Intellectual Output: IO2

Intellectual Output title: Employability pilot survey for informing the practice of HE professionals

Document title: Briefing report with key findings and anonymised quotes from focus groups

Contributing authors: ‡Simonetta Longhi, ‡Sarah Jewell, *Kristinn Hermansson, *Deidre Kelly, §Rosario Scandurra, ‖Johan Loeckx

Author affiliation: *University of Glasgow (UoG), ‡University of Reading (UoR), §Universitat Autonoma de Barcelona (UAB), ‖Vrije Universiteit Brussel (VUB)

How can universities train graduates for jobs that constantly evolve?

Intellectual Output 2:
Report on key findings from and recommendations for how best to inform employability practice by surveying employers and recent graduates

Simonetta Longhi and Sarah Jewell
Department of Economics
University of Reading

1. Introduction

In the UK, partly as a result of the expansion of higher education, universities are judged not only by the quality of the education they provide, but also by how many of their students find graduate employment after graduation[1]. The market for graduates is also very competitive with, on average, 92 applicants per vacancy reported by large graduate employers (Institute of Student Employers, 2021). To be able to properly prepare students for work, universities need to be constantly informed of the academic and non-academic skills required by employers, and as a result, universities have developed strong career services (Tomlinson, 2017). Strong career services for UK universities are needed because, in contrast to Europe, UK universities tend to provide more general than specific training (Little & Arthur, 2010; Tomlinson, 2017) and there is no clear trajectory between university studies and professional careers.[2]

One challenge faced by the sector is that the technical skills needed in future jobs are likely to be different than the ones needed for today's jobs. For example, the report by AGCAS et al. (2021) suggests that employers think that in ten years' time they will be recruiting into jobs that do not exist today. This raises two broad questions, which we aim to answer in this report: 1) How do employers hire graduates for jobs that constantly evolve? and 2) How can universities train graduates for such constantly evolving jobs?

Employers know both what skills are needed for employment in the short term, and what skills are needed for long term employability. The distinction between employment and employability therefore is crucial. Employment consists of a number of tasks, and a suitable candidate can perform those tasks; in contrast, employability is the ability to fulfil a job role, and a suitable candidate is able to acquire the skills needed to do the job (Cox & King, 2006). Employability, therefore, includes not only technical skills needed to do the job, but also soft skills and the right attitude to continue learning after completing university. The balance between the technical skills, the soft skills and attitude is likely to depend on the type of job and on the type of employers. To better understand what is the balance among the different types of skills and attitudes required by employers when hiring graduates, we have carried out focus groups with employers in different sectors.

Since this project coincided with the recent Covid-19 pandemic, we have also investigated how the balance among the different types of skills and attitudes required by employers has changed now that many activities permanently take place online or in a hybrid form rather than fully in person.

2. Method

To understand how employers hire graduates for jobs that constantly evolve and how universities can train graduate for such jobs, we carried out focus groups with employers of different sizes and operating in different sectors. The first set of focus groups was carried out between November 2021 and January 2022 with employers in the banking and finance sector (four small size employers and two large size employers), civil service (three

---

[1] In the UK, information on graduate labour market activities is collected 15 months after graduation for all universities, on behalf of the higher education statistical authority (HESA). University league tables (e.g., in the Guardian Higher Education League tables, The Times Good University Guide and The Complete University Guide) use data from this "Graduate Outcomes survey", such as the percentage of graduates who are either in graduate level jobs or in further study (higher education or professional level) as one of the key metrics to rank universities. Universities are interested in league tables since prospective students use league tables to decide to which university to apply.

[2] There are a few exceptions, for example degrees in subjects such as law, medicine, or nursing.

participants) and one interview with one large employer in the accountancy sector. We asked five questions to all focus groups:

1. Do you have any subject requirements or preferences for the graduates you hire? What are the important skills or other things you look for in an applicant when recruiting graduates?
2. How do you identify whether applicants have the required/desired skills?
3. Are there any skills or knowledge you feel graduates lack that you would expect them to have?
4. Are there any skills or knowledge you feel that could be developed through programmes at University?
5. Has the pandemic changed the desired skills you want from graduates or changed your recruitment processes?

