

Identifying the skill gap faced by employers among fresh graduates in the UK

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ABSTRACT

Aim: This research focuses on one of the most persistent issues of the UK employment market: the mismatch of skills between newly graduated individuals and the job market. It was, therefore, the purpose of the study to establish which of the technical and soft skills are specifically lacking in recent graduates and, in so doing, determine the extent to which higher education institutions have prepared students for the necessary skills in industries and, most importantly, compare the expectations of employers to the actual graduates about the required skills.

Method: Employing a qualitative research approach, the study employed interviews with the participants, who included HR managers, recruitment officers and team leaders in the technology, healthcare, engineering and business service industries.

Findings: The key themes emerged through thematic analysis: lack of practical skills, lack of relevance of the curriculum, match between employers' requirements and graduates, difficulties in the recruitment process due to skills gaps, and strategic recommendations to improve graduate employability. The findings have important implications for education curricula to better reflect the industry requirements and for increased collaboration between academia and employers to produce a workforce capable of handling the dynamic nature of today's work environment.

Conclusion: The conclusions of the study contribute to the current discourses on graduate employability and provide feasible solutions to allow for the minimisation of a gap in skills required to meet the operation necessities of modern organisations.

Keywords: Skills, fresh graduates, UK, skill gap, employers.

INTRODUCTION

As the market of the United Kingdom increases in complexity, the disparity between the skills that new entrants into the labour force already possess and that the employers require is widening (Jackson, 2010). This was not only a disservice to young professionals by hindering their chances of employment opportunities in the limited time they had but also hampering the growth and development of any business entity to compete within the market. As industries rapidly improve their standards due to enhanced technology and changing market situations, the requirement for skilled human capital with good technical, flexibility and interpersonal skills is felt like never before. Universities and schools training the future generation of employees and managers face a difficult choice (Mirza et al., 2014). They must work with the old school styles and the requirement for delivering educational content in line with the rapidly changing corporate environment.

On the other hand, employers complain of the need to offer on-the-job training to cover the above educational gaps, which is costly for operations and results in reduced productivity (Pang et al., 2019). This skill gap is a complex process that manifests itself in different fields, including, for example, technologic, business, the health sector, and engineering. It requires a meaningful reassessment of approaches to learning and partnership between education and vocational training to facilitate employment progression and cater to all stakeholders' interests (Ng et al., 2021). Knowing the general cause and the details of this skill deficiency can help formulate ideal ways and means of education and designing and developing the right human resources capable of servicing the modern world. This article aims to provide an understanding of the skills deficit from an employer's perspective, particularly when recruiting fresh graduates in the United Kingdom.

Objectives

This research examines the skill gap employers face among fresh graduates in the UK. The objectives are:

- To identify the primary skills that employers find lacking in fresh graduates, including soft skills, technical abilities, and industry-specific knowledge.

- To investigate the role of higher education institutions in the UK in equipping students with the necessary skills for meeting industry standards.
- To examine the expectations of UK employers regarding the skill sets of fresh graduates, contrasting these expectations with the current reality of graduate skills.
- To recommend strategies for stakeholders for enhancing graduate employability and meeting the operational needs of modern enterprises.

LITERATURE REVIEW

Studies have highlighted a persistent gap between the competencies imparted in higher education institutions (HEIs) and those required in the workplace (Pang et al., 2019; Mirza et al., 2014). Early research by the Confederation of British Industry (CBI) shows that over three-quarters of UK employers struggle to find candidates with relevant skills, revealing a significant shortage in problem-solving, teamwork, and communication abilities (Matsouka & Mihail, 2016). This misalignment not only affects individual employment prospects but also impacts organizational effectiveness and creativity. Economists have linked skill deficiencies to broader economic issues, such as low GDP levels and poor global market performance (Ng et al., 2021).

