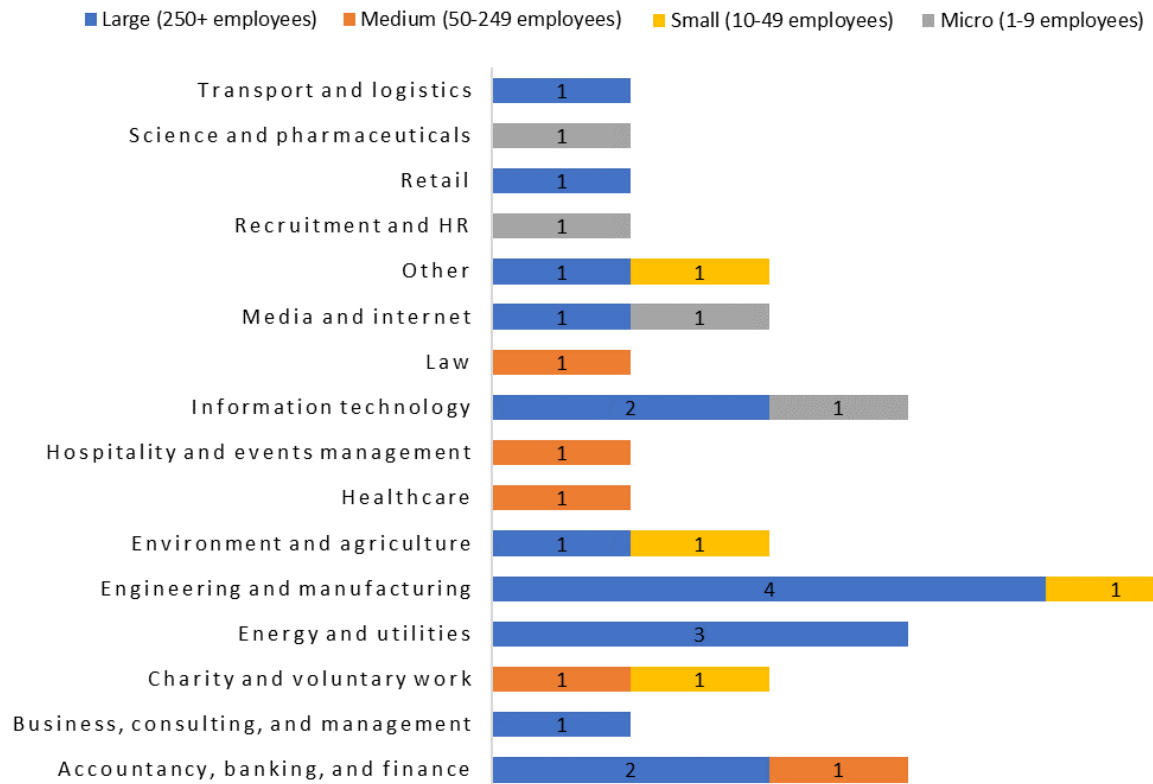
Employer respondents

This study was able to gather views from a range of companies by size and sector, with a high proportion of respondents noting that their usual recruitment per year is one to nine graduates.

GRADUATE RECRUITMENT BY COMPANY SIZE

Legend:
- Large (250+ employees)
- Medium (50-249 employees)
- Small (10-49 employees)
- Micro (1-9 employees)

Category	Large	Medium	Micro	Small
50+	6			
25 - 49	3			
10 - 24	3			
1 - 9	4	5	2	3
NONE	1		2	1

SMEs are represented in a number of key sectors as shown in the table below. The high proportion of large engineering/manufacturing and energy/utilities companies represented (7/30) should be noted in the context of this analysis. Those which selected 'other' have a multi-disciplinary business model and were unable to select one category.

COMPANY SIZE BY SECTOR

Legend: ■ Large (250+ employees) ■ Medium (50-249 employees) ■ Small (10-49 employees) ■ Micro (1-9 employees)

Sector	Large (250+ employees)	Medium (50-249 employees)	Small (10-49 employees)	Micro (1-9 employees)
Transport and logistics	1			
Science and pharmaceuticals				1
Retail	1			
Recruitment and HR				1
Other	1		1	
Media and internet	1			1
Law		1		
Information technology	2			1
Hospitality and events management		1		
Healthcare		1		
Environment and agriculture	1		1	
Engineering and manufacturing	4		1	
Energy and utilities	3			
Charity and voluntary work		1	1	
Business, consulting, and management	1			
Accountancy, banking, and finance	2	1		

Key findings

77% of graduate respondents felt that their HEI had given them the opportunity to gain a broad range of skills that allowed them to feel prepared for the workplace. All respondents who selected Law (19), Education (8), Architecture, Building, and Planning (10), Sport (2), or English (2) as their course category felt that university had prepared them for the workplace.

All employer respondents felt that Scottish HEIs adequately prepare graduates for the workplace. 24/30 of those rated graduate preparedness as Excellent or Good.

- 'Good grasp of the requirements of success in work environment.' (Energy, Large)
- 'We find those who succeed with us come from a strong academic background.' (Healthcare, SME)
- 'I believe we all have a duty and responsibility to support and equip students for work readiness.' (Media, Large)

25/30 employer respondents agreed that having a degree was important. **Six companies exclusively recruit graduates** (for the specialist skills graduates bring to the role - specifically scientists, managers, consultants, and software developers), and 19 recognise a degree as 'Very Important' or 'Important'. Five of the surveyed companies have wider recruitment aims and apprenticeship programmes, with processes open to any candidate with the right skills. Two companies compared the length of degrees at Scottish HEIs to those in England, with one mentioning it gave graduates an 'extra year of maturity'.

Explored in further detail later in the analysis (see p15), just over half (56%) of graduate respondents felt there were no barriers to themselves or others in relation to accessing skills development opportunities. Of those who expressed concern about some form of barrier:

- **13%** felt that the cost and timing of skills development activities affected access
- **9%** were affected by the necessity to work to support their studies.

81% felt that being at university had enabled them to develop appropriate digital skills in some way.

Graduate and employer respondents both rated Scottish HEIs highly when considering students' access to digital learning environments, the opportunities students have to collaborate in those learning environments, and their preparation to find, analyse, and use credible digital data sources.

66% of graduate respondents feel that they are well equipped to live and work in a global society as a direct result of attending university.

Q1: What is the sector doing well?

Graduate perspectives

Areas of good practice at Scottish HEIs

Graduate respondents said:

- 'The mandatory industry experience portfolio module which I had to pass every year in order to progress in my degree proved to be favourable with potential employers. It was seen as a much better alternative to a single placement year.' (Business, 2015)
- '[The two Scottish universities at which I studied] had awards schemes to allow you to gain recognition for volunteering or work done over and above the usual studies. Both careers services were also proactive in putting on events such as CV workshops, skills development events etc.' (Biological Sciences, 2017)
- '[Delivering] presentations in the curriculum has given me confidence to express myself in workplace meetings, both formal and informal.' (English, 2018)
- 'Digital and Information Literacy skills were built into the curriculum, with multiple opportunities to practise and gain feedback.' (Publishing, 2018)
- 'We were encouraged to get as much industry experience as we could and our lecturers would put us in touch with their industry contacts. We were put in group classes for some modules with students studying different degrees.' (Business, 2015)
- 'Whilst theory was important, the emphasis was on real world application which I continue to use to this day in my career.' (Computer Science, 2017)
- 'Lecturers actively working in their respective fields, both in academia and industry, meant the module content was generally on the cutting edge and relevant to the modern world and industry.' (Engineering, 2018).

