



THE GLOBAL SKILLS GAP

in the 21st Century



CONTENTS

Contributors	4
Introduction	5
Executive Summary	7
Global Overview of Core Skills	8
Regional Breakdown of Core Skills	10
Different Countries, Different Skills	13
Impact of Company Size & Staff Seniority on Skills	15
Mismatched Expectations: Students versus Employers	17
Next Steps on Bridging the Gap	20
The MBA Supplement: A Snapshot on Employers Hiring Business Graduates	23
Methodology	26

CONTRIBUTORS

Dasha Karzunina



Dasha is the Markets Insights Manager at QS, combining a public-facing role with extensive involvement in the QS Intelligence Unit's research, analysis and rankings delivery. She specialises in qualitative research, having run focus groups with prospective international students from all over the world. Leading on key partner relationships, she regularly liaises with university officials and presents at higher education conferences. Coming from a student leadership background, Dasha previously represented the academic interests of over 30,000 students in one of the biggest Students' Unions in the UK.

Josie West



Josie is a Market Insights Researcher at QS. She works on new content in the form of reports, articles, blog posts, conference proposals and presentations. Josie has extensive experience with social and qualitative research, using a variety of methods including surveys and interviews. She is responsible for conducting the research on the ground, running focus groups worldwide and seeing the project through to completion, from analysis to write-up.

Gabriel Maschião da Costa



Gabriel is a Research Analyst at QS Intelligence Unit. He manages the QS Global Employer Survey from data acquisition, data analysis and development of partnerships, to the dissemination of findings and key insights. He also runs the Latin American Rankings analysis and helps in the implementation and improvement of internal systems. Gabriel has a vast experience in both quantitative and qualitative research, specialising in the fields of Economics and Psychology.

Georgia Philippou



Graphic designer Georgia Philippou creates innovative infographics and visualisations based on QS's research and rankings. Her work is featured on TopUniversities.com and TopMBA.com, and across the company's social media channels. Georgia is the lead designer for a range of online publications, including a popular range of guides for prospective students, as well as market research reports for higher education professionals.

Samuel Gordon



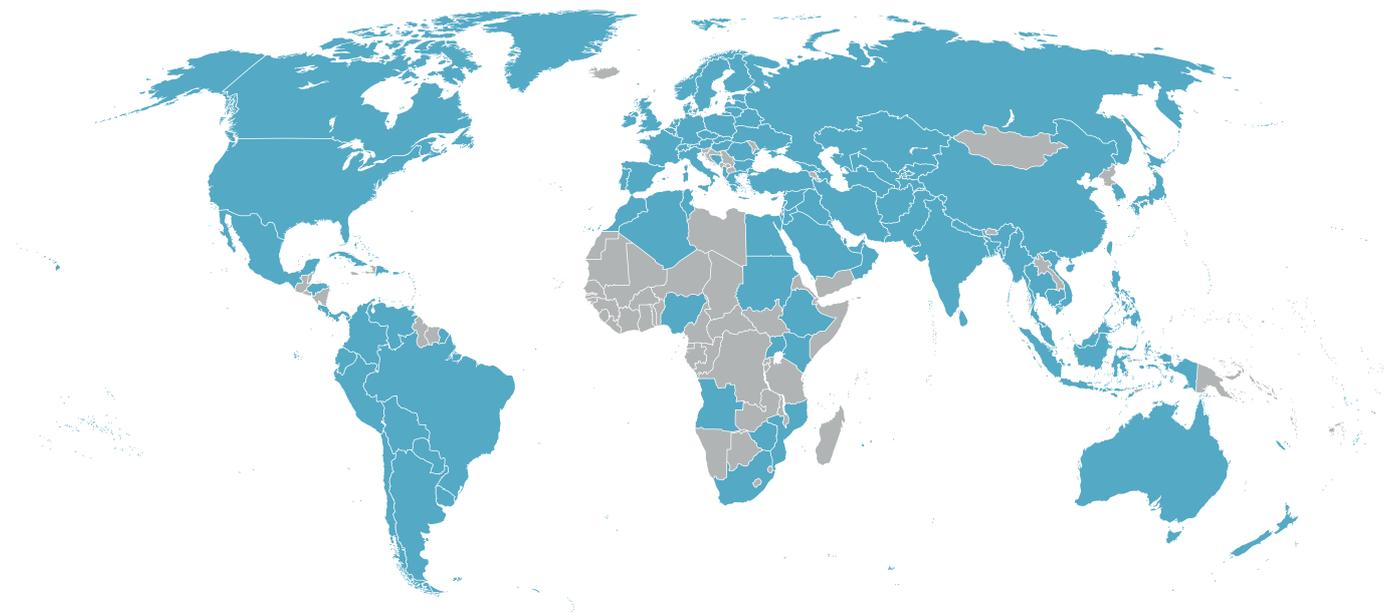
Samuel Gordon was the Research Analyst for the Institute of Student Employers (ISE) between 2014 and 2018. During that time he delivered the ISE research program and was responsible for the design, analysis and reporting of pioneering employer surveys of UK market trends, as well as helping organisations to act on the findings by presenting these at a wide range of conferences and events. Sam has a quantitative background, a reputation for bringing data to life, and holds an MSc from Oxford University.

INTRODUCTION

This report will examine the relationship between graduate skills and employer expectations in today's ever-changing labour market. Key findings from the QS Global Employer Survey 2018 and the QS Applicant Survey 2018 will be evaluated to explore the link between employer and applicant expectations, highlighting key areas of alignment and misalignment. This study was carried out in conjunction with the UK-based Institute of Student Employers (ISE), hence their latest insights are also incorporated, providing guidance on how the skills gap can be bridged and using the UK labour market as a case study. The two QS research exercises are conducted annually with thousands of employers and prospective students worldwide. The most recent surveys received more than 11,000 and 16,000 responses respectively, enabling a global perspective to be developed. This report will also include a global overview of divergences between regions, and a more targeted analysis of shifting

opinions between small and larger companies, as well as between levels of seniority of company staff employers. These insights can potentially be harnessed by universities when planning for the critical skills that will empower their students in future interactions with employers worldwide.

It is commonly perceived that employers feel there is a graduate skills gap, suggesting that universities do not necessarily provide enough opportunities for students to develop skills critical for the labour market. This report confirms this perception for particular skills, and in every country surveyed. The data reflects two defining measures of skills: the weight of importance employers place on a particular skill; and the perceived employer satisfaction with this skill in the graduates they hire. For almost all skills, the number of employers satisfied with a particular skill does not match the number who regard that skill as important.



11008 Responses

● Countries Involved

In general, larger companies are more satisfied with the skills they find in their graduate hires, which may suggest that such companies are more attractive to high performing students, or that they have more rigorous selection processes which are better at identifying the skills they require in graduate hires.

Stephen Isherwood, CEO of the ISE, identifies the biggest challenge graduates currently face: *“The pace of change in the workplace is ever increasing, so graduates need to ensure they are developing the skills and abilities that will not only empower them to land the job of their choice, but also allow them to thrive as their career develops.”*

This perception is echoed by Nunzio Quacquarelli, CEO of QS, commenting on the role universities play in this: *“It is becoming more and more vital that universities also prepare graduates for the world of work. This means that the development of soft*

skills, like team-playing and resilience, often becomes as important as the technical skills and knowledge acquired during a degree. Opportunities for internships, study abroad, extra-curricular activity and active learning can all contribute to the development of these and other skills universities want.”

This insight can help bridge the gap between students, employers and universities and can enable an in-depth exploration of which skills and behaviors need to be developed. Additionally, the way in which students adopt skills must be adapted and this can be achieved by a more symbiotic relationship between employers and universities. Examining the most desired skills by employers, in differing regions, countries and company sizes, provides context and incentive to act on this insight, allowing universities and students to make informed decisions.

EXECUTIVE SUMMARY

Importance versus Satisfaction

- **The graduate skills gap is a global and widespread issue.** For 14 of the 15 key employability skills identified here, the resulting score of employers who consider each skill to be important is higher than the resulting score who are satisfied with it in their graduate hires.
- **These skill gaps exist across regions, countries and firms of varying sizes.** Bridging these gaps is a key step towards a more productive workforce and to employers making the most of today's talented young people.

Divergences between regions and countries:

- **Employers perceive some skills to be more important than others.** The three most important skills are perceived to be: problem solving, teamwork, and communication. The three least important are: commercial awareness, negotiating and language skills.
- **The biggest shortfall is perceived for the skill of resilience,** while the best alignment between expectations and reality is for teamwork.
- On a regional basis, **North American employers are most satisfied with the skills of their graduates,** while **Latin American employers are the least satisfied.** In terms of five key country markets considered, **UK employers are the most satisfied** and **Russian employers are the least satisfied.**
- **Research by the ISE broadly aligns with the UK trends** highlighted in the QS Global Employer Survey. In the US, graduates seem to perform more strongly in the areas of commercial awareness, negotiating and language skills, relative to graduates from other countries.

Divergences among companies and senior employers:

- **Small firms are the most dissatisfied with the skill of commercial awareness in their graduates.** Leadership skills are more important than technical skills for larger employers.

- **C-suite staff (senior level corporate leaders) tend to be less satisfied with graduate skills than other groups;** meanwhile middle managers had similar opinions to those of HR professionals in regard to graduate skills.
- **Employers who target recruitment from highly ranked academic institutions are likely to be more satisfied with graduate skills** than either employers in general, or employers with other recruitment priorities.
- **Employers may need to get better at educating their businesses about skills gaps** and tailoring the ways in which they attract their hires.