Osmani et al. (2015) found that curricula in universities across the United Kingdom are highly academic and often fail to adequately prepare students for practical application. While maintaining academic standards is important, there is a pressing need for a greater focus on practical and soft skills (Osmani et al., 2015). Furthermore, partnerships between universities and industries have not yet fully developed, though such collaborations have been shown to align educational content more closely with job requirements. Modern trends, such as advances in artificial intelligence, have accelerated changes in fields like big data and cybersecurity. Capelli (2015) notes that the rapid pace of technological advancement necessitates continuous, incremental learning, a model that most universities do not currently support. Consequently, graduates often enter new positions with significant skill gaps, necessitating additional training that can be both costly and time-consuming for employers (Capelli, 2015).

In addition to technical competence, there is increasing recognition of the importance of human competencies, such as communication skills. According to Ramadi et al. (2016), employers place a higher value on soft skills, including flexibility, problem-solving, and interpersonal abilities. These competencies are often lacking in conventional degree programs, creating a gap that affects various segments of the economy. This issue is particularly evident in the service and creative industries, where mental flexibility and social skills are crucial drivers of success (Hurrell, 2016). However, the government and educational policy-making bodies are beginning to address these deficiencies. The UK Department for Education has introduced several policies aimed at bridging the gap between degree programs and employers' needs. These initiatives include expanding vocational training and enhancing internship programs that integrate theoretical knowledge with practical experience.

Theoretical Framework

Understanding the skill differentials between educational outcomes and employer expectations draws on several theoretical frameworks used to examine this phenomenon. These include Human Capital Theory, Skills Mismatch Theory, and the Theory of Workforce Readiness. As Becker (1964) explained in his Human Capital Theory, individuals and communities gain economically by investing in education and vocational training (Cappelli, 2015; Ramadi et al., 2016). Education provides people with skills and knowledge that are considered capital, enhancing their productivity and earning potential. This framework is crucial as it directly links investment in education with economic growth and career outcomes.

Skills Mismatch Theory addresses the discrepancies between the supply and demand of skills in the labor market. Unlike other theories, it considers not only over-education and under-education but also skill degradation, which relates to industry transformations (Stewart et al., 2016). This theory is particularly relevant in the context of evolving educational outcomes and the changing requirements that employers have for job seekers.

Literature Gap

Despite interest in the skill gap problem, several gaps in the existing literature remain understudied. Notably, there is a lack of longitudinal research that examines changes in skill deficiencies among graduates (Moore & Morton, 2017). Such research would provide valuable insights into how these gaps evolve in response to technological advancements or changes in education policies. While some industries have been thoroughly analyzed, others, particularly newer fields like green technology and renewable energy, are less well-studied (Pang et al., 2019). Investigating these sectors in more detail could lead to more targeted educational pathways.

With the acceleration of digitalization, it is crucial to explore the role of digital skills in employability and productivity more thoroughly. More research is needed to identify which skills are most important and how they can be effectively incorporated into instructional programs (Monaghan, 2015). Additionally, it remains unclear whether there are regional disparities in the roles required of graduates and the quality of education provided. Detailed regional analyses could help tailor educational policies and initiatives to better align with regional economic conditions and employer demands.

Osmani et al. (2015) noted that few studies have assessed the sustainability of policies aimed at addressing perceived skill mismatches. Evaluative, reception-oriented research could determine the effectiveness of these policies and contribute to improvements in both education and economic development (Whittaker, 2016). Addressing these gaps in the literature could enhance our understanding of the skill gap issue and inform better strategies for preparing graduates to meet dynamic market demands.

Methodology

The study uses a **qualitative research** approach, it is more appropriate for identifying and describing the stereotypical perceptions that employers have on the gap in skills possessed by fresh graduates. A qualitative approach is well applicable for detailed investigations of perception, attitudes, and emotions, which may be excluded or not clearly distinguished by quantitative ones. Since this is a cross-sectional study, it provides an in-depth analysis of how employers across

different sectors view graduates' preparedness to work and which skills are deemed as deficiencies (Snyder, 2019).