77% of graduate respondents confirmed that attending university in Scotland had prepared them for the workplace. **118** graduate respondents provided comments about what their university had done well.

The following key themes emerged:

Theme	Responses coded in this category
Prepared me for the workplace (43)	1 Graduate respondents recognising that a degree is a basic requirement for their chosen career 2 University providing industry-relevant experience and knowledge 3 Embedding practical examples into the curriculum to expose graduates to the realities of work environments 4 Equipping graduates with a 'work-ready' mindset
Allowed me to develop relevant skills (36)	1 Graduate respondents summarising their experience as gaining a 'broad range of skills' or similar wording 2 Gaining transferable and meta skills, such as organisation, teamwork, communication, time management, digital literacy, working independently, creativity, public speaking

Gave me access to HEI-specific opportunities (8)	1 Graduate respondents appreciating the unique access to specialist staff, resources, and facilities 2 Accessing on-campus services and opportunities, including students' associations and societies 3 Having opportunities to work in interdisciplinary teams
Equipped me with academic knowledge (13)	1 Gaining research skills 2 University preparing graduates for further study Those entering the workplace had mixed opinions in this category, in some cases linking it to a lack of work-ready skills, for example: 'University has given me academic knowledge but did not prepare me properly in a professional way'.

In addition to the key positive themes, some graduate respondents placed higher value on their employment experience (6) before and during university in preparing them for the workplace. This was particularly true of distance learners and mature learners, who felt that their HEI did not have as much influence on them. A small proportion of graduate respondents had an overall negative experience of university and were unable to comment what their HEI had done well (8). A further small proportion of respondents had no experience of the workplace (4) so did not feel able to comment.
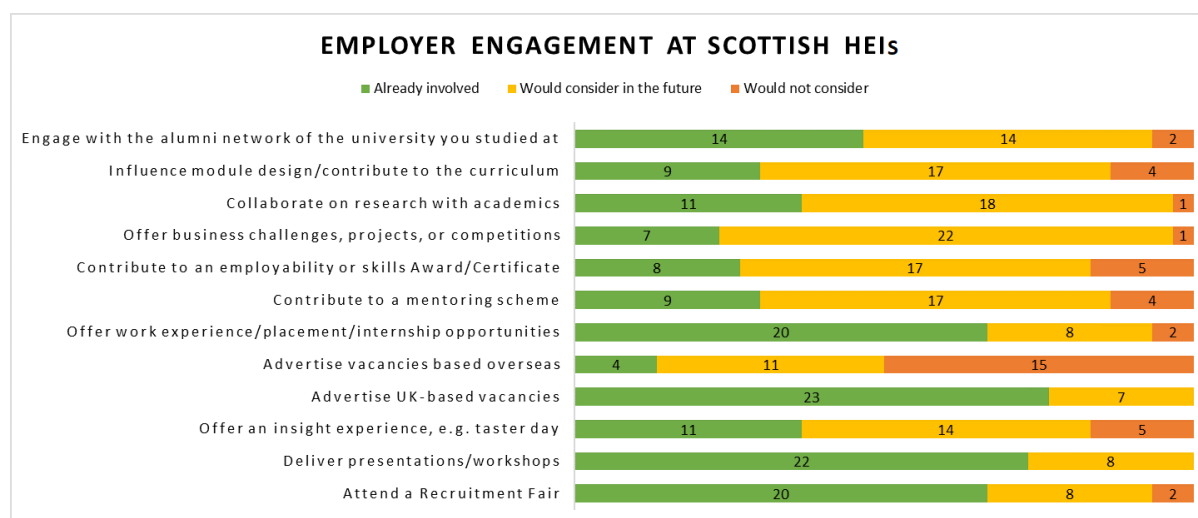
Employer perspectives

22/30 employer respondents agreed that graduates from Scottish HEIs are adequately prepared for their workplace.

Employer respondents offered their interpretations of what HEIs do well:

- **Delivering a high standard** of education/knowledge/learning skills
- Shaping graduates who are **generally well prepared for the workplace**
- Preparing graduates **to use soft skills**
- Teaching basic **commercial understanding**
- **Careers Services** preparing graduates for the recruitment process, one commenting 'I think a lot of the classes the careers service run help massively with interview skills/CV writing.'

Employer respondents did note some inconsistency in graduate preparedness, which can be summarised in one employer's comment as graduates having a 'variable understanding' of the requirements for the workplace. Work ethic, unrealistic expectations, and level of maturity were highlighted as some of the key factors.

Employer engagement at Scottish HEIs

EMPLOYER ENGAGEMENT AT SCOTTISH HEIs

■ Already involved ■ Would consider in the future ■ Would not consider

Activity	Already involved	Would consider in the future	Would not consider
Engage with the alumni network of the university you studied at	14	14	2
Influence module design/contribute to the curriculum	9	17	4
Collaborate on research with academics	11	18	1
Offer business challenges, projects, or competitions	7	22	1
Contribute to an employability or skills Award/Certificate	8	17	5
Contribute to a mentoring scheme	9	17	4
Offer work experience/placement/internship opportunities	20	8	2
Advertise vacancies based overseas	4	11	15
Advertise UK-based vacancies	23	7	
Offer an insight experience, e.g. taster day	11	14	5
Deliver presentations/workshops	22	8	
Attend a Recruitment Fair	20	8	2

Employer respondents recognised the part they can play in preparing graduates for the workplace. A large Media company reported that they 'had some fantastic students on placement from a number of universities', continuing that these placements then converted to graduate recruitment. An SME in the Sciences sector agreed: 'student work placements have been of great benefit to preparing the students for working'.

Why employers hire graduates

23/30 employer respondents recruit graduates to bring in new talent to develop the workforce or for their specialist skills and knowledge. Other reasons include general business growth, and one employer commented that it is a cost-effective option. **24/30** experienced increased or stable graduate recruitment in 2018 compared with the previous year: 15 saw an increase, nine stayed the same.

Q2: How is the sector ensuring that appropriate digital skills are developed by graduates in all disciplines and subject areas?

Graduate perspectives

A 2018 Architecture graduate summarised their digital skills, and the role of the university in the development of these skills, as follows: 'Digital skills to me is how to use architectural software, the university encouraged us to experiment with […] software - my digital skills ability got me my current job'.

To introduce respondents to the digital skills theme, participants were asked to define their interpretation of digital skills in their own words. Responses were then grouped into categories. **125** graduate comments were categorised as **the ability to successfully use/interact with the digital world (for example, computers, internet) including social media**. Responses in this category include: reference to computing/IT skills; effective use of everyday technology (computers, smartphones); the ability to use common software, such as the Microsoft Office Suite; use of the internet; and references to a 'digital world' both at home and in work. A 2018 Computer Science graduate summarised: 'my personal view dictates that these are skills that we use daily, in our "always online" world'.

81% felt that attending university had enabled them to develop appropriate digital skills in some way:
- **55%** responded 'yes'
- **26%** responded 'neutral' – however, reviewing comments associated with this response, a key theme was the development of digital skills as a general outcome of working in the university environment, where they might be expected to access course materials online, submit work electronically, and so on.