We found little differences across types of employers: all employers seemed generally satisfied with most of their applicants and did not point out any major lack of skill. Hence, we decided to carry out additional focus groups in March-April 2022 with employers in different types of sectors. The additional four focus groups included five employers from the IT sector, and one each from engineering, science research, clinical research, accountancy, business services, and sales and customer services. To these focus groups we asked the five questions listed above, as well as two additional sub-questions to better investigate the technical skills required by employers and the related training they may provide. The additional questions are: 1b. Do you have any specific technical or software skills that you require? (which was asked right after question 1) and 3b. Do you provide any specific training to graduates to bring them up to speed in relation to technical or software skills? (which was asked right after question 3).

All focus groups took place via Microsoft Teams and were recorded with auto-generated transcripts. All questions were asked as worded above, and in the same order in each focus group. All participants were asked to contribute, and all replied to each question, and participants were given the chance to add further comment for each question after all participants had replied. After the last question participants were asked if they had anything further to add based on the discussions we had. The focus groups ranged in length from 15 minutes (the interview) to 60 minutes with an average time of 31 minutes. We anonymised the transcripts, corrected any transcription errors, and cleaned the transcripts for better readability.

The main themes were identified during the preparation of the transcripts using thematic analysis, and given the structure of the discussions in the focus groups, the themes mostly mapped with the questions asked. We identified four main themes: the recruitment process via which employers identify whether applicants have the required skills (question 2); the type of skills required by employers (questions 1, 1b, 3 and 3b); the type of skills that employers would like universities to further develop in their students (questions 3, 3b and 4); and the impact of the pandemic (questions 5 and partly 4).

We found surprisingly few differences between employers, even when they operate in very different sectors. All employers seem to have similar expectations from university graduates and similar requirements in terms of balance between soft and technical skills. Their process to evaluate and select the graduates to hire are also rather similar, and aiming to assess whether graduates have the types of skills employers value most. Given such similarities across employers we report our results based on research questions of interest, but without a systematic distinction and comparison across employers in different sectors.

3. Results

3.1. The recruitment process

The recruitment process seems to be very similar across employers. Submitted CVs are screened for shortlisting, and sometimes this is combined with a short screening interview. Screening is generally done by a person rather than using Artificial Intelligence tools. This step aims to assess whether candidates have the necessary requisites for the job. Sometimes the short interview is replaced by a pre-recorded video interview.

Candidates who pass this first stage are generally invited to participate in a more in-depth assessment (assessment centre) to test basic technical knowledge and soft skills possessed by the applicants. The assessment centre generally combines various tests and exercises such as psychometric and basic technical skills tests, situational case studies, which may be either individual or in groups, presentations, preparation of short writing pieces. Group exercises testing communication skills tend to always be included in the selection process. Only rarely is this step of the process missing, and skills are only assessed in a less structured way via interviews. In some cases, the assessment centre is followed by a final interview, and occasionally by an invitation to meet and shadow the team for half a day.

A relatively large proportion of graduates hired are students who did a placement or internship with the company during their degree programme and return after completing their university degree. As

reported by the ISE recruitment Survey 2021, around 60% of interns/placement students obtain a graduate role with their internship/placement employer (Institute of Student Employers, 2021). In the High Fliers 2021 Graduate Labour Market report, it was expected that 34% of graduates recruited will have completed work experience at that organisation whilst at University: with this highest in investment banking (73%), law (70%), banking and finance (58%) and lowest in consultancy (10%) and public sector (12%). (Higher Fliers, 2021). These graduates are typically hired directly, and do not go through the normal recruitment process (although they did go through a similar process designed to select candidates for the placements and internships).

3.2. What is the balance between technical and soft skills required by employers?

Except for technical types of jobs for example in IT, engineering, clinical research etc., most employers do not require a university degree in a specific discipline, and even when a specific discipline(s) is required, this is generally quite broad. Those types of jobs that do not require any specific degree subject, for example jobs related to accounting, human resources, or customer service, can be found in all types of sectors: employers in engineering or IT will also hire graduates in these types of jobs besides the more technical roles.