Mismatched expectations among students and employers:

- **Students do not fully understand how employers value skills.** For example, students relatively over-value the importance of creativity and leadership skills, and under-value the importance of flexibility/adaptability and teamwork.
- **There is a need for the most valued skills to be clearly communicated,** to ensure that when students up-skill, they focus on areas which organisations prioritise. From an employer point of view, the ability of students to learn is more important than their creativity.

Key points of learning:

- **There are many actions that organisations can take to bridge skills gaps.** Research from the ISE highlights UK employers, many of whom are already improving selection processes, changing the level, methods and focus of on-the-job training, highlighting skills gaps more effectively to students and running internship programs. Recruiting organisations in other countries may want to explore and consider these approaches.
- **Skills gaps pose a challenge to employers around the world.** Many of the core issues are similar worldwide, so there is value in sharing challenges and best practice between employers across the globe to bridge the

GLOBAL OVERVIEW OF CORE SKILLS

The following two sections provide a global overview and analysis of graduate skills according to employers, and explore divergences between geographical regions. These insights may be helpful for universities who are seeking to identify and bridge any employability skills' deficiencies within their student body. The observations may also prove useful for students that wish to understand which skills are important to employers in different regions.

Two factors are used to identify deficiencies in skills. The importance factor is a measure of how many employers see a skill as important or very important, minus the employers who see the skill as not important. The satisfaction factor is a measure of how many employers are satisfied or very satisfied with the particular skill in their graduate hires, minus the employers who are not satisfied. Where the importance factor is higher than the satisfaction factor, there is a 'skills gap'. A satisfaction factor score which equates to, or surpasses, the importance factor score is rare, but when it occurs, it demonstrates that employer expectations are met or exceeded.

Overall, across the globe, problem solving, the ability to work in a team, and communication, are considered to be the most important skills. There is a large 'skills gap' in relation to problem solving, with employers giving it an importance factor score of 96, but a satisfaction factor score of just 67. The ability to work in a team shows more promise, with an importance factor score of 95, and a satisfaction factor score of 80; this represents one of the smallest margins of the 15 skills surveyed. The third most demanded skill, communication, was given an importance factor score of 95, but achieved a satisfaction factor score of 71.

The most pronounced skills gap across the board emerges in resilience/dealing with conflict. This ranked as the seventh most important skill yet achieved a Satisfaction Factor score of just 58.

This particular skill deserves more attention. It is defined by the American Psychological Association (APA*) as " ... the process of adapting well in the face of adversity, trauma, tragedy, threats or significant sources of stress – such as family and relationship problems, serious health problems or workplace and financial stressors. It means 'bouncing back' from difficult experiences." Thus, the lack of such ability is indicative of a negative response to conflict or stress, something every graduate is likely to experience in a new role. The APA assures that resilience is not a personality trait but rather a behaviour that can be learned, suggesting that it is something that both universities and employers may be able to foster. The APA further notes that resilience is associated with communication skills, as we have seen, a skill that employers worldwide find somewhat lacking in graduates.

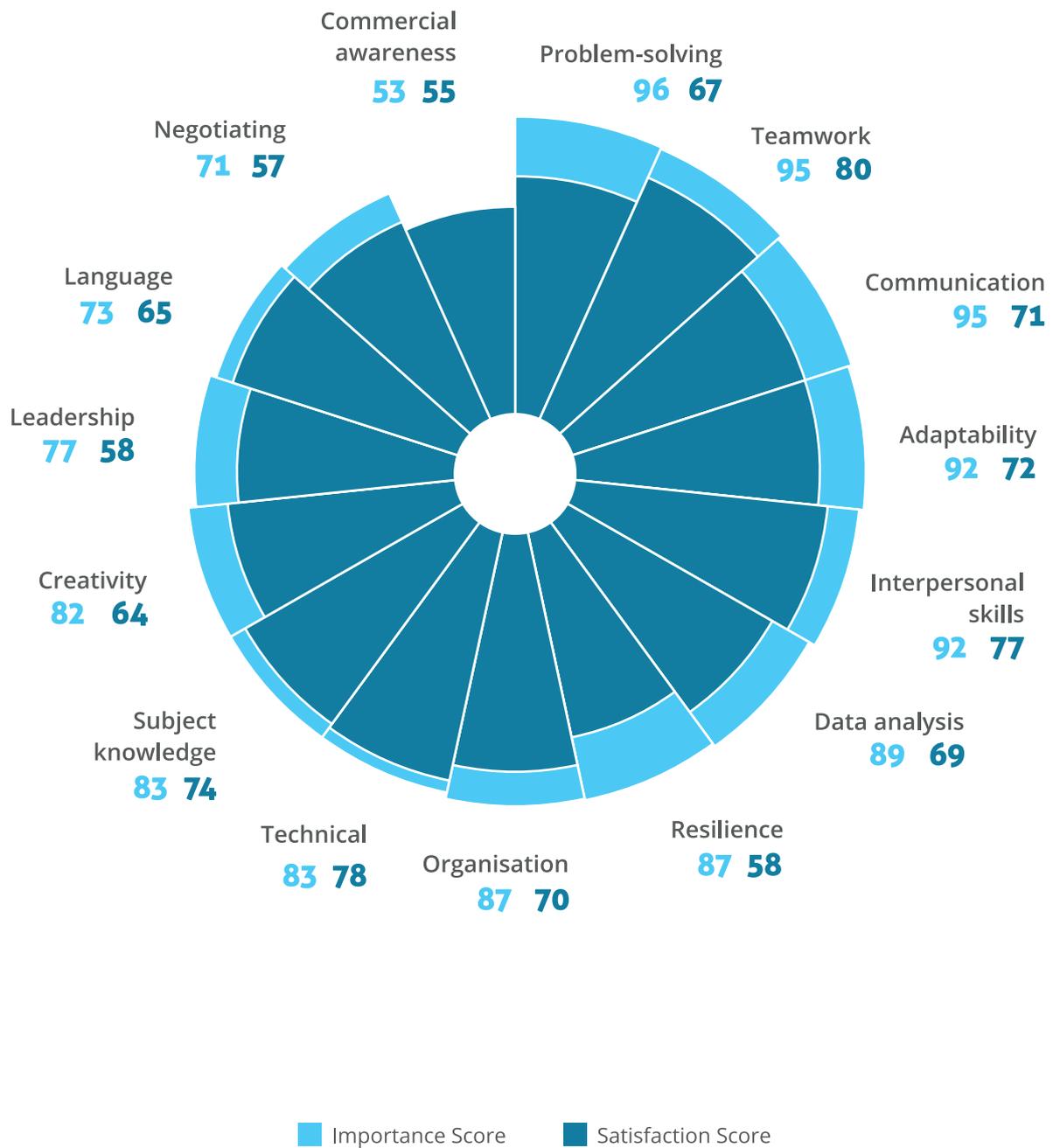
Commercial awareness achieves the highest Satisfaction to Importance score, which could suggest either that students develop this skill while at university, or that employers don't place substantial importance on commercial awareness compared to other skills, as they perhaps expect graduates to develop it on the job. If the latter is the case, this is perhaps also indicative of the skill set of the social media generation, which has grown up in a more digital and commercialised world.

"It is becoming more and more vital that universities also prepare graduates for the world of work. This means that the development of soft skills, like team-playing and resilience, often becomes as important as the technical skills and knowledge acquired during a degree."

Nunzio Quacquarelli
CEO, QS

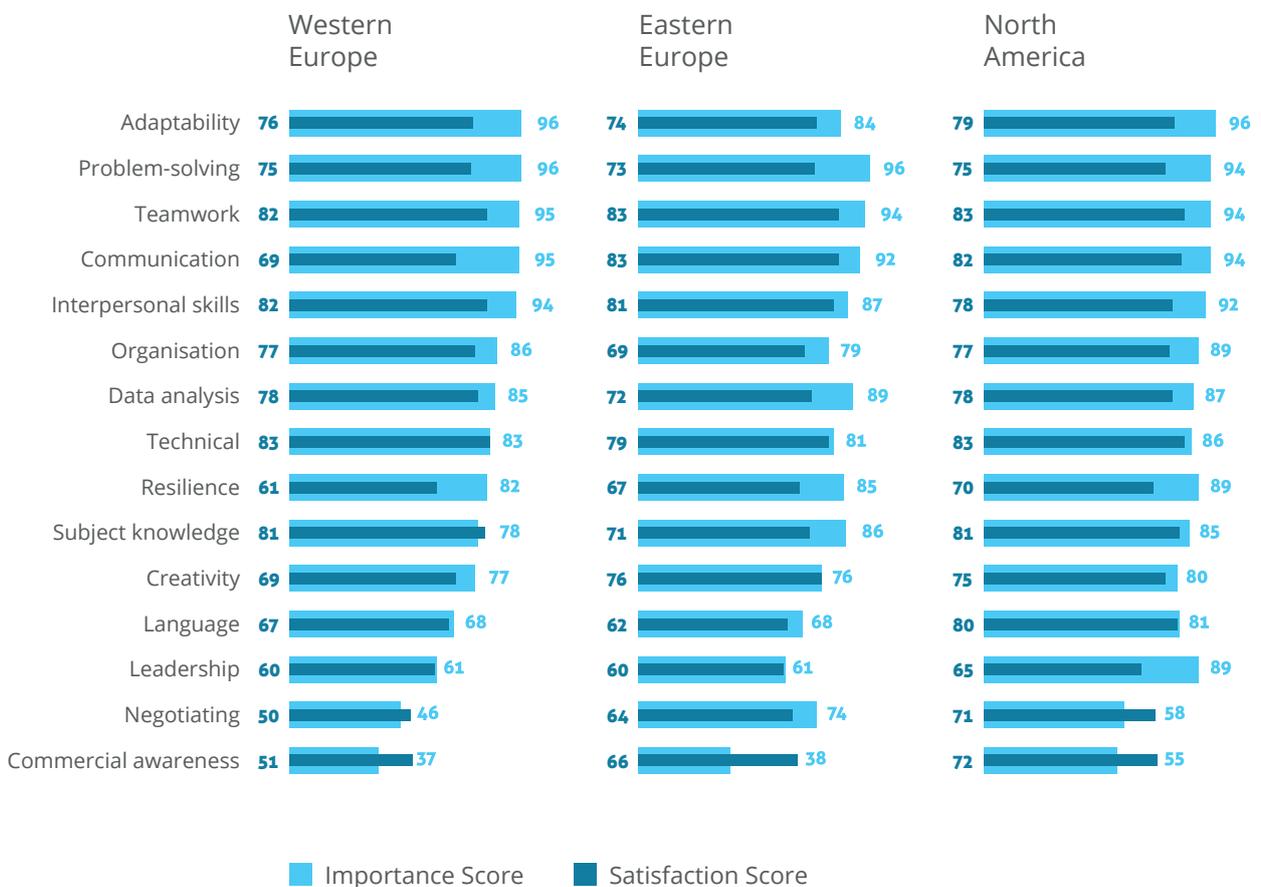
* <http://www.apa.org/helpcenter/road-resilience.aspx>