GRADUATES WHO DEFINED 'DIGITAL SKILLS' AS INTERACTION WITH THE DIGITAL WORLD
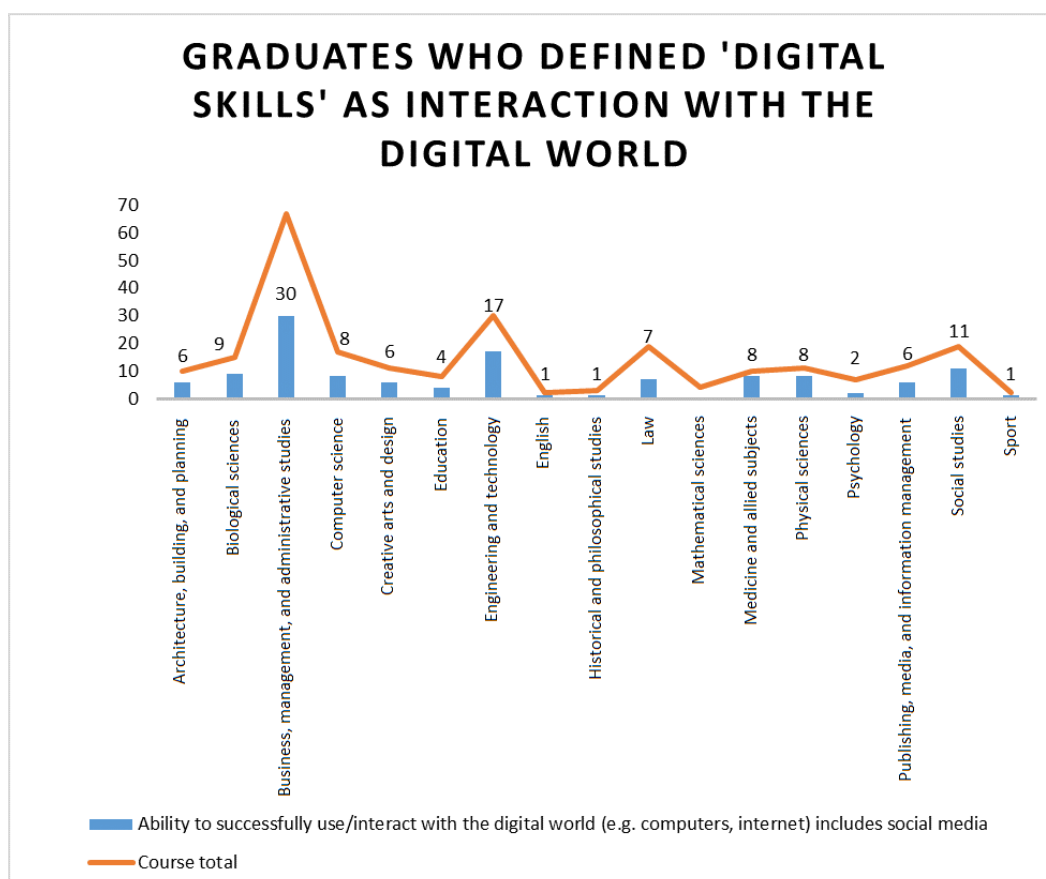
When graduate respondents explained their interpretation of digital skills, many considered the ability to use/interact with the digital world as a baseline. Other themes emerged, including:

- **Industry/workplace relevant** digital skills **(43)**
- **Advanced** digital skills including coding, cybersecurity, and artificial intelligence **(27)** (graduate respondents articulated these specifically as advanced skills; however, there is correlation with the industry/workplace relevant category)
- **Academic** skills including using the library, accessing journals, and writing essays **(19)**
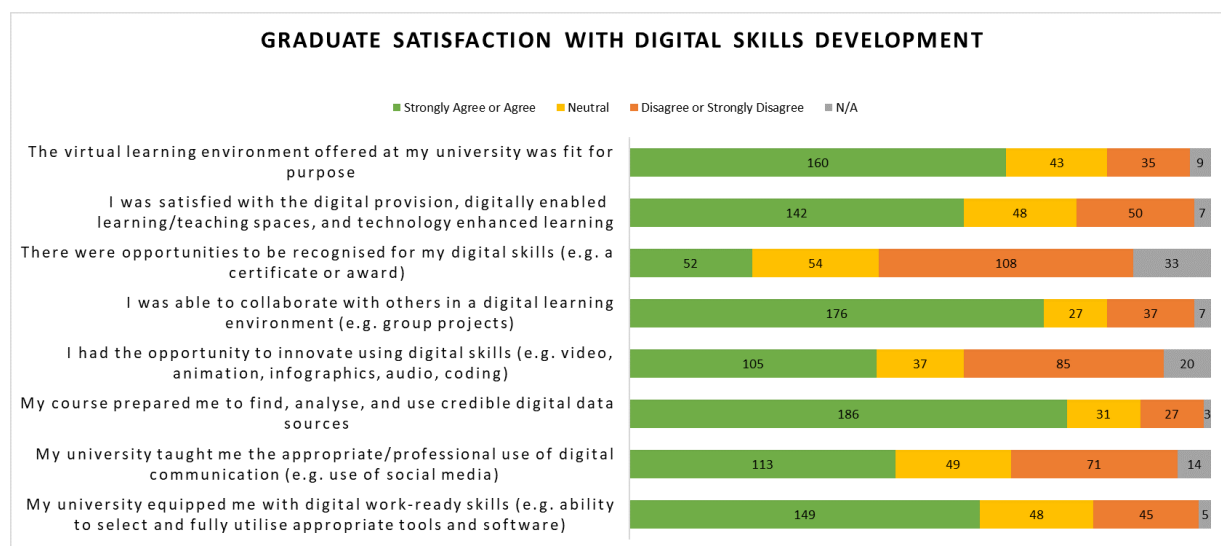- **Digital design/content creation**, for example photography, filmography, and editing **(4)**
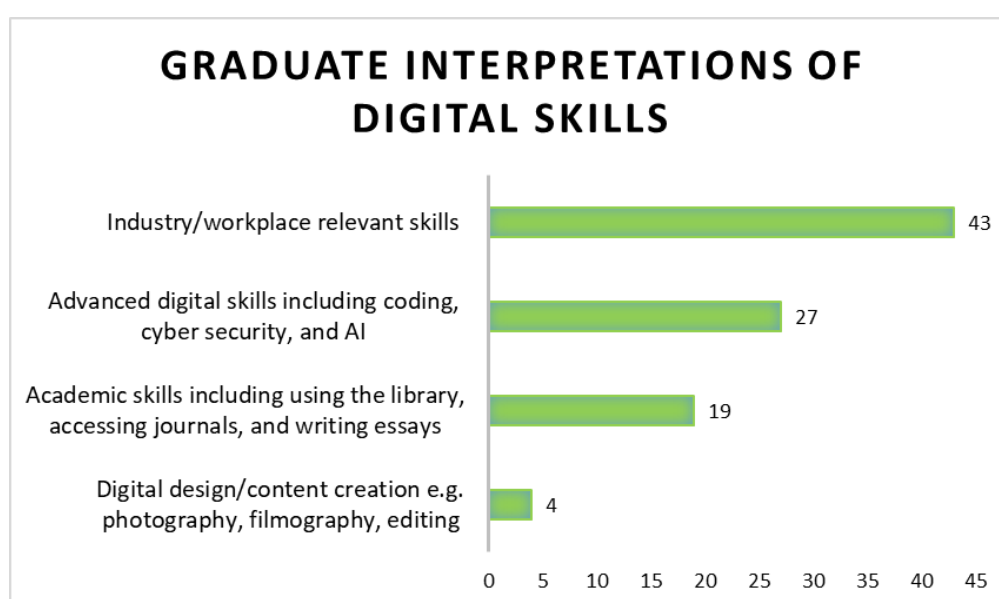
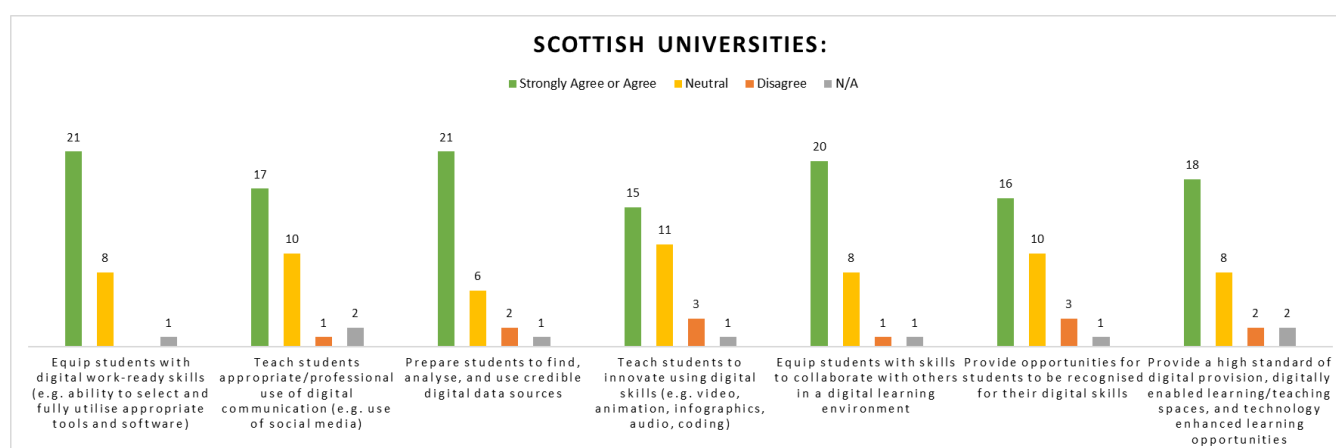
Digital skills development by course
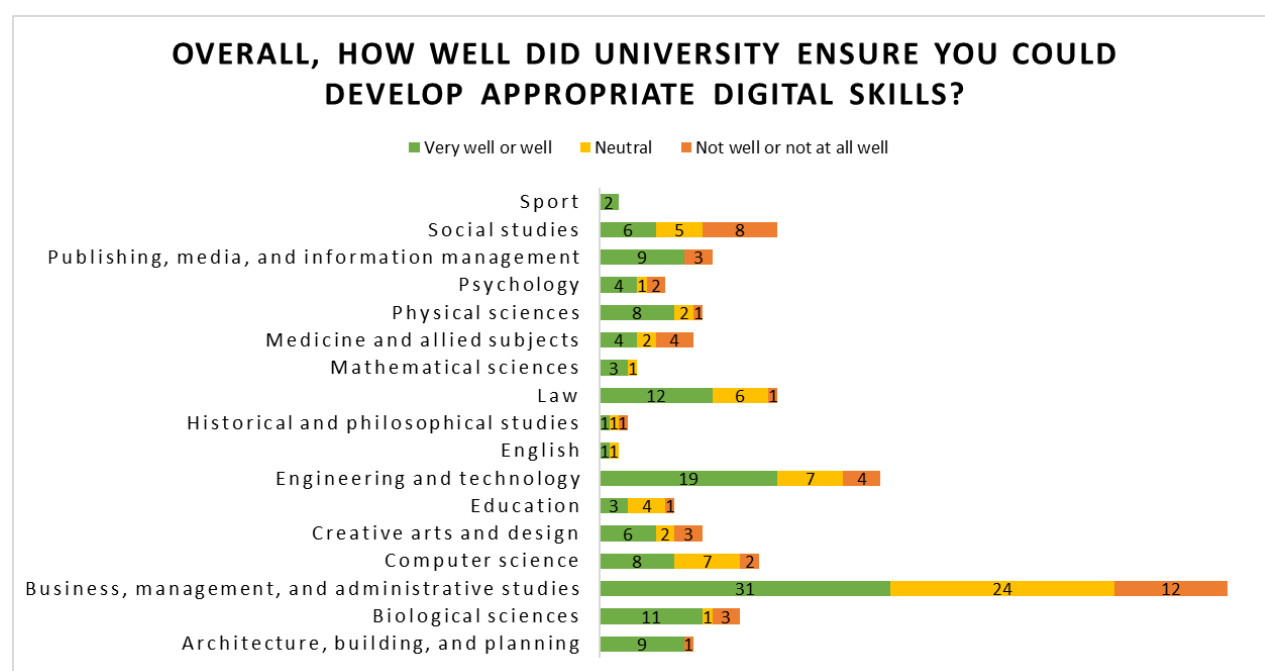
The survey questions asked in this section were influenced by categories in the Jisc Digital Capabilities Framework. Graduate respondents were asked to rate their satisfaction with their digital skills development in a number of key areas. Strengths in the digital provision at Scottish HEIs emerged:

- Virtual learning environments are largely considered to be fit for purpose
- Students have opportunities to collaborate in a digital learning environment
- Courses prepare graduates to find, analyse, and use credible digital data sources.

GRADUATE SATISFACTION WITH DIGITAL SKILLS DEVELOPMENT

■ Strongly Agree or Agree ■ Neutral ■ Disagree or Strongly Disagree ■ N/A

	Strongly Agree or Agree	Neutral	Disagree or Strongly Disagree	N/A
The virtual learning environment offered at my university was fit for purpose	160	43	35	9
I was satisfied with the digital provision, digitally enabled learning/teaching spaces, and technology enhanced learning	142	48	50	7
There were opportunities to be recognised for my digital skills (e.g. a certificate or award)	52	54	108	33
I was able to collaborate with others in a digital learning environment (e.g. group projects)	176	27	37	7
I had the opportunity to innovate using digital skills (e.g. video, animation, infographics, audio, coding)	105	37	85	20
My course prepared me to find, analyse, and use credible digital data sources	186	31	27	3
My university taught me the appropriate/professional use of digital communication (e.g. use of social media)	113	49	71	14
My university equipped me with digital work-ready skills (e.g. ability to select and fully utilise appropriate tools and software)	149	48	45	5

Employer perspectives

Employer respondents were asked to rate the digital skills development opportunities available at Scottish HEIs:

SCOTTISH UNIVERSITIES:

■ Strongly Agree or Agree ■ Neutral ■ Disagree ■ N/A

	Strongly Agree or Agree	Neutral	Disagree	N/A
Equip students with digital work-ready skills (e.g. ability to select and fully utilise appropriate tools and software)	21	8		1
Teach students appropriate/professional use of digital communication (e.g. use of social media)	17	10	1	2
Prepare students to find, analyse, and use credible digital data sources	21	6	2	1
Teach students to innovate using digital skills (e.g. video, animation, infographics, audio, coding)	15	11	3	1
Equip students with skills to collaborate with others in a digital learning environment	20	8	1	1
Provide opportunities for students to be recognised for their digital skills	16	10	3	1
Provide a high standard of digital provision, digitally enabled learning/teaching spaces, and technology enhanced learning opportunities	18	8	2	2

Employer respondents largely agreed that Scottish HEIs offer a range of support to facilitate students' acquisition of appropriate digital skills, including:

1   Equipping students with digital work-ready skills
2   Preparing students to find, analyse, and use credible digital data sources
3   Equipping students with skills to collaborate with others in a digital learning environment.