> *"Regardless of the business groups that we hire into, there's no subject requirements."* Daisy (financial sector)

> *"For the majority of roles, we don't have a certain degree background that candidates need to come from. We try to open it up to as many degree backgrounds as possible, just to encourage that diversity of thought. For the more technical roles or very niche roles we look for a certain degree background."* Alison (accountancy sector)

> *"For our graduate programs, there's no requirement as such. If it's for a more technical role, they have to have some background in computer science or programming just because it means that they can hit the ground running."* Mary (IT sector)

> *"We're biggest on chemistry, biochemistry, pharma-science, but we're open to physics within our physical sciences team. Specific, but not that limited."* Audrey (science research)

All employers, regardless of the sector, look for passion, enthusiasm, resilience and soft skills. They are not looking for experts, but for graduates who are willing and able to adapt to the changing circumstances of their jobs and can become experts while learning how to do their job (learning by doing). In other words, employers focus on the wider skills for employability rather than on the skills needed for one specific job role.

As technology and jobs are constantly evolving, employers look for graduates who are flexible, adaptable, organised, and able to learn quickly. These characteristics are considered more important than advanced technical skills; employers consider only the basic broad technical skills as necessary, for example, familiarity with MS Excel, PowerPoint, or Word.

> *"Students think we're looking for people who are super technical and know all the answers, but ultimately we're looking for the right attitude, like a learning mindset and, obviously, commercially aware."* Daisy (financial sector)

> *"In terms of skills, the only thing that we ask for is just to be able to demonstrate an interest or a passion to work. We are a tech industry and that is pretty much it in terms of requirements."* Colin (business services)

> *"Sometimes we say, for example, that we're looking for students who have a passion and interest in technology, but it's an added bonus if they have experience in SQL, Python, experience with databases, data analysis. We don't say that it's required, we just say if you have an interest or passion or if you have previous experience in these, that will help you stand out, but we're not going to screen out applicants or candidates based on them not having that."* Michael (accountancy sector)

One of the reasons why employers favour characteristics such as enthusiasm and adaptability, is that the more technical skills are often very specific to the job and sometimes bespoke to the specific employer. Employers do not expect graduates to possess all specific skills required for a job (such skills are considered a bonus that will make candidates stand out) and are open to teach graduates the more technical skills. All employers we interviewed have a system in place to provide a wide range of formal and informal training on the more specific technical skills.

> *"In terms of skills, our general line is that we can teach the hard skills, we can teach them how to use our systems, we can teach them about our technology, we can teach them how to use Zoom. It's the soft skills, how they communicate, that enthusiasm, how inquisitive they are, that you can't teach."* Mary (IT sector)

> *"It's either leaning on a professional qualification like delivery for that, or it's on-the-job training, or we've tons of internal training available. It's a big global organisation, there's just tons of it."* Bill (engineering sector)

> *"We have robust training procedures in place. We've got SOP [Standard Operating Procedures] that detail the basics that everybody gets if they're based in the lab. Then they'd be trained in the specialist software that they use. So, it's basic for everybody, but then it goes into the specifics within the different teams."* Audrey (science research)

> *"We firmly believe that with it being a graduate training program, that we can teach and develop all of the real core technical skills that they need to be able to understand how the business operates. But they've just got to be able to thrive in a people environment first and foremost."* Peter (sales and customer service)

Besides formal training, many employers also offer informal peer-to-peer learning.

> *"Throughout the whole business at all levels to a degree as well you always get paired up with a buddy mentor and that's a person who's doing the same job as you, but has been doing it for a minimum of 12 months. This is how we tend to train people up."* Duncan (clinical research)

Although not directly related to technical or soft skills, some employers stressed the difficulty that some graduates find in transitioning from university to a job. Employers look for students who demonstrate passion and commitment, and who are able to organise their time across competing tasks, who are resilient, and can thrive in an environment which is much faster-paced and less handholding than universities are (a point on which we will return when discussing what skills universities can further develop).