GLOBAL OVERVIEW OF CORE SKILLS: IMPORTANCE VERSUS SATISFACTION



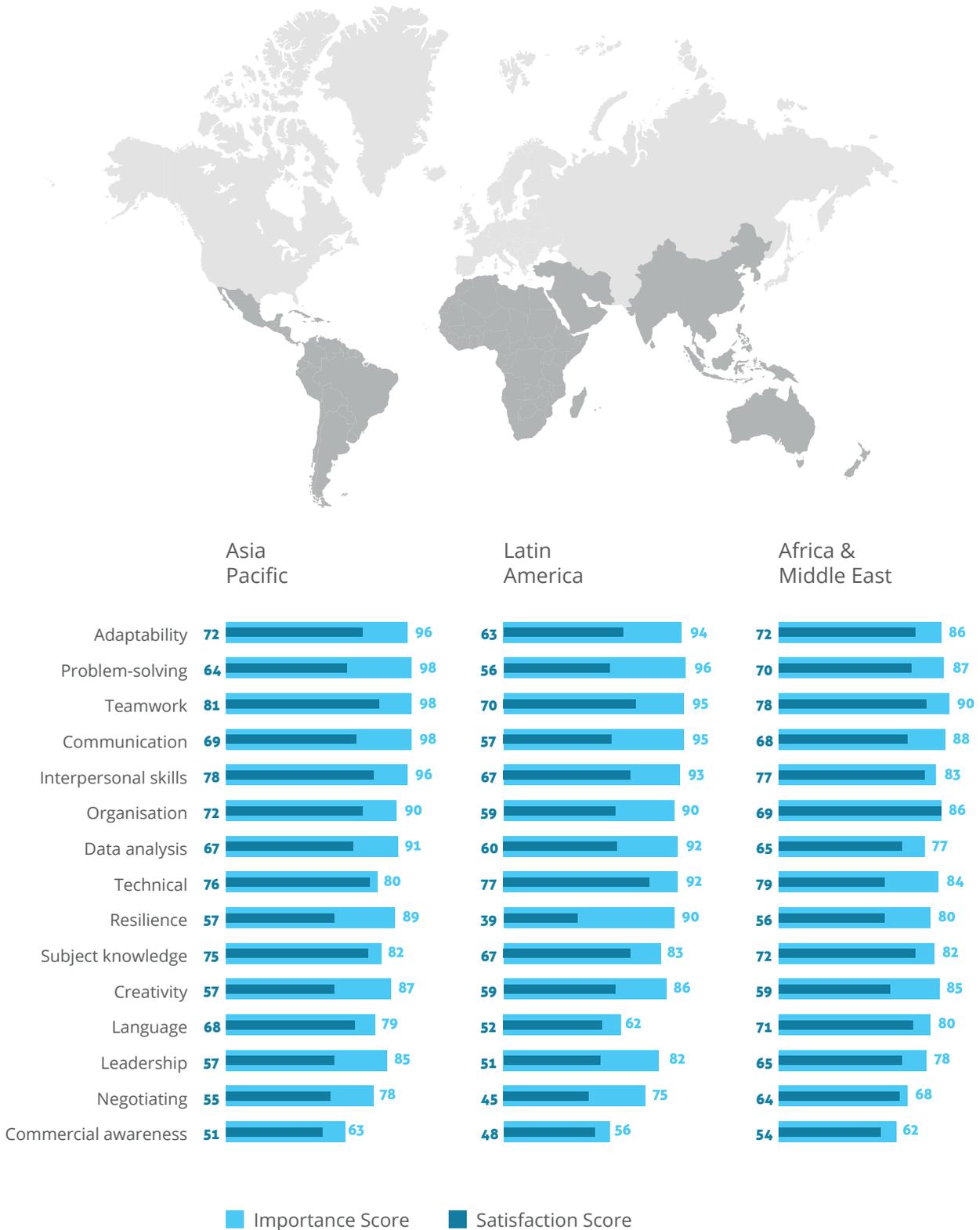
Source: QS Global Employer Survey 2018

REGIONAL BREAKDOWN OF CORE SKILLS



Source: QS Global Employer Survey 2018

REGIONAL BREAKDOWN OF CORE SKILLS



Source: QS Global Employer Survey 2018

North America is the region where employers are most satisfied with the skills presented by graduates, while Latin America is the region with the least satisfied employers. This could be indicative of the quality of education in the former region, which is home to some of the world's highest ranked universities. Employers in North America consider flexibility/adaptability, problem solving, and the ability to work in a team, as highly important, expressing the highest satisfaction level worldwide for these skills at 83.

By comparison, Latin America is still an emerging market with a relative scarcity of globally regarded institutions. Many countries in this region are currently investing in their higher education sectors to influence the league tables in their favor, whilst increasing international student numbers.* Universities in this region could significantly help their graduates succeed by fostering desirable skills such as problem solving, the ability to work in a team, and communication, which employers from the region regard as the three most important. It should be noted that employers from this region express most satisfaction with the technical skills of the graduates they employ.

Asia-Pacific is the region in which employers are the least satisfied with creativity skills, identifying this as a skills area in which university preparation is potentially falling short. On the other hand, the ability to work in a team, interpersonal skills and technical skills show higher satisfaction scores than in other regions. Technical skills in particular are given a relatively strong satisfaction to importance ratio.

Employers in Africa and the Middle East are also dissatisfied with the creativity of graduates, giving this skill a Satisfaction Factor score of just 59, as compared to the 57 registered in Asia-Pacific. Employers in Africa and the Middle East are also the most satisfied with the technical skills of the graduates they hire and regard the ability to work in a team as crucially important. Teamwork has a Satisfaction score of 78, indicating that the

employers in that region are, overall, not dissatisfied with graduate performance in this area.

Employers in Europe give an extremely high satisfaction to importance ratio for commercial awareness, especially in Eastern Europe where the satisfaction rating is 66. Employers in Eastern Europe are also highly satisfied with the creativity of graduates in comparison to other regions, with a satisfaction rating of 76. Other areas in which graduates in this region appear to excel are the ability to work in a team, and communication skills and interpersonal skills. Problem solving skills seem to be a significant area of deficiency, suggesting this is an area in which universities are underperforming.

Resilience, dealing with conflict, and communication skills all receive a low satisfaction rating among employers in Western Europe. This indicates space for improvement in these spheres among students and institutions. Flexibility/adaptability, problem solving and the ability to work in a team are considered the most important skills in this region, with teamwork scoring the highest satisfaction score of 83. This score for teamwork is the highest among all of the regions surveyed, alongside North America which also received a score of 83.

"In my business (Offshore Engineering) we still tend to recruit engineers with traditional engineering degrees rather than multi-disciplinary ones. Good knowledge of the chosen subject is key and digital competence is becoming increasingly important. Employers also value when students manage to get involved with external companies during their studies."