22/30 companies indicated that they have a digital strategy; of the eight that did not, seven were SMEs. One employer summarised: 'students from [all HEIs] come well equipped with digital skills'.

Findings in this part of the study highlighted that some employers - including those selecting 'neutral' - may be unaware of the work universities are doing to prepare students with digital skills. Awareness raising may help in some circumstances. However, there were common themes from both student and employer responses:

- Half of employer respondents were unable to assess whether Scottish universities teach students to innovate using digital skills (correspondingly, 60% of graduate respondents did not feel they were offered this opportunity)
- Around half of employer respondents were not aware whether Scottish universities provide opportunities for students to be recognised for their digital skills (likewise, 79% of graduate respondents did not feel they had access to these opportunities).

Teaching students appropriate/professional use of digital communication scored slightly higher for both graduate and employer respondents, but similarly was met with a high proportion of neutrality and/or disagreement.

Q3: How is the sector ensuring that all students (irrespective of background and different characteristics) are able to access the full range of skills development opportunities offered in higher education?

Primarily, this part of the project was directed towards graduates.

Graduate perspectives

'The University embraces diversity and students from all backgrounds, it is a safe place to develop skills and enhance learning' (Law, 2017).

Just over half of graduate respondents (56%) felt there were no barriers to access to themselves or others. The following table and quotes summarise the key issues raised by respondents.

DO YOU THINK ALL STUDENTS (IRRESPECTIVE OF BACKGROUND AND DIFFERENT CHARACTERISTICS) ARE ABLE TO ACCESS THE FULL RANGE OF DEVELOPMENT OPPORTUNITIES OFFERED AT UNIVERSITY?
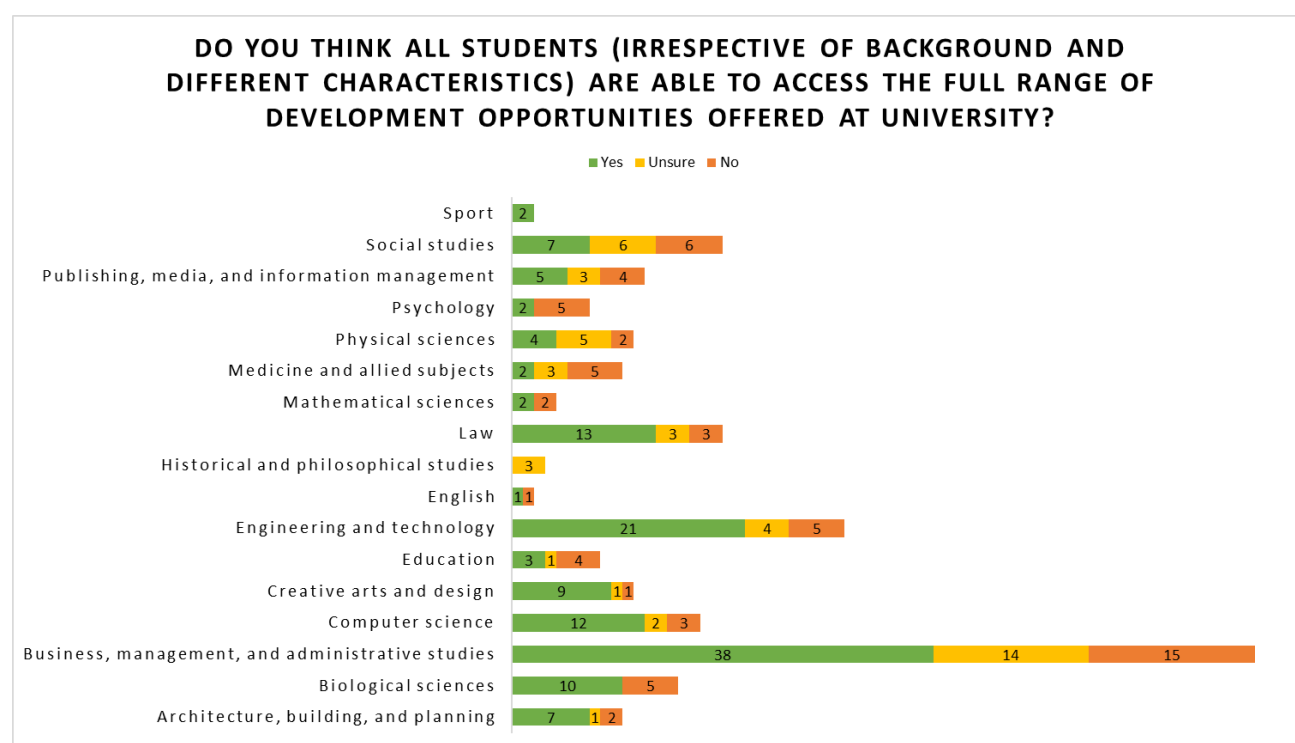
Graduate respondents who were unable to participate (but wished to) commented on the types of barriers they faced and how it affected them:

- 'The course was spread out over a full week but sometimes we were only in an hour a day. It would have been much better putting those hours into a couple of days so that we could get some work experience whilst we studied.' (Education, 2017)
- 'In first year I signed up for sports teams and societies to meet new people, but couldn't afford to pay the membership for the gym or clubs and had to drop out. I feel like this would have boosted my confidence a lot if I'd had the chance to keep participating in extracurricular activities.' (English, 2018)
- 'As a dyslexic student I often felt my achievements on my placements and/or giving presentations were overshadowed by my grades on written essays.' (Anonymised)

- 'I was hoping to change career and reached out for career guidance, but was disappointed that they seemed only equipped to offer advice to new graduates.' (Publishing, 2016)
- 'Money [was a barrier], but I do not know how university could have helped. For example, I wanted to go for a semester abroad (Erasmus) but I couldn't because I would have had to leave my job and wouldn't have enough money.' (Publishing, 2018)
- Course commitments caused other financial constraints: 'The support and research materials required forced […] students to purchase the expensive course books.' (Psychology, 2018)

Awareness and choice to access opportunities

- 66% of graduate respondents were aware of the range of skills development opportunities available to them
- 53% agreed that skills development opportunities were easy to access
- 52% felt that university offered opportunities to gain an insight into local industry/employers.