> *"What they study at university and what they actually do in their jobs is very different. I think it's more about the softer skills, their ability to manage workloads, to present if there was an important one, and teamwork, asking questions. It's that sort of stuff."* Mary (IT sector)

> *"We also promote quite heavily on being able to work independently, being proactive rather than reactive."* Duncan (clinical research)

> *"The learning agility is good: can you apply that learning or do we have to keep telling you the same thing again and again? Often, I point out they've paid for a service: they have paid for the education, they've paid for accommodation and had lots of support and encouragement at university. You come to the world of work, we're paying you, and you need to do the job and the support disappears, so students struggle. And that's why we look for the resilience and the core ability to get things done and that kind of initiative as well. The thing is flipped from being paid for service, now we're paying you for the service and we expect it."* Bill (engineering sector)

"There is going to be a lot of information and it is going to be hard work and you are going to have to work hard. We're not going to just spoon feed you like we do with the apprentices who have come straight from school. Ultimately, we're just looking for nice people and people that show that kind of learning agility. The grads come out of university and they don't know everything, despite what they may think. We accept that we have to fill some of those gaps. But so long as they've got that base, knowing how to learn almost, there's an awful lot to pick up quickly, and there's an awful lot of pressure on all of the grads and indeed any new starters." Audrey (science research)

In summary, the balance between technical and soft skills seems to be skewed in favour of soft rather than technical skills. This is in line with the AGCAS et al. (2021) report, which suggests that employers will be screening more and more for potential rather than experience or current skills. This is because employers expect to train graduates on the specific more technical skills required in the job, while soft skills, enthusiasm and passion, which are considered essential for graduates to be successful in their job, cannot be taught.[3] As a result, the selection processes used by employers to hire graduates tend to mostly evaluate whether graduates do possess these soft skills.

There are nevertheless some soft skills that can be improved while at university; communication skills and a learning mindset are amongst the most valued. This is in line with what found for the US by Baird and Parayitam (2019), who argue that the most sought-after skills are soft skills such as interpersonal/working well with others, listening and communication. This is also consistent with general employers in the UK: Winterbotham et al. (2020) found in the 2019 Employer Skills Survey that 66% of employers with skill shortage vacancies reported that people and personal skills were lacking from applicants.

3.3. What skills can universities further develop?
Besides the basic technical skills, universities need to provide graduates with skills that allow them to learn the same way a practitioner would learn on the job. As already mentioned, this comprises a bundle of various skills ranging from organisational to communication skills, via an interest in learning and self-improvement.

Some employers, as already mentioned, pointed out the difficulty in the transition between university to work. This is partly reflected in their lack of organisational skills and the commitment to continued learning for their professional development.

"Not all graduates, but some that we see are missing some skills. One is organizational skills, which is particularly important with our graduates because they will be coming into a role where they're doing training at the same time. They will be doing their professional qualifications as well as working full time and we're seeing them not seeming to be able to balance study and working at the same time, which is another important reason why we look for people that have been able to balance work at the same time as doing their degree because actually they indicated that they do know how to balance. It's worrying when they have only done their study and nothing else." Michelle (financial sector)

"Once they join, as they transition into the world of work, sometimes they can be very strong in terms of their knowledge or certain soft skills, but it can take a bit of time for them to adapt into how you actually manage sometimes conflicting priorities and deal with the unknown and uncontrollable, which they come to learn in a way, but it's not something necessarily, they have from the outset." Francis (financial sector)

"It is that kind of right level of confidence, that two-way communications, and it's maintaining that level of curiosity and growing and developing yourself. Just because you finish university, that's academia you finish with, now let's hit the world of work, and there's

---

[3] This does not mean that employers do not value more technical skills. These are expected when hiring someone who already has work experience in the sector, but not for graduates straight out of university. The concept of employability remains relevant, though, for graduates to be able to become experience professionals able to move across employers or progress in their career with the same employer.

lots more professional qualifications, and the lifelong skills and experience we built up. You're not the perfect article just yet." Bill (engineering sector)

In addition, particular skills that are often mentioned as important and that university could improve are various types of communication skills. Employers mentioned various types of communication skills that graduates seem to lack; for example, the ability to present and communicate complex concepts to a non-technical audience. Research suggests that the ability to communicate tends to vary across disciplines, with hard sciences having better communication patterns and techniques than social sciences such as economics (Della Giusta et al., 2021); and that economic students find it difficult to apply their knowledge to explain things to a non-economists audience (Jenkins & Lane, 2019) and seem to particularly struggle with presentation, rather than writing, skills (The Economics Network, 2019).