Johan Reenskaug
Engineering manager, Aker Solutions

*http://www.reimagine-education.com/wp-content/uploads/2018/01/RE_White-Paper_Student-Mobility-Demographic-Changes.pdf

DIFFERENT COUNTRIES, DIFFERENT SKILLS

TOP FIVE MOST IMPORTANT SKILLS FOR EMPLOYERS GLOBALLY

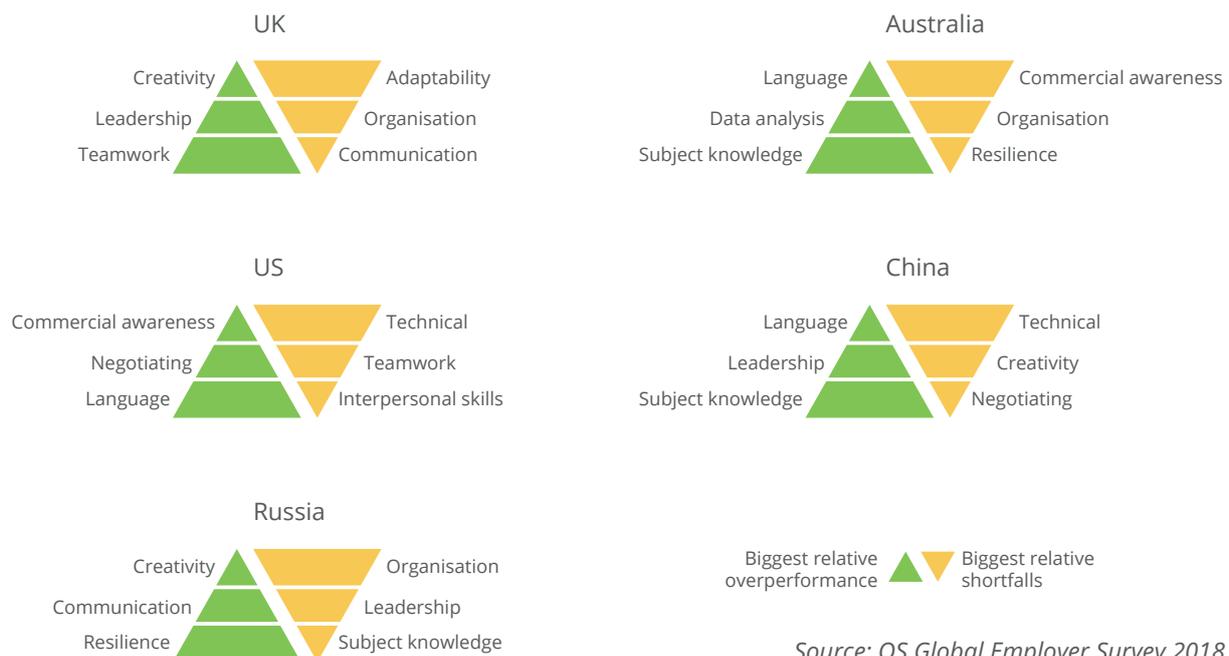


Source: QS Global Employer Survey 2018

Five countries - US, UK, China, Russia and Australia - are highlighted in this section as some of the key and substantially diverging recruitment markets. Results for these countries can also be teased out from the overall global trends. Benchmarks for each of them are explored below. The relative differences between these countries in both the

importance employers place on each skill, and their levels of satisfaction with graduates, reveal relative best practice or weakness. These insights can provide a guide for academic institutions in these countries to focus on skills building.

TOP AND BOTTOM SKILLS GAP PERFORMANCE RELATIVE TO GLOBAL TRENDS



Source: QS Global Employer Survey 2018

There are variations in China and Russia. Chinese employers prioritise resilience over adaptability, while Russian employers prioritise analytical skills and the depth of knowledge in a subject over adaptability and interpersonal skills.

The relative satisfaction with skills is more varied. Overall, the UK and Australia have the highest levels of satisfaction with graduate skills. The three areas in which the UK has the biggest relative gain – where their satisfaction score for a skill is higher than the global satisfaction score – are in creativity, leadership and teamwork. These seem to be areas in which the UK education system is over-performing relative to other countries, or where levels of these skills are more in line with the expectations of employers than they are elsewhere in the world. Efforts dedicated to developing these skills in UK graduates may be worth sharing more widely.

Relative shortfalls are also shown below. Chinese and Russian employers are generally less satisfied with the skills of the graduates they hire. Relative shortfalls – where the satisfaction score for a skill is below the global average – can also be found in countries which perform well overall: Australia, for example, has relative shortfalls in commercial awareness, organisational skills, and resilience. Academic institutions in countries with such relative shortfalls may want to focus their attention on these areas.

Detailed trends: UK

The UK, as the country with the highest overall satisfaction scores, is worthy of a more detailed exploration to identify learning opportunities. The top skills that UK employers seek seem to be the skills which they are most satisfied with, which shows relatively good alignment with what universities are providing. UK employers place a higher premium on communication, interpersonal, and technical skills and a lower premium on the depth of knowledge in a subject, which could be

due to the flexible nature of the UK recruitment market. According to research by the ISE, 82% of employers don't mind which degree subject a candidate has studied.

ISE research on UK skills gaps also broadly aligns with the QS findings. There are eight skills which both organisations have asked UK employers for views on. The three skills employers are most dissatisfied with are the same in both cases: commercial awareness, resilience and negotiating. The three skills employers are least dissatisfied with are also the same: teamwork, interpersonal skills and problem solving. In addition, levels of dissatisfaction are similar, although employers represented in the ISE survey are slightly more dissatisfied with communication and time management skills.

It is important to note that ISE uses a different methodology when asking employers about skills gaps, gathering responses from development professionals on whether graduates do or do not have specific skills, rather than seeking their levels of satisfaction. However, the similarity in results suggests that both sets of findings are relatively robust.

These findings can be used to guide discussion and debate and to add focus to skills building initiatives.

“The main challenge graduates face is accessing opportunities to develop key ‘soft skills’ such as leadership, confidence and resilience. There is also a lack of awareness about the need to develop these skills. This means students graduate without a level of employability and are thus underemployed or unable to secure roles.”

Henry Aspinall
Head of Partnerships, Work Ready

IMPACT OF COMPANY SIZE & STAFF SENIORITY ON SKILLS

This section looks at differences in employers' opinions based on the size of company they come from. The intention is to shed light on the relationship between company size and the importance and development of specific skills.

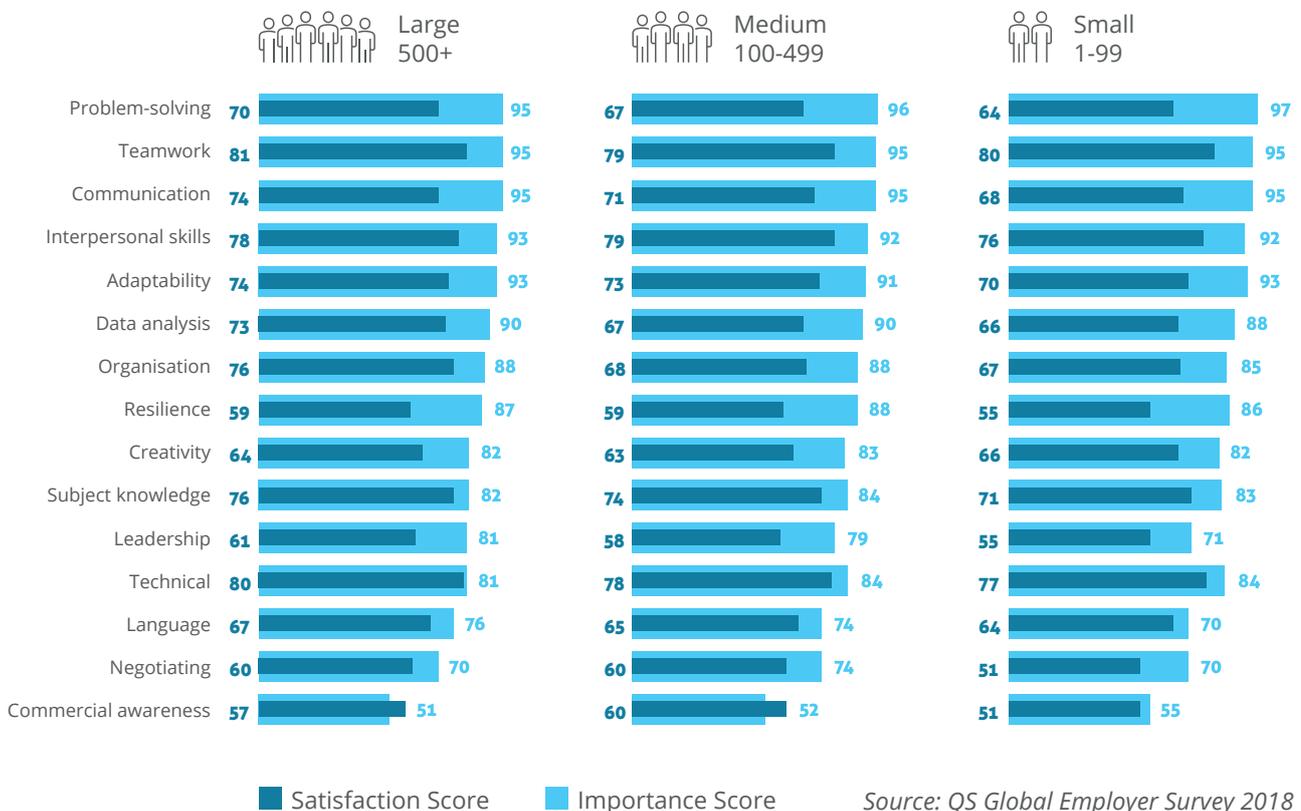
Companies of different sizes place a similar importance on each of the 15 skills. One key difference is that small companies attribute less importance to leadership skills when compared to medium and large companies. The number of employees might influence how leadership is perceived and therefore impact its relevance for a company.