The skills development opportunities indicated in the chart below were selected based on the likelihood that these types of skills development opportunities were available at Scottish HEIs. Of the total graduate respondents, they chose to access the following opportunities:
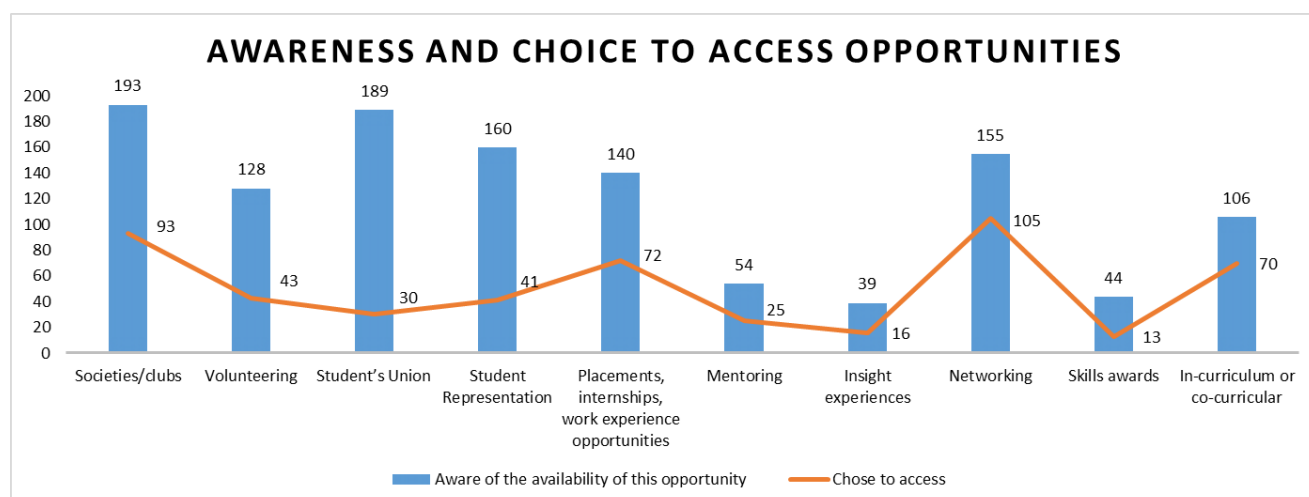
Graduate respondents primarily chose activities for the following reasons:

- **Value/usefulness** to employability **(68)**
- **Enjoyment/interest (30)**
- To **meet new people (17)**
- Course **requirement (8)**
- Could **fit** these activities in **(7)**
- Easily **available (8)**
- To **help others**/contribute to the community **(7)**.

Of the 102 students who chose not to access opportunities, 29 chose not to elaborate further. 73 offered insights into the access challenges they faced:

- **Access**, for example distance, cost, lack of relevant opportunities **(20)**
- Other **commitments**, for example family, work **(14)**

- Actively choosing not to get involved/**did not want to (12)**
- **Time** constraints **(9)**
- **Did not know** about the opportunities **(9)**
- Access - **equality (5)**
- **Personal** reasons **(4)**.

Those noting 'access - equality' and 'personal reasons' referred to specific issues that had affected them, including thoughts on 'positive' discrimination favouring students from other backgrounds, personal disagreements with staff, and lack of confidence/mental health.

- 'Most weren't available, due to sex/colour.' (Anonymised)
- 'I once joined the student union, one of the lecturers saw me in one of the events. It was enough for him to [then] bully me all the time.' (Anonymised)
- 'I have depression so spent the entire year worrying about coursework and my mental state.' (Anonymised)
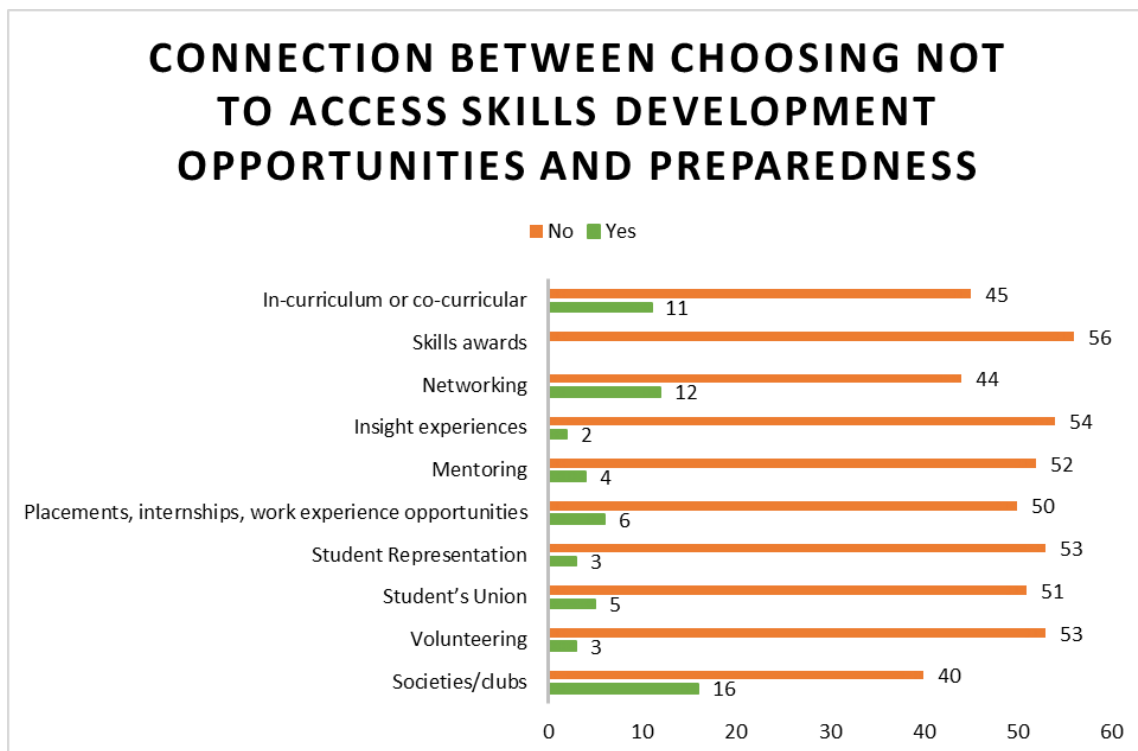
Impact of accessing skills development opportunities

Access to skills development opportunities was identified as a key challenge for students and a recommendation in this research. To explore the impact of accessing skills development opportunities, this part of the study explored feelings of preparedness for the workplace compared against which skills development opportunities students chose to access. The following graph includes only respondents who answered clearly 'yes' or 'no' to the following question: 'Has attending university given you the opportunity to gain a broad range of skills which allowed you to feel prepared for the workplace?' (Total: 191).

Overall, there was no correlation between students accessing opportunities and answering 'yes'. Accessing networking, societies, placements, and in-curriculum/co-curricular activity can be linked to an increased likelihood of answering 'yes'; however, a larger proportion in every category answered 'no' when asked about their preparedness.