> *"I think things that are really important are things like presentation skills, getting people used to talking in front of other people and having good discussions with people, it's really important."* Rose (civil service)

> *"the capability to relate and explain to layperson complicated things would be really valuable. Whereas when you're doing an essay, you're normally doing it for your professor, this is at a much higher level."* Michelle (financial sector)

> *"I think communication skills are really an important part of it, how you can communicate and how you work with other people. Strong communication skills, verbal, report writing, communicating in a group setting, that kind of thing is really important."* Rose (civil service)

Besides the ability of being able to communicate complex concepts in a simple, way, employers also pointed out the lack of interpersonal communication skills, such as the lack of etiquette when communicating, for example, to line managers.

> *"Other sort of thing which I think people could be missing is, I guess, written etiquette. How do you write emails? What sort of things you need to say in meetings? Do you know how to do an agenda, taking a note?"* Hannah (civil service)

> *"some students need to improve on is that a lot of them have never experienced any sort of professional working environment before. Even some of their soft skills, like how to email properly or how to speak to a recruiter, need a little bit of improvement."* Colin (business services)

> *"One important thing is attention to detail in not just the CV, but in any correspondence by email, and just trying to keep it professional as possible. I know we've got things like WhatsApp, but I did find it a little bit strange straight away for someone to be WhatsApping me rather than sending an email to arrange a meeting. Once you get beyond that and when people are working here, it doesn't really matter, but I think the initial stages is trying to actually keep some of the basics very professional. I work in finance, so I don't really expect to be contacted via Facebook."* Ruth (financial sector)

Often, the focus of communication training is a one-way communication to an audience, whether this is a group, or one single person. However, employers also pointed out the purpose of communication and the fact that communication should be a two-way process which involves an understanding of the needs of the other party.

> *"It is that ability to communicate, whether that's through the initial CV, or through the initial telephone call. It is thinking about the other person and trying to deliver at a level that they want to hear and that they will understand. It's thinking about you and not me a little bit more."* Catherine (financial sector)

> "Then basic stuff like, you can communicate effectively and it's two ways: not that you can communicate to somebody and write a good email or deliver a good speech, but do you

understand what's being said to you? Do you get that kind of emotion behind, the emotional intelligence, and can you understand that communications are two-way things?" Bill (engineering sector)

Some employers pointed out the importance of customer service skills. This is indirectly related to the previous discussion that communication is a two-way process which involves an understanding of the needs of the other party.

> *"The other one is the customer service skills, just the basic things. I've got an example of one person that is an amazing first-class graduate, technically excellent. However, the basic thing of telling a client when to expect something to be received, they're just not getting that basic customer service and communication. This is something I wouldn't expect to have to teach, but obviously we are having to teach it."* Michelle (financial sector)

> *"It's around thinking about what the person on the other end wants. That to me this is just an example of where you're concentrating on what the person on the other end wants, not just what you want, and that goes back to customer service, it goes back to delivering for your boss. You're thinking about: what is this role about? What am I trying to deliver? Rather than just about me and what I can do."* Catherine (financial sector)

Some employers also pointed out that they would like graduates to have more problem solving abilities. This is related to graduates achieving more developed critical thinking skills and having a more interdisciplinary training, which would enable them to be able to think outside of the box.

> *"And then you can see candidates having varied levels in areas like critical thinking or problem solving. Depending on what they studied, how their program is structured, they have been a bit less or more exposed to that, and I think it's areas that play more and more an important role in terms of having that critical thinking ability and the problem solving, especially when you're thrown into situations or dealing with types of information you're not as familiar anymore with."* Francis (financial sector)

> *"I think universities have changed a lot since I went, and I think it's the non-bounded problem solving. I think there's these things where guys are coming through and they're brilliant on one sector, on one field, but when you ask them to work outside of that field with another discipline or another type of department, it breaks down on them and you have to go back to the very basics to build up some type of interdisciplinary collaborative working system. We're finding we were having to provide that."* David (financial sector)

In summary, employers would like graduates to have more developed organisational skills and more commitment to lifelong learning, as this is a requisite for a successful transition from university to employment.