Overall, the gap between satisfaction and importance scores is wider in small companies

than in large companies. One clear example is technical skills, for which satisfaction almost meets the importance attributed to this skill in larger companies, while a wider gap can be seen in small companies. This result could indicate a better capacity of large companies to identify and attract the technical skills needed for the positions offered to graduates. Large companies may also have greater access to the opportunities and experience required to develop and cultivate these abilities.

The exception is creativity skills, for which large companies showed a slightly wider gap than small companies, indicating that small companies might either select more graduates with this skill set, or provide a better environment to both attract and exercise creativity.

COMPANY SIZE BREAKDOWN: IMPORTANCE VERSUS SATISFACTION



On the other hand, large companies have higher satisfaction scores for organisational skills than medium and small companies. A possible explanation for this is that larger companies often have a more established culture and defined processes for completing tasks and running projects. This structure, alongside more defined roles, may positively contribute to the development of organisational skills. There is also the chance that employers from large companies put more emphasis in assessing organisational skills in their recruitment process.

Impact of job titles on recruitment

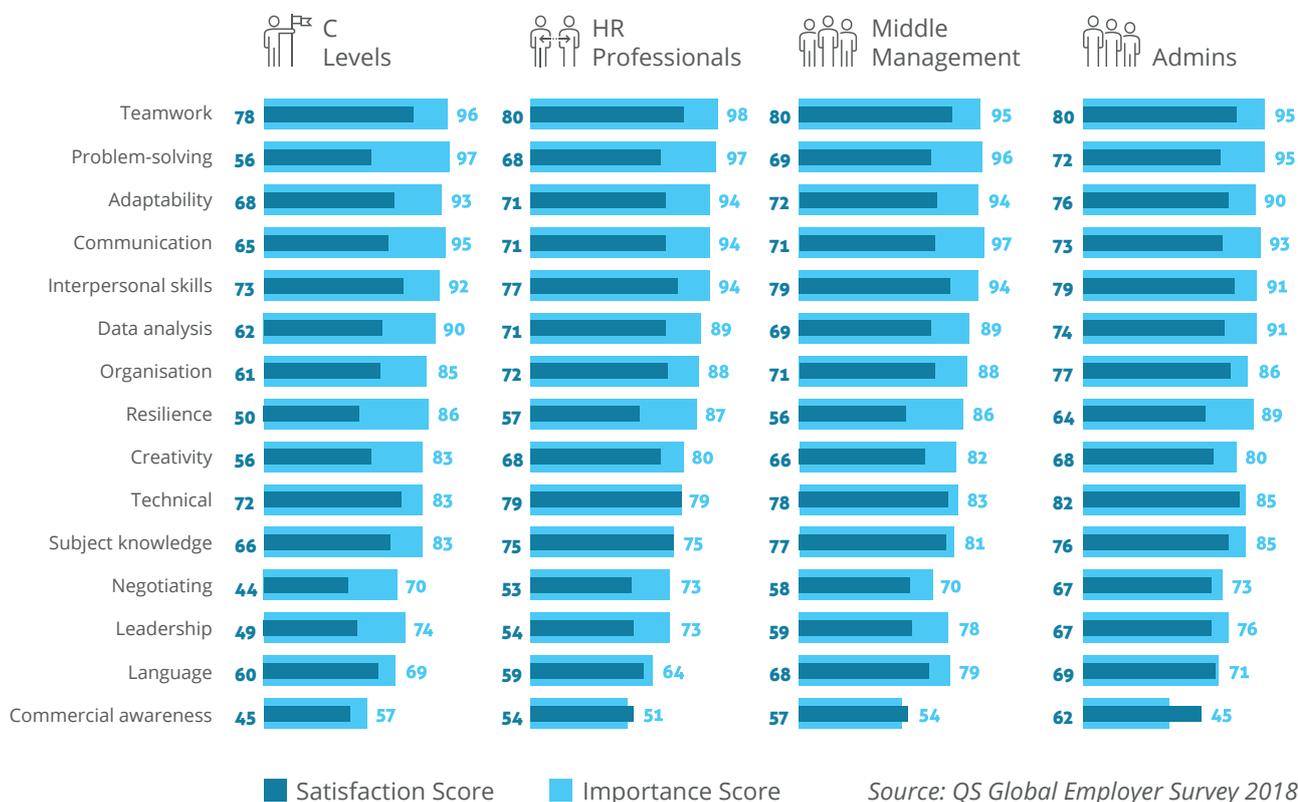
This section explores differences in perception of the graduate skills gap according to the job title, and hence the seniority, of the survey respondents:

C levels, HR professionals, Middle Management, and Administrators.

Among the C Level respondents alone, satisfaction scores for commercial awareness did not meet the importance scores, and it was also the group with the highest importance scores for commercial awareness of the respondent groups. One way to bridge this gap would be to have graduate hires shadowing C levels in their interactions with external stakeholders, so this skill set can be developed on the job and at different organisational levels.

The differences between individuals at different levels of seniority and in different roles, reinforces the importance of understanding and communicating skills priorities across different hierarchical levels.

THE SKILLS GAP ACCORDING TO SENIORITY OF RESPONDENTS



MISMATCHED EXPECTATIONS: STUDENTS VERSUS EMPLOYERS.

The graduate labor market is full of expectations – from both graduates and employers. Arguably, graduates are in a tougher position, both due to their lack of work experience and also because they need to understand what is expected of them, demonstrate it during the recruitment process and ultimately appeal to their future employer. This equation is of course not complete without the university – one bridge between graduates and employers, and the place where students are expected to gain many of the skills necessary for entering employment, often, for the very first time.

This section compares data from the QS Applicant Survey, which gathers over 16,000 student responses annually, to employer views on skills. 12 skills common to both surveys were considered. This list is further benchmarked to the ISE skills list, as well as the National Association of Colleges and Employers (NACE) list - the equivalent of ISE in the US. The gaps between student and employer expectations are therefore explored, highlighting the

miscommunication and misinformation of one of the most important stakeholder groups in the labor market – the students.

Most desired skills

As demonstrated before, the top three skills employers unanimously want to see in graduates are problem solving, teamwork and communication. On the student side, the three most important skills they believe ‘employers value most in new recruits, and hence they would like to develop at university’ are: creativity, organisational and problem solving skills. Problem solving is the only skill that features on both the student and employer list of top three priorities. There is clearly a mismatch overall.

One possible reason for the mismatch is the fact that students’ understanding of the necessary skills is shaped by multiple influencers at once – their university, school counselors, parents and friends, the media, and perhaps to an extent,

THE IMPACT OF RECRUITMENT PRIORITIES ON OVERALL SATISFACTION WITH SKILLS



Source: QS Global Employer Survey 2018

potential future employers. It can therefore be challenging for them to decide which skills to prioritise, creating confusion.

Students tend to overestimate the value of creativity, leadership and organisational skills to employers and under-estimate the value of flexibility/adaptability and analytical skills, as well as resilience. From an employer point of view, the ability of students to learn is far more important than the creativity or leadership that they may have already developed. This could suggest that students have deficiencies that they are unaware of, but it also suggest that employers could be making more of the skills that graduates already have.

Further down the list, students do recognise the importance of the ability to work in a team, which they rank in fifth place. Leadership precedes this however, and students believe is the fourth most important skill to develop while at university. Employers, on the other hand, don't place the same emphasis on leadership, ranking it as only the tenth of the twelve presented skills.

Employers also place significant emphasis on flexibility and adaptability (92%). While employers rank it in the top five, flexibility and adaptability is not recognised as a student priority, and is ranked ninth by them.

Biggest gaps

The analysis above demonstrates that for several skills the gaps are particularly noticeable, and these are skills that need to be explored in more detail: flexibility and adaptability, analytical skills, leadership, creativity and organisational skills. They present the biggest mismatch between employer and student opinion. Employers value flexibility and adaptability, and analytical skills highly, while students do not put the same emphasis on them. In the case of leadership, creativity and organisational skills– the opposite is the case.

Flexibility is no doubt important in today's ever-changing employment market and this is perhaps one transferable skill that is expected of every graduate. It would appear that there needs to be more communication of the importance of this skill to students.

While students think demonstrating leadership and creativity - and through that showing initiative and bringing new ideas to the table - is important, employers firmly believe that flexibility trumps both. A possible explanation for this could be a saturation of leadership and creativity in the market, and a shift of priorities in the market. Alternatively, this can be indicative of a historic misconception held by students, demonstrating a clear lack of understanding between the two groups.

Why the difference?

Graduate skills are not the only criteria employers use to differentiate between candidates in a global pool of graduates. Other recruitment priorities could include improving the diversity of their workforce or attracting more employees with an international background. Different recruitment priorities affect employers' satisfaction with graduate skills.