CORRELATION BETWEEN HOW PREPARED GRADUATES FELT FOR THE WORKPLACE AND THE OPPORTUNITIES THEY ACCESSED
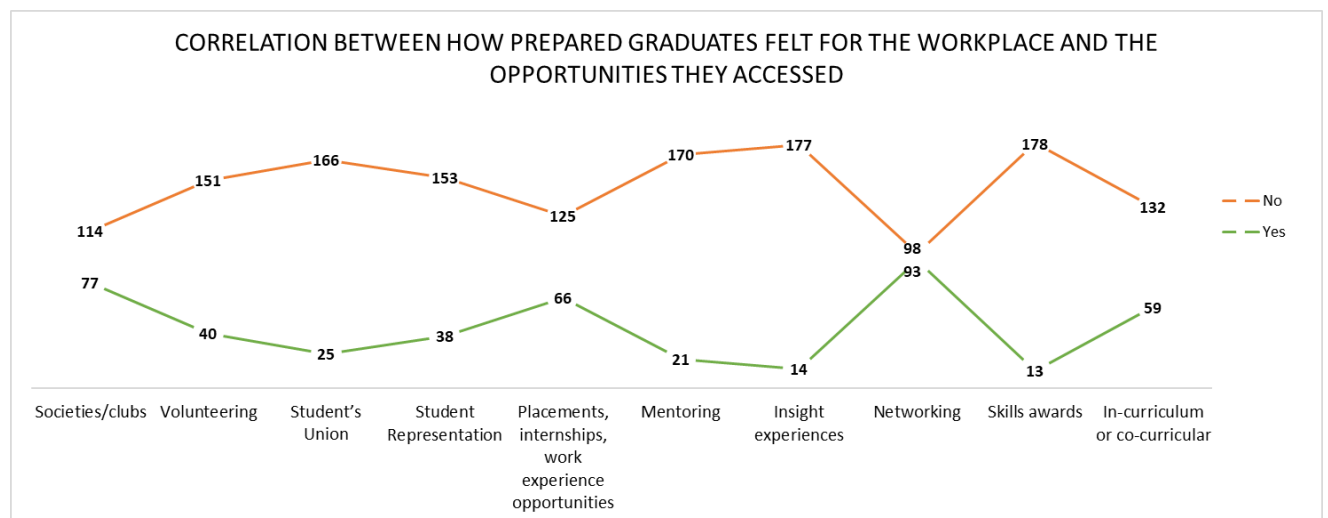
As summarised in the graph below, there is a connection between choosing not to access skills development activities and feeling unprepared for the workplace. Of the respondents, 56 selected 'no' or 'can't tell' to the following question: 'Has attending university given you the opportunity to gain a broad range of skills which allowed you to feel prepared for the workplace?'

Those selecting these responses were less likely to have accessed skills development activities. However, when viewed in connection with the previous chart, it is difficult to conclude that increased access would have impacted their response on preparedness.

CONNECTION BETWEEN CHOOSING NOT TO ACCESS SKILLS DEVELOPMENT OPPORTUNITIES AND PREPAREDNESS

Mapped against feelings of unpreparedness for the workplace or being unsure, when asked to elaborate on their choice not to access skills development opportunities, there were three key themes:

- Other commitments, for example family, work
- Access (distance/cost), primarily selected by distance learners
- Actively choosing not to get involved/did not want to access.

Q4: How is the sector ensuring that graduates are equipped to live and work in a global society?

Graduate perspectives

66% feel that they are well equipped to live and work in a global society as a direct result of attending university. However, not all graduate respondents attributed this sense of preparedness to their time at university. To understand networking opportunities offered by their university, graduate respondents were asked whether they know how to access their university's global alumni network. **49% answered yes**. Overall:

- **82%** are confident to travel and/or work abroad
- **90%** have appropriate global/cultural understanding to interact with individuals from other countries.

The two main reasons for selecting 'no' or 'unsure' are that respondents already had these skills before university (from previous work or study, for example), or that at the time of completing the survey they had not had the opportunity to test these skills so felt unable to comment.

<u>Awareness and access to relevant opportunities</u>

Two-thirds of graduate respondents were <u>not</u> aware of the overseas experiences available to them:

- **33%** were aware that a study abroad year was available
- **31%** knew an overseas placement, internship, or work experience opportunity was available
- **21%** knew of exchange programmes they could access
- **16%** were aware of arranged trips abroad, for example group trips, global insight programmes.

For those who were able/chose to access an overseas experience, they praised the richness of the experience, one commenting: 'that was the best year of my education'. There were also comments about enjoyment, understanding of different academic environments, new experiences, increased confidence, independence, and the diversity of the people with whom they were able to interact.

This part of the study identified a significant area of recommendation: **to improve knowledge and access to overseas experiences where possible**.

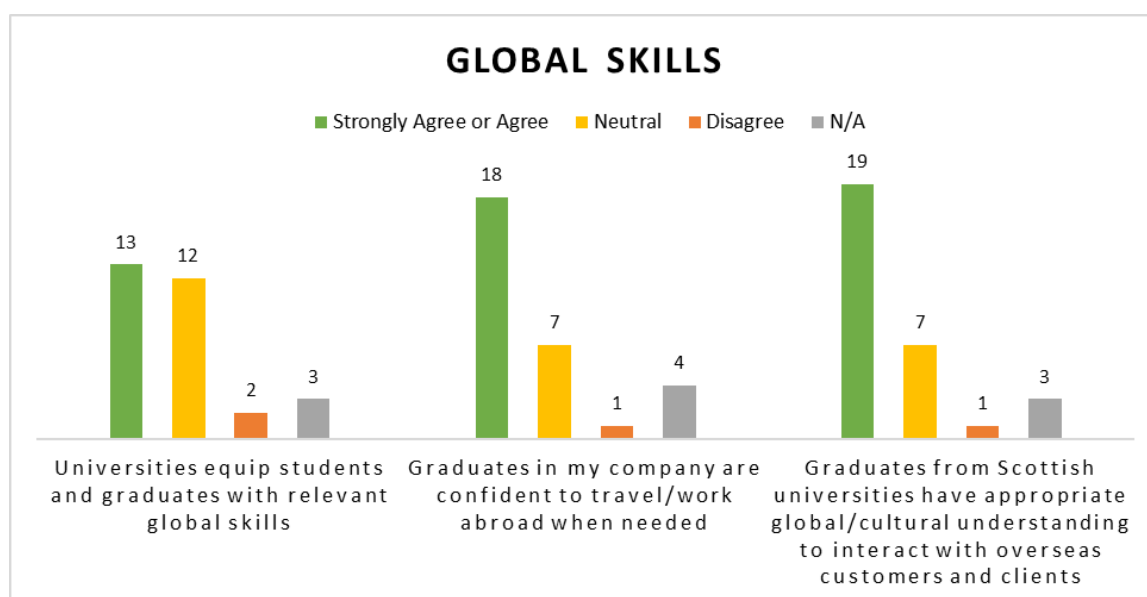Graduate respondents were asked to comment on why they did not take up an overseas experience:

- The opportunity **wasn't available/didn't know about it (63)**
- The **financial cost was too high (20)**
- They **applied and were rejected (9)**.

There were additional reasons not related to access, including **actively choosing not to** access it **(35)**; deciding that overseas opportunities were **not applicable** to their situation/course **(45)**, which included **distance learners**; and **personal and other commitments (17)**.

To understand whether more subtle opportunities were available to students, they were asked: 'Did your university provide interdisciplinary development opportunities? (For example, working with students from different degree disciplines/backgrounds/countries)'. **53% of graduate respondents felt that their university provided interdisciplinary development opportunities**. Respondents were then asked to elaborate on their response. 129 commented, and the following key themes emerged:

- I **interacted with international students** in my class **(53)**
- I had **interdisciplinary collaboration** opportunities with students from other courses **(45)**
- There were some opportunities, but they were **limited (18)**
- I accessed these **outside class**, for example involvement with societies **(13)**.