Another frequently mentioned set of skills that employers think should be further developed are the various types of communication skills. Employers would like graduates to be better able to communicate complex concepts in simple way, but also to have better interpersonal communication skills that would allow them to improve their two-way interactions with colleagues and customers in a formal environment.

Other types of skills, such as problem-solving abilities, were mentioned, but much less frequently.

3.4. Has the pandemic changed the skills that employers require from graduates?

The Covid-19 pandemic has been a critical event for all employers. While most of them continued hiring throughout the pandemic, some temporarily decreased their intake. All employers completely moved their recruitment process online; this, however, did not change the process itself, which still comprises interviews and assessment centres. The general consensus is that most of the process will remain online, and that the pandemic has only sped up a change that would have taken place anyway.

The online hiring process saves time and money both to employers and to candidates who do not have to spend time and money commuting to the interview or the assessment centre. This also means that with the online recruitment process employers can now reach a geographically larger pool of potential candidates amongst which to select the best ones. The AGCAS, ISE, Wonkhe and Handshake (2021) report

also suggests that the online recruitment process may have also partly levelled the playing field, allowing a more diverse pool of applicants, and may have helped less confident students. For students, this means the need to have a greater familiarity with technologies such as Microsoft Teams and Zoom. While students were forced to use these technologies to learn during the pandemic, as universities move back to in person teaching it is important that students remain familiar, and increase their ability to actively use these technologies, and to understand their related etiquette. In addition, students need to become accustomed with online and with recorded interviews.

For most employers the pandemic has also meant a move to work from home, with most networking and onboarding activities taking place online. Most of the onboarding process and most of the training is expected to return in person since employers think that in person interaction is needed in this phase of the process. For the peer-to-peer part and the informal training, in particular, in-person interaction is key and necessary for new recruits to develop their social interactions at work and to feel part of a team.

> *"The ability to manage not having your manager next to you has been something that I know they found difficult. When you're sat next to somebody it's much easier to ask do you know this question, but when they're on Zoom they have to be far more independent and more proactive in terms of reaching out to ask people for things."* Mary (IT sector)

The consensus is that hybrid work, with 2-3 days spent in the office and the rest spent working from home, is a permanent change. This is consistent with research for the US which suggests that working from home will continue after the pandemic (Barrero et al., 2021), and that working from home is more common in industries which report lower productivity losses from working from home, and which employ a high proportion of highly educated and highly paid workers (Bartik et al., 2020). This shift to hybrid work has also partly changed the type of soft skills that employers expect from graduates. Besides being able to master the technology for online collaboration, graduates now need to be even more independent, motivated and autonomous to be able to successfully work from home.

> *"The independence has always been important, but I would say over the last two years it's become even more important because they haven't just got somebody to talk to, they've got to be proactive and reaching out for help. That ability to be comfortable in the virtual environment is definitely a skill that we would look for now"* Mary (IT sector)

> *"With students working from home, is that accountability and letting them know that they need to be accountable for these tasks and have personal objectives, I think that's one of the key points."* Michael (accountancy sector)

> *"Being agile is obviously something that's probably more important now than it ever has been before, and being able to flex at the very last minute. The tech that we're using now versus what we're going to be using in five years' time could look very different. It's not necessarily about getting stuck on that, it's more about an eagerness to learn about the technology and to work with that, and wanting to be able to work alongside that"* Alison (accountancy sector)

Recognising the difficulties that graduates face in the new work-from-home environment, some employers designed bespoke training sessions.

> *"Last year we did a whole session on their mental health and being aware of it, how to be more 'self' like self-manage, self-aware, self-motivated and set their objectives themselves and be more proactive. Because we knew they did have to be a bit more self-sufficient, work from home a lot more. Also the managers didn't know everything, and stuff has changed with the new virtual working kind of agreement, that was a bit of a challenge as well."* Bill (engineering sector)

Communications skills are even more important now, as employers recognise that the communication skills needed for in-person interactions and collaboration are different than the ones needed for online collaboration.