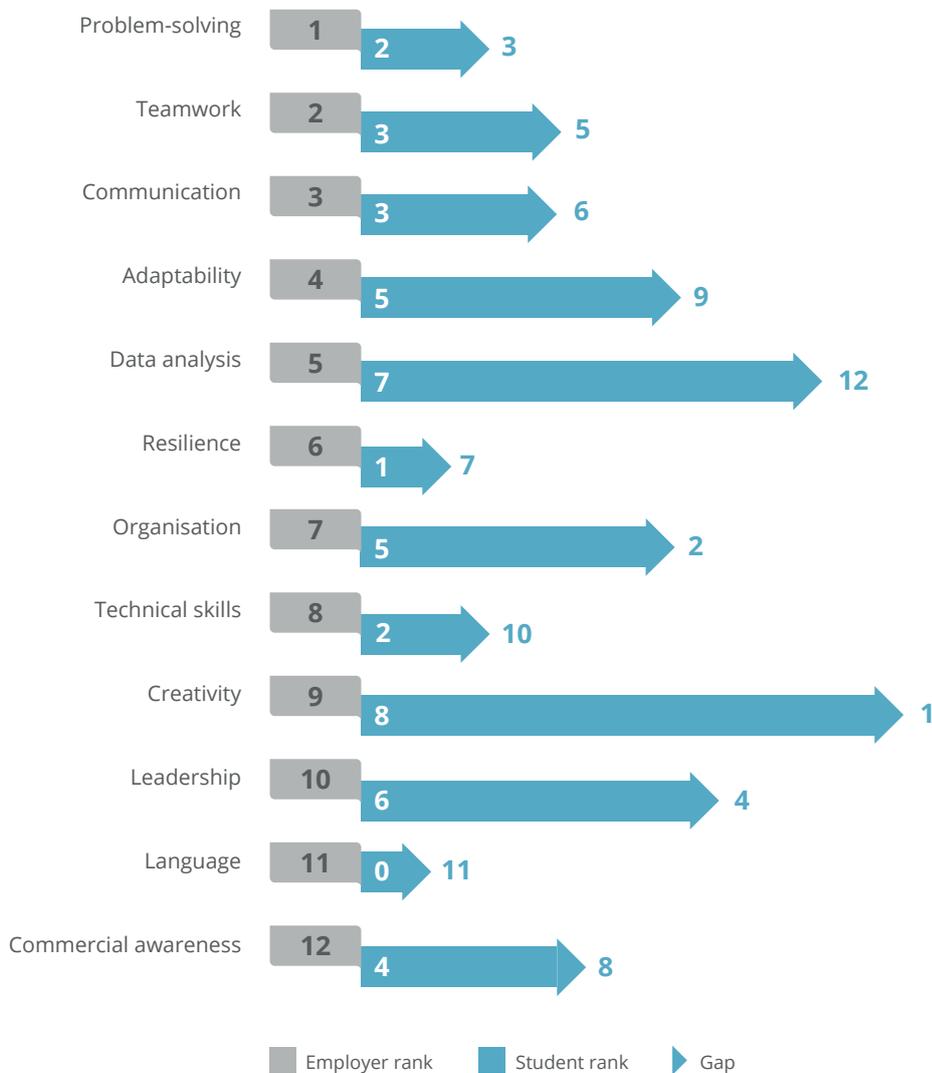
"Universities must become increasingly responsible for growing awareness of the skills gap and the need for students to develop 'soft skills'. Student development is down to the individual student and their motivation to improve their employability, but the awareness should be the responsibility of universities."

Henry Aspinall
Head of Partnerships, Work Ready

One of the most interesting findings from the data is that employers who prioritise graduates from highly ranked institutions are more satisfied with the level of skills they receive. The next most satisfied group of employers are those focusing on students that have partaken in demonstrable extra-curricular activities, followed by students with international

experience. This suggests that students participating in these activities in addition to their degrees tend to develop additional skills as compared to other students.

IMPORTANCE OF CORE SKILLS: STUDENTS VERSUS EMPLOYERS



Source: QS Global Employer Survey 2018 and QS Applicant Survey 2018

NEXT STEPS: BRIDGING THE GAP

The findings of this analysis point to a number of areas for employers, universities and students to work on with a view to bridging the skills gaps identified. While satisfaction with graduate skills is, on average, high, there are also many gaps which will take time to close. Given that we have identified that many of the same core skills are being sought across widely different countries, there is value in sharing best practice globally in terms of bridging these gaps. The potential benefits are also significant: a more productive workforce, and graduates who can make the most of their potential. The following section includes suggestions as to steps the various stakeholders can begin to take.

Case study: UK

The UK, as a country with the most satisfied employers, provides a useful case study of how employers can act on insight into skills gaps. The ISE has been developing specific research on skills for the past three years and has identified key trends.

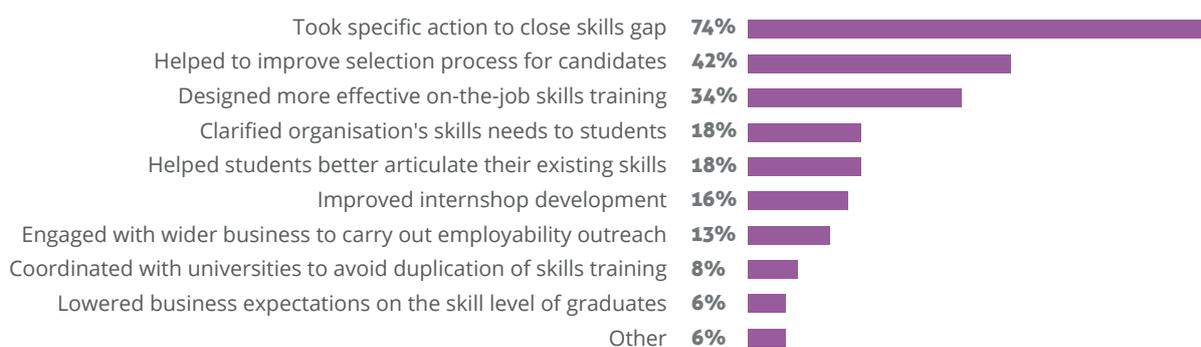
ISE employers are taking some ownership of solving the problem. 74% claim to have taken specific actions to close gaps in 2017. The two most commonly taken actions were changing selection processes to find candidates with more advanced skills, and

improving on-the-job training. Communicating skills' needs to students is also key in terms of aligning expectations, and 30% of organisations are either doing this directly or helping students to articulate the skills they already have. These actions provide some useful insights and ideas for organisations in other countries.

Investing in on-the-job skills training is the norm for ISE employers. After graduates join these organisations, they typically receive formal skills training, informal support, and learning opportunities across a structured two-year development program. The purpose of the training is not just remedial: it can be used to refine the skills needed for a particular sector (e.g. team working in a law firm may be different to team working in an engineering firm), or to prepare graduates for future leadership roles. UK employers also recognise that skills development is an ongoing process.

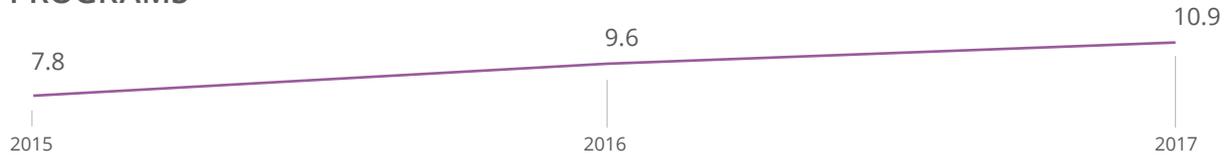
On-the-job skills training is becoming longer and more advanced within graduate programmes. 11 days is typical, up from an average of eight days two years ago. 32% of ISE employers are changing their use of technology for learning, and, since the year before the survey was carried out, there was an increase in the use of blended methods which combine face-to-face and online training. 45% of employers have also changed their training for the

ACTIONS TAKEN BY UK EMPLOYER DEVELOPMENT PROFESSIONALS TO CLOSE SKILLS GAP IN 2017



Source: ISE 2018 Development Survey

AVERAGE DAYS OF SOFT SKILLS TRAINING DURING GRADUATE DEVELOPMENT PROGRAMS



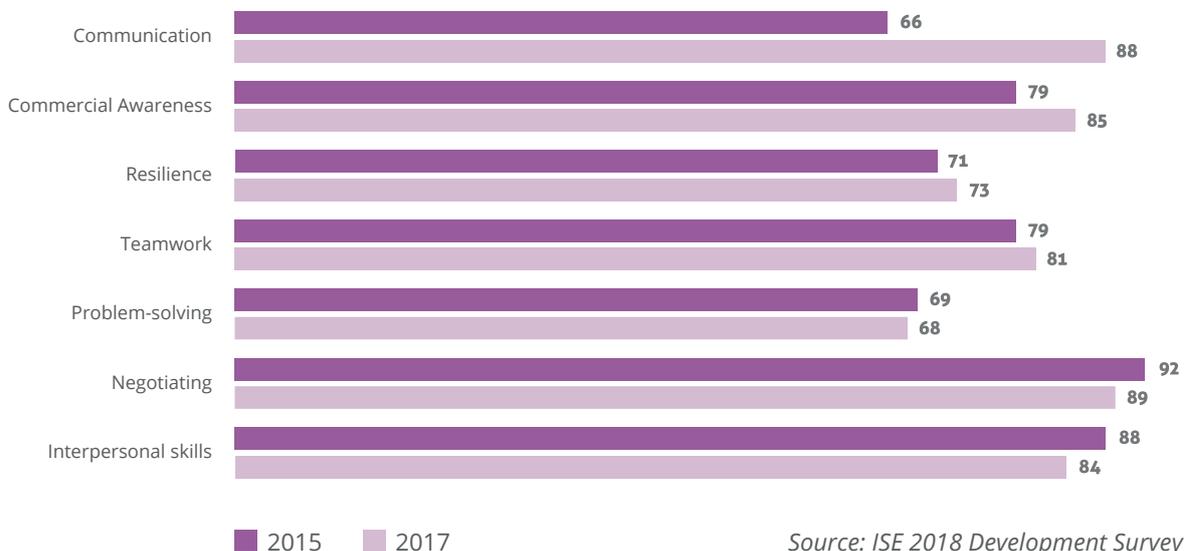
Source: ISE 2018 Development Survey

managers of graduates, recognising the value of involving wider stakeholders to help with improving graduate performance. Other employers may want to review whether these approaches could also be suitable for their organisation.