Employer perspectives

GLOBAL SKILLS

Legend: ■ Strongly Agree or Agree ■ Neutral ■ Disagree ■ N/A

Universities equip students and graduates with relevant global skills: 13, 12, 2, 3

Graduates in my company are confident to travel/work abroad when needed: 18, 7, 1, 4

Graduates from Scottish universities have appropriate global/cultural understanding to interact with overseas customers and clients: 19, 7, 1, 3

When asked to rate whether Scottish HEIs equip students and graduates with relevant global skills, employer respondents were less likely to strongly state that universities achieve this outcome, with 12 remaining neutral on the topic. Employer respondents were more likely to remain neutral or state that these questions were not applicable than for any other survey question.

Employer respondents commented that these skills were dependent on levels of confidence, that the internet creates the 'illusion' of global connectedness, and that the global environment in which we live and work means 'there are fewer barriers to overcome' than in the past.

Additionally, two employer respondents commented that the setup of higher education in Scotland can impact graduate preparedness to live and work in a global society, commenting that they may move around Scotland but are less likely to move further afield:

- 'Fee differences can mean Scottish students choose to study closer to home.' (Energy, Large)
- 'A peculiarity of geography but many of the graduates we have don't want to move away from the area in which they were brought up.' (Engineering, Large)

Areas for development

Graduate perspectives

Graduate respondents were asked how they felt university could have better prepared them for their future, including for the workplace. 68 felt there was nothing their university could have done to better prepare them, and 11 chose not to comment.

Of the remaining 168, graduate respondents would like to see the following improvements:

1   Provide **work experience**/placement opportunities including access to employers **(49)**
2   Offer **employability, interdisciplinary, and/or skills-based learning** (including embedded provision in the curriculum) **(42)**
3   Provide **practical, industry-specific** courses and projects/activities **(34)**
4   **Upskill staff/update teaching**, for example, hiring teaching staff with greater industry experience **(34)**
5   Offer support to **transition**/follow up support to find a job **(9)**.

Graduate respondents were also asked what their university could do to make development opportunities easier to access. Of those who gave suggestions (206), responses included improving:
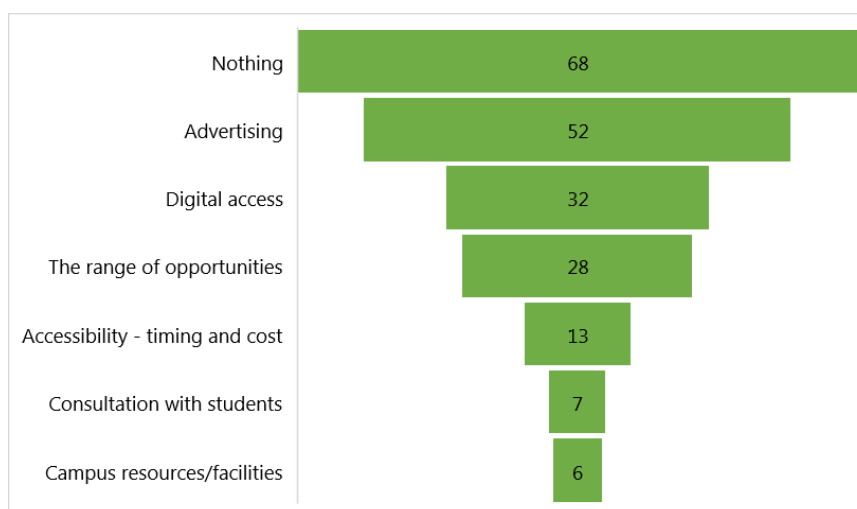
103 graduate respondents commented on the barriers to participation in skills development opportunities faced during their time at university. Two key issues were identified, which are likely to be linked but were worded in the following ways:

- **Access** - cost, timing **(33)**
- The **necessity to work** to support study **(23)**.

Additionally, small numbers of students mentioned lack of degree flexibility (11), personal/disability worries including mental health (10), and feelings of cultural (7), social (4), and wider (7) discrimination leading to difficulties integrating at university. In the latter category, graduate respondents again commented on 'positive' discrimination and how this had affected their access to opportunities.

Considering their access to digital development opportunities - and corresponding to similar comments from Employer respondents - graduate respondents were less satisfied with provision of:

- Opportunities to be recognised for their digital skills (for example, a certificate or award)
- Opportunities to innovate using digital skills
- Teaching on appropriate/professional use of digital communication.

Two-thirds of graduate respondents were <u>not</u> aware of the overseas experiences available to them. This is potentially an indication that these experiences were not available at Scottish HEIs, or that improved awareness raising and/or access is needed to improve students' understanding of study abroad options, overseas work experience opportunities, exchange programmes, and arranged trips abroad.

Employer perspectives

Employer respondents were asked what kinds of employer engagement and/or skills development opportunities for students they would like to see included or improved in Scottish HEIs. Suggestions included:

- More **practical, work-based opportunities** to improve commercial understanding **(9)**
- A more collaborative approach and **closer links with industry (5)**
- Increased **networking** opportunities **(4)**
- **Promotion** of specific types of opportunity, for example SMEs, volunteering **(4)**
- Improved **employability**/soft skills learning **(3)**
- Improved **attendance** at events on campus **(1)**.

<u>Skills employers value in graduates</u>

16 Employer respondents commented that their company has identified skills that they consider graduates frequently lack. One summarised these as 'employability skills', another as 'practical experience to blend with their theoretical learning', and two discussed skills related to the recruitment process - 'detailed applications without errors' and 'confidence' at interview.

For engineering and IT companies, these included subject-specific knowledge and skills related to processes/systems and the challenges of recruiting graduates with the correct technical skills for these ever-changing industries was referenced.

Companies made the following observations on where improvements could be made:

Commercial understanding/research
- 'Commercial awareness; 'real world' savvy.'
- 'Company research. Perhaps more recognition of how important their extracurricular interests and responsibilities are for an employer.'

Business acumen
- 'Exercising professional judgement - the ability to analyse information and justify your approach with clarity and confidence.'
- 'Making an impact - to make a positive lasting impression with colleagues and clients, you must be able to communicate passionately and professionally […] able to convey your point in an influential way.'
- 'Adaptability and managing up.'
- 'Basic project management and business case construction.'

Soft skills
- 'General soft skills, verbal communication skills including telephone skills.'
- 'Analytical skills and effective communication.'
- 'Capturing data and summarising concise reports.'
- 'Critical thinking, problem solving, and analytical skills. Communication skills can be varied particularly the quality of written communication.'

They were also asked which skills they had **identified as a priority for future graduate recruitment**. **27/30** identified specific skills and attributes, including: analytical skills/critical thinking; teamwork; problem solving; communication; customer care; management/ leadership; managing up; innovation; risk management; digital (data, analytics, coding, media); and emotional intelligence.

Additionally, respondents selected wider qualities and behaviours including professionalism, work ethic, career motivation, 'general work skills', and specialist skills relevant to their sector, which they noted would be taught on the job.

Overall, this research primarily uncovered a wide range of areas of good practice at Scottish HEIs, with areas of improvement linked to improved accessibility and advertising of relevant opportunities.