"I think maybe your ability to communicate with people who are in the room with you is more important than it used to be. It's still a focus on communication and teamwork and things like that. They might just need to come out in slightly different ways now, and having some familiarity with how you collaborate with people when you're not in the room with them." Rose (civil service)

In summary, the Covid-19 pandemic has accelerated changes that were already taking place such as moving to online recruitment and increasing the number of days people work from home. Employers were already looking for graduates showing independence, motivation and having good communication skills; these skills have become even more important after the Covid-19 pandemic. As a perhaps unexpected side effect, online recruitment practices seem to have had a positive impact on candidates and to have increased the diversity of the pool of applicants.

4. Employers in other countries

The focus groups carried out by the University of Reading included employers located in the South East of England; additional focus groups and interviews have been carried out in the partner countries: Scotland, Barcelona and Belgium, in Spring 2023. Regardless of the country or sector, employers value both technical and soft skills. While the technical skills required typically depend on the sector, all employers require enthusiasm and willingness to learn, teamwork, and various types of communication skills. Resilience, self-management, interpersonal communication, as well as digital skills, have increased their importance as a result of the pandemic. There is a strong preference for graduates who completed placements of internships, since students who have already experienced a work environment have already experienced the difference of pace and approach to 'work' between university and employers.

4.1. Scotland

The University of Glasgow carried out three focus groups with employers in the accountancy, education and public sector. Most employers consider graduates from a range of disciplines, and specific degrees are only required for certain jobs. Employers require technical but also soft skills such as willingness to learn, enthusiasm, teamwork, time-management and resilience. In education in particular, leadership skills, both at the classroom and school level are also considered important. Employers are willing to support graduates in learning new technical skills and in introducing them to the world of work to provide an understanding how things work in an office. In this respect, employers prefer graduates who had placements and other work experience but also value extra-curricular activities since graduates can use these experiences to provide examples of leadership and teamwork. Universities could better prepare students for the job search process by providing hem with job search skills, teamwork experience, and interview skills. In addition, employers suggested that it would be useful to have more direct communication between universities and employers.

As the pandemic has resulted in lack of personal interactions, it has decreased resilience and adaptability. Graduates now also need to have more advanced digital skills and more self-management to be able to work in a hybrid environment.

4.2. Spain

The Universitat Autonoma de Barcelona carried out one focus group with two employers in the health sector. Given the specificity of the sector, employers require a degree which fits the job description; the only exception are administrative jobs, for which a university degree is not required. There is a high preference for graduates with previous work experience in the health field; however, training is offered to new graduates who lack work experience. Employers are willing to provide specific and more general training to settle into the new job.

In contrast to the other countries, important factors considered while hiring new graduates are the specific university people graduated from, and how long it took them to graduate. Employers also value digital skills, as well as soft skills such as teamwork, the ability to solve conflicts, for example while dealing with patients, and, given the nature of the job, the ability to manage emotions. Employers find that graduates tend to lack the ability to manage frustration while working with patients, but also the ability to link scientific evidence to practical actions.

The pandemic has increased the flexibility to provide some services online to patients but with the need for a good balance between online and in person activities. Employers have become more selective in their search for graduates and now only consider those who are a good fit with the job available.

4.3. Belgium

The Vrije Universiteit Brussels carried out one interview with one employer in the IT data science sector. Given the specificity of the sector, employers require degrees related to the sector. There is a strong preference for hiring graduates from the pool of interns who already had experience with the employer, or, alternatively, who had work experience in the industry. Work experience ensures that graduates have understood the difference between the university and work environments: while at university students are taught techniques and then shown how to apply them, in a work environment they are faced with a problem and need to find a technique that can solve the problem, but without much hand holding. Skills such as willingness to learn, openness to new ideas, problem solving, are also necessary. In this respect, employers suggested the usefulness of providing more interdisciplinary knowledge to graduates. Communication skills, especially oral communication, are necessary as graduates need to be able to explain the process and solution to clients who are not experts in the field. Employers also mentioned the concept of two-way communication (listening skills), where graduates need to be able to have a dialogue with clients to understand their needs. The increasing importance of communication skills was also highlighted as a result of the pandemic since graduates needs to learn how to reach out for help to colleagues in an hybrid environment; this being much more difficult than reaching out to colleagues working in person in the same office.