There seem to have been some changes to what

the training of recruits covers in the two years analysed. Business communication and commercial awareness training appear to have become more common, perhaps reflecting a recognition by employers that some skills are best trained on the job, and resilience and team working have also seen an increased priority. Responsively adjusting

CHANGES IN THE SHARE OF UK EMPLOYERS USING SPECIFIC ON-THE-JOB GRADUATE SOFT SKILLS TRAINING



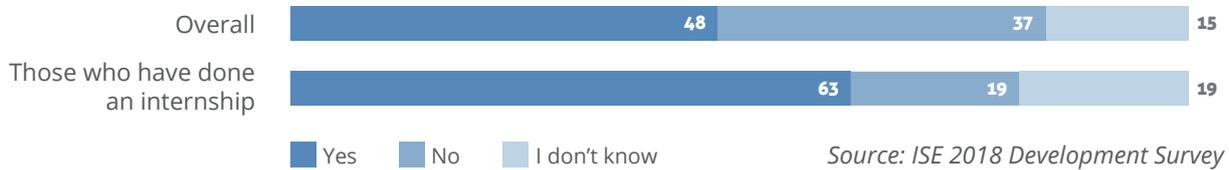
Source: ISE 2018 Development Survey

on-the-job training can address skills' challenges in the short term.

In the longer term, internship programs can help to close graduate skills gaps prior to graduate hiring. In the UK, internships are temporary work opportunities between 4-12 weeks that are

offered to students over summer months and are typically paid positions. 63% of ISE employers state that former interns that they recruit have the soft skills they expect, compared to just 48% of graduates in general. In fact, 70% of employers who compare former interns with other graduates, state that interns outperform their peers in at least

UK EMPLOYER VIEWS OF WHETHER GRADUATES HAVE THE SKILLS THEY EXPECT

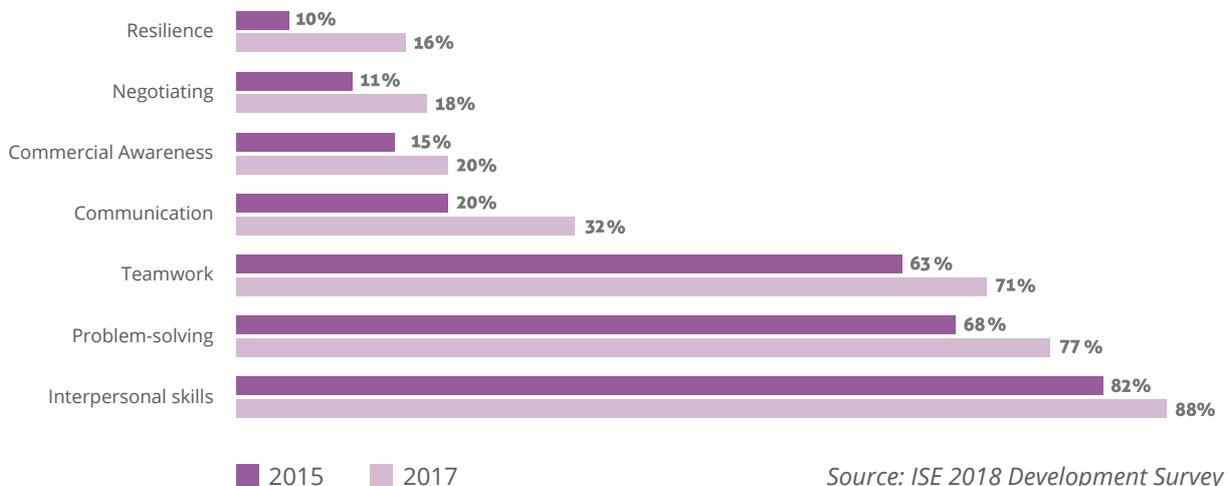


one respect. There is evidently value in expanding and enhancing internship programs.

As all these efforts continue, specific skills gaps for UK graduates appear to be closing. There is an average increase of 7% in the satisfaction of

ISE employers with each of the graduate skills at the point of hiring, as compared with 2015. This trend should be interpreted with care: it may be down to growing awareness of skills gaps, or better assessment of them, rather than a genuine increase in skilled candidates. But it also suggests

THE SHARE OF UK EMPLOYERS WHO THINK GRADUATES HAVE EACH SKILL



that progress is being made and can be built on. There is value in tracking the same set of skills over time and communicating the trends.

Communicating a number of key messages to students could further help them to optimise their soft skills development whilst at university. It continues to be important that students invest in the core skills of problem solving, teamwork and communication skills. Strengths in these

transferable skills will set them up for success with employers from around the globe. However, the ability of students to learn seems to be more important to employers than their existing creativity or leadership skills, so they need to receive the message from the institutions at which they study that it will pay dividends when they look for a job if they invest in their adaptability and be prepared to continue learning when they are employed.

THE MBA SUPPLEMENT: A SNAPSHOT ON EMPLOYERS HIRING BUSINESS GRADUATES

TOP 5 SKILLS BY IMPORTANCE FOR MBA EMPLOYERS



Source: QS Global Employer Survey 2018

Global businesses have high expectations when they invest in MBA talent. More than any other degree type, employers believe MBA graduates should have already established a professional record before refining their skills and perspectives in business school. In fact, nearly 70% of employers expect MBA graduates to hold at least four years of work experience. This advanced profile is what makes MBA hires unique to organisations and is what drives the salary premium that MBA graduates often command.

Nearly 15% of employers represented in this report actively recruit MBA graduates. This rate is higher in industries such as consulting and finance and lower in science, law, and non-profits. Findings in this section reflect insights collected from some of the most sought-after destinations for MBA talent, including McKinsey & Company, Ernst & Young, Goldman Sachs, and Google.

Skill expectations and evaluation for business school graduates

MBA employers overwhelmingly rate soft skills as more important than hard skills. This is not to imply that technical knowledge is unimportant, but to emphasize that the ability to interact, communicate, and lead remains paramount to successfully moving organisations forward.

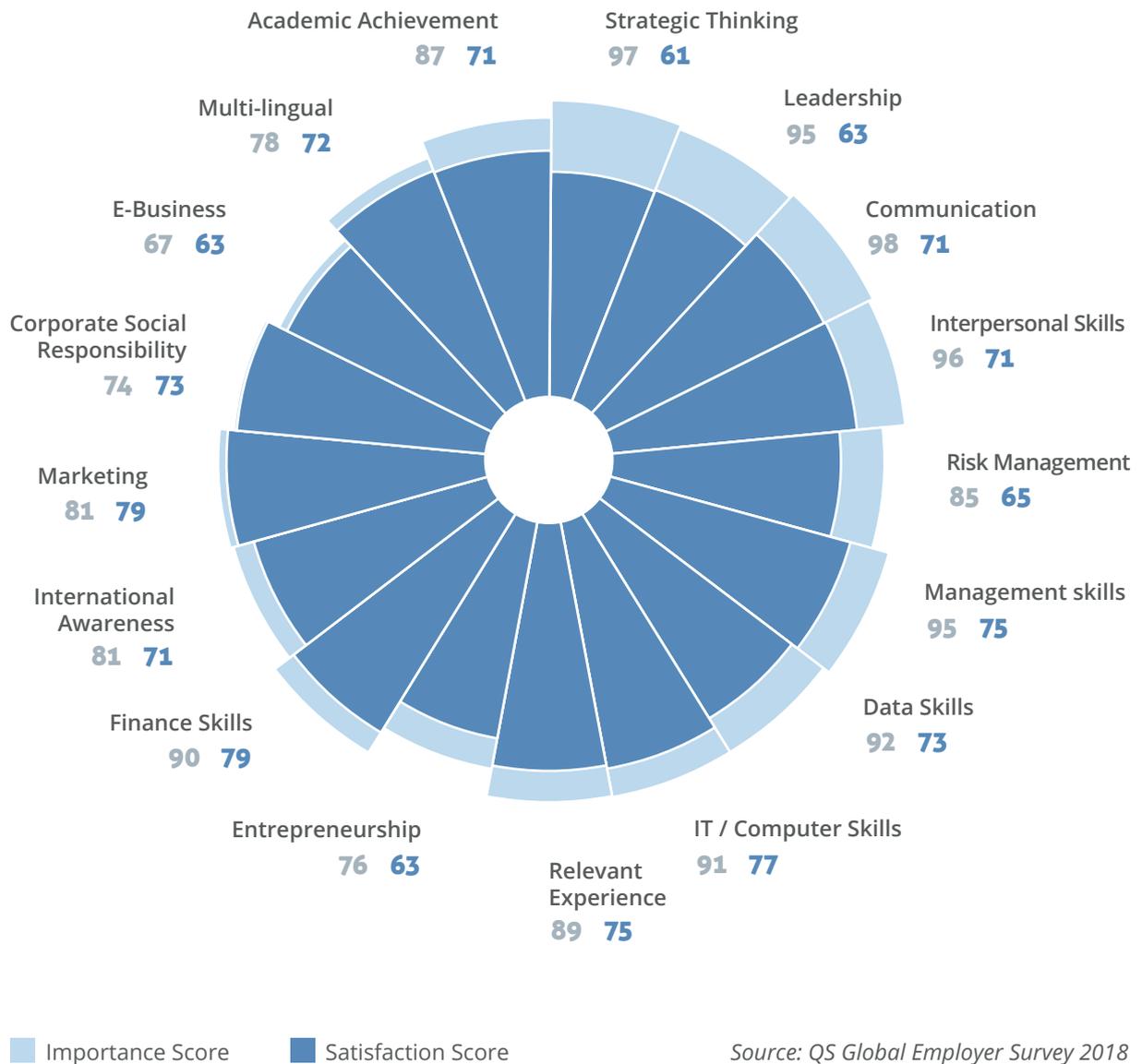
When exploring the evaluation of skills by MBA employers, a clear gap emerges between what employers want and where MBA hires appear to excel. Specific skills – such as marketing, finance, and computer skills – receive the highest satisfaction scores, even though these are not rated as highly as soft skills to employers. On the other hand, strategic thinking and leadership – voted in the top five skills by employers – are evaluated with the lowest satisfaction. This gap, one where the most important skills are evaluated relatively poorly by employers, has the potential to threaten the long-term value proposition of management education.