5. Conclusions

To be able to properly prepare students for work, universities need to be constantly informed of the academic and non-academic skills required by employers. As jobs constantly evolve, the skills required by employers may be in constant evolution as well. The aim of this report was to provide up-to-date information to understand 1) how employers hire graduates for jobs that constantly evolve and 2) how universities should train graduates for such constantly evolving jobs.

To answer these questions we carried out focus groups with employers of various sizes and working in different sectors. With respect to the first question, employers hire graduates for jobs that are constantly evolving by requiring graduates to have skills and attributes such as adaptability, and passion. This ensures that the graduates hired will continuously learn and improve their knowledge to perform new (constantly evolving) jobs. While basic technical skills are necessary, employers are open to train new hires (whether graduates or not) in the more technical skills necessary for the job. Organisational skills and a commitment to lifelong learning, however, are necessary prerequisites for a successful transition from university to the workplace.

Universities are expected to provide graduates with the basic technical skills; however, students also need to learn how to communicate, work with others, and to be autonomous, self-motivated, and independent. Although universities already teach some of these (soft) skills, there may be scope to revise the curriculum to include more of the soft skills that employers want.

In general, employers are broadly satisfied with the technical skills of the graduates they hire (with the caveat that many applicants do not progress within the hiring process due to the lack of technical and/or soft skills). This is consistent with the report from the Institute of Student Employers (2021), which suggests that career services in the UK have a good understanding of what skills employers value, while students have a poor understanding (and need the direction of career services). The main issue may be students' uptake of the various opportunities offered by universities to enhance their employability skills (The Economics Network, 2019); research suggests that the uptake varies between high and low socio-economic background students (Montacute et al., 2021; Parutis & Kandiko Howson, 2020).

References

AGCAS, ISE, Wonkhe, & Handshake. (2021) *Careers2032* Report by AGCAS, ISE, Wonkhe and Handshake.

Baird, A. M., & Parayitam, S. (2019) Employers' ratings of importance of skills and competencies college graduates need to get hired. Evidence from the New England region of USA. *Education + Training*, *61*(5), 622-634.

Barrero, J. M., Bloom, N., & Davis, S. J. (2021) *Why working from home will stick* NBER Working Paper 28731.

Bartik, A. W., Cullen, Z. B., Glaeser, E. L., Luca, M., & Stanton, C. T. (2020) *What Jobs are Being Done at Home During the Covid-19 Crisis? Evidence from Firm-Level Surveys* NBER Working Paper 27422.

Cox, S., & King, D. (2006) Skill sets: an approach to embed employability in course design. *Education + Training*, *49*(4), 262-274.

Della Giusta, M., Jaworska, S., & Vukadinović Greetham, D. (2021) Expert communication on twitter: Comparing economists' and scientists' social networks, topics and communicative styles. *Public Understanding of Science*, *30*(1), 75-90.

High Fliers (2021) The Graduate Market in 2021, High Fliers Research, https://www.highfliers.co.uk/download/2021/graduate_market/GM21-Report.pdf, last accessed 09/07/2022

Institute of Student Employers (2021) *Student Recruitment Survey 2021,* Institute of Student Employers.

Institute of Student Employers (2021) *ISE Polling - June 2021* Institute of Student Employers.

Jenkins, C., & Lane, S. (2019) *Employability skills in UK economics degrees* The Economics Network, October 2019.

Little, B., & Arthur, L. (2010) Less time to study, less well prepared for work, yet satisfied with higher education: a UK perspective on links between higher education and the labour market. *Journal of Education and Work*, *23*(3), 275-296.

Montacute, R., Holt-White, E., & Gent, A. (2021) *The university of life. Employability and essential life skills at university* The Sutton Trust.

Parutis, V., & Kandiko Howson, C. (2020) Failing to level the playing field: student discourses on graduate employability. *Research in Post-Compulsory Education*, *25*(4), 373-393.

The Economics Network. (2019) *Survey of employers of economic graduates* The Economics Network 2019 results report.

Tomlinson, M. (2017) Form of graduate capital and their relationship to graduate employability. *Education + Training*, *59*(4), 338-352.

Winterbotham, M., Kik, G., Selner, S. Menys, R. Stroud, S. and Whittaker, S. (2020) Employer Skills Survey 2019, October 2020, Department for Education.