The impact of industry

Skill expectations for MBA graduates depend largely on industry factors. Employers in the leading sectors for MBA talent – consulting, finance, and technology – each identify distinct skills priorities and shortcomings.

In consulting firms, for instance, communication was reported as the most important skill compared with, not surprisingly, financial skills in the finance industry, and, perhaps more surprisingly, interpersonal skills in technology companies. These varied outcomes extend to skills gaps too. In consulting, where employees typically support

SKILLS GAPS ACCORDING TO MBA EMPLOYERS



clients with insights and guidance, strategic thinking shows a negative gap of 46 points. In finance, leadership shows the biggest gap of 35 points. Finally, a 44-point mismatch in data skills drives discontent in the technology industry where MBAs may find themselves working closely with experienced data scientists and engineers.

Firms operating in different sectors clearly tailor their hiring practices to meet the unique operating challenges they face. Although MBA graduates are well positioned to add value in all professional settings, understanding the skills pain points of specific industries will enable them to further standout in the interview process.

AREAS OF OVERPERFORMANCE AND UNDERPERFORMANCE ACCORDING TO MBA EMPLOYERS

	CONSULTING	FINANCE	TECHNOLOGY
SKILLS WITH HIGHEST IMPORTANCE SCORES	Communication: 100 Interpersonal: 98 Management: 98	Finance: 100 Strategic Thinking: 98 Interpersonal: 98	Interpersonal: 100 Communication: 100 Data: 97
SKILLS WITH HIGHEST SATISFACTION SCORES	Academic Achievement: 86 Finance Skills: 78 Multi-Lingual: 75	Academic Achievement: 92 Finance: 92 Communication: 92	Academic Achievement: 90 Communication: 83 Finance: 83
SKILLS WITH LOWEST SATISFACTION SCORES	Strategic Thinking: 51 Leadership: 56 Interpersonal: 58	E-Business: 54 Entrepreneurship: 59 Leadership: 62	Data: 53 Entrepreneurship: 56 CRS: 64
BIGGEST GAP: SATISFACTION SCORE - IMPORTANCE SCORE	STRATEGIC THINKING Gap: -46	LEADERSHIP Gap: -35	DATA SKILLS Gap: -44

Source: QS Global Employer Survey 2018

Other interesting findings relating to skills and MBA hiring:

- Companies that are optimistic about the future report smaller skills gaps, on average, than companies who are less optimistic.
- Small companies value entrepreneurial skillsets more than larger companies and are less satisfied with these skills in MBA hires.
- Satisfaction scores for strategic thinking are significantly higher for organizations that demand a greater amount of work experience from MBA hires.
- Global and regional companies are much more likely than local companies to note the importance of multi-lingual abilities of MBA graduates.

Awareness of these skills and their observed gaps can help business schools open dialogue with corporate partners, shape curriculum on campus, and better prepare students for interviews.

For more information on the business school insights available from this survey, please contact alex.chisholm@qs.com.

METHODOLOGY

Authors:

- QS Intelligence Unit (QS)
- Institute of Student Employers (ISE)

Data Sources:

- QS Global Employer Survey 2018: 11,008 responses
- QS Applicant Survey 2018: 16,560 responses
- ISE 2017 Annual Survey: 200 responses
- ISE Development Survey: 173 responses

Skills questions design:

Importance metric: Matrix table containing columns: (A) Very Important (B) Important (C) Not Important

Rows containing the 15 skills in randomised order:

Leadership; Ability to work in a team; Communication; Problem solving; Analytical/quantitative; Flexibility/adaptability; Depth of knowledge in subject; Interpersonal/relates well to others; Technical; Organisational; Creativity; Commercial awareness; Resilience/dealing with conflict; Negotiating; Languages.

To generate Importance scores, every “Very Important” choice was attributed one point (1), “Important” one point (1), and “Not Important” received minus one point (-1). Therefore, the distance of the score from zero indicates the degree of overall Importance attributed to the skill in question.

Satisfaction metric: Matrix table containing columns: (A) Very Satisfied (B) Satisfied (C) Not Satisfied

Rows containing the 15 skills in randomised order:

Leadership; Ability to work in a team; Communication; Problem solving; Analytical/quantitative; Flexibility/adaptability; Depth of knowledge in subject; Interpersonal/relates well to others; Technical; Organisational; Creativity; Commercial awareness; Resilience/dealing with conflict; Negotiating; Languages.

To generate Satisfaction scores, every “Very Satisfied” choice was attributed one point (1), “Satisfied” one point (1), and “Not Satisfied” received minus one point (-1). Therefore, the distance of the score from zero indicates the degree of overall Satisfaction attributed to the skill in question.

Employer Survey Design

Skills Gap Report

<p>Micro business (1-9 employees) Small business (10 - 99 employees)</p>		<p>Small</p>
<p>Medium sized business (100 - 499 employees)</p>		<p>Medium</p>
<p>Mid-Large sized business (500 - 999 employees) Enterprise business (1000 - 2499 employees) Large Enterprise (more than 2500 employees)</p>		<p>Large</p>

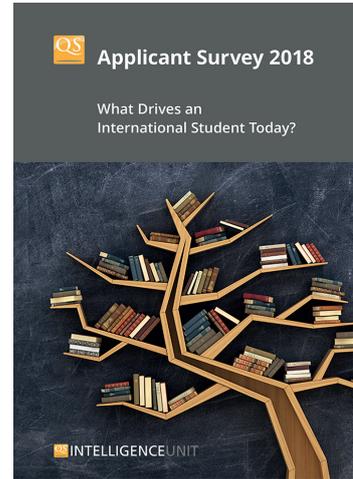
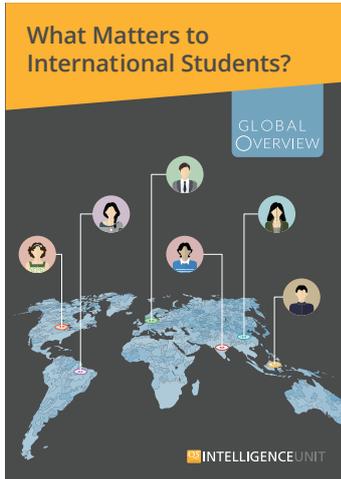
The decisions to cluster the company sizes that were previously separated in the survey were taken considering the homogeneity of results during the analysis.

Employer Survey Design

Skills Gap Report

<p>CEO / President / Managing Director COO / CFO / CTO / CIO / CMO Director / Partner / Vice President</p>		<p>C Level</p>
<p>Senior Human Resources / Recruitment Other Human Resources / Recruitment</p>		<p>HR Professionals</p>
<p>Manager / Executive Consultant / Advisor</p>		<p>Middle Management</p>
<p>Coordinator / Officer Analyst / Specialist Assistant / Administrator</p>		<p>Administrator</p>

See the full range of insight reports on student motivations and trends at <http://www.qs.com/qs-industry-reports/>



If you are interested in first-hand access to insights, want to explore a particular topic or region, or would like to partner with us on future research projects, please do not hesitate to get in touch, at gabriel.costa@qs.com.

About ISE

The Institute of Student Employers (ISE), formerly known as the Association of Graduate Recruiters is an independent, not-for-profit member organisation which was established in 1968. As the UK's leading independent voice for student employers, the ISE brings together employers, educational institutions and supplier partners, providing leadership and support in all aspects of student recruitment and development.

About QS

Established in 1990, QS is dedicated to providing independent and authoritative research and resources for both prospective students and higher education providers worldwide. The QS World University Rankings®, published annually since 2004 and hosted on student-focused platform TopUniversities.com, is among the most-consulted resources in the sector.

In response to growing public demand for comparative data on universities and other higher education providers, and for institutions to develop deeper insight into their competitive environment, the QS Intelligence Unit was formed in 2008. Committed to the key values of rigorous integrity, undeniable value, unique insight and charismatic presentation, QSIU strives to be the most trusted independent source of global intelligence on the higher education sector.

In addition to the research and insights provided by QSIU, the company offers a range of services to help prospective international students find the right institution – and vice versa. This includes a global series of higher education fairs; an annual publication cycle of guides, reports and e-papers; and a dynamic range of online platforms.



TRUSTED • INDEPENDENT • GLOBAL

www.qs.com

All information © QS Quacquarelli Symonds Ltd 2018