Primary data collection was done with the use of interviews, which are more flexible as compared to structured interviews and not very rigid like the unstructured ones. This format is chosen deliberately on account of its ability to provide sufficient freedom for probing into the extent of employers' perceptions of the threat while offering enough framework to maintain variation in consistency across interviews (Browne et al., 2019). The questions aspect ensure that the employers are asked questions that will make them delve deeper into their opinions on the missing skills that they find among graduates, the way these gaps affect performance and the role that they expect from the institutions in preparing students for job markets better. The structure of the specific interview questions will also be such that each interview will last 25 to 30 minutes, but the respondents will be allowed to introduce and discuss additional concerns that they deem important and relevant to the topic being discussed.

The employers of technology-based companies, business corporations, health care, chemical, IT and civil engineering firms, etc., will be selected to make the results generalisable enough. Moreover, various big businesses and SME employees were targeted to obtain a distinct organisational demand and insight. Lastly, the varying regions in the UK will also be considered since participants will be recruited from different regions to observe possible regional differences in the required skills and educational results. The **thematic analysis** method was applied in the process of data analysis and systematic analysis of the collected materials. It consists of several stages, starting with the transcription of the interviews, the subsequent reading of the content to get to know the data slightly better and the preliminary listing of ideas (Fellows and Liu, 2021). This is then followed by data coding systematically, where data about each code is grouped. These codes are then considered and clustered into potential themes and developed and connected to construct an intelligible pattern. The last part of the process is about defining the last themes and giving them a proper name for which they will be used for constructing the final report to describe the relationships between the empirical findings, the research questions and the prior knowledge (Clarke and Braun, 2017).

Therefore, the study uses **purposive sampling** to identify participants who are knowledgeable about hiring and managing fresh graduates. This method helps ensure that the collected data corresponds to the gaps employers are observing and is rather detailed. This will involve approximately 20-30 participants who will be purposefully recruited to the extent that thematic saturation is reached, which means that no new information is being identified in the data, making the study outcomes as comprehensive and detailed as possible.

To all participants, receiving informed consent is important. It included explaining the reason for the research, the kind of information being gathered, how the data will be utilised, and there as participants' rights and independence to pull out of the study at any time with no reprimand. Privacy and confidentiality will be highly respected, with all data of the patients stripped of their identification details before analysis is done (Arifin, 2018). The study avoided any form of coercion for participation; employer participants will come in out of their own free will, and invitations to participate in this study will be made using professional connections in the business field. The ethical permission of the relevant institutional review board will be applied to confirm that all the intended activities correspond to the ethical norms obligatory for human research.

Results and analysis

After collection of data, thematic analysis is conducted, and the following themes have emerged.

Theme	Sub-theme
Deficiency in practical skills	Technical skills gap Soft skills shortfall
Insufficient preparation by higher education institutions	Curriculum relevance Partnership gaps
A mismatch between graduate realities and employer expectations	Expectation-reality disparity Evolving industry needs
Challenges in recruitment due to skill gaps	Lengthened recruitment processes Increased training costs
Recommendations for enhancing graduate employability	Curriculum improvements Strengthening industry-education collaboration

Deficiency in practical skills

The lack of practical experience and technical and interpersonal skills is prevalent in transitioning from educational contexts to workplaces. Managers in different industries stated that the practical experience of properly using the necessary equipment and applications is absent (Ramadi et al., 2016). It adversely affects the level of productivity of newly employed specialists in the short term. This indicates not only the failure of skills that the various individuals should possess but also a major problem within the education systems where organisations have emphasized theory. In contrast, practical skills vital for the job market are being sidelined. A participant said:

A common theme we have seen in our candidates is that they are not well familiar with standard software used in the industry even though it is crucial for daily work; for example, IT department graduates are sometimes not well versed in programming tools and software, which we consider basic knowledge.

Another participant mentioned:

'Our sector involves the use of software such as Computer-Aided Design (CAD), Math Works MATLAB among others, skills which graduates possess theoretically but cannot practice due to practical constraints hence entail a time and money consuming training process.'

In addition, the deficiency of soft skills, such as communication, teamwork, and problem-solving skills, is worrisome because these are among the most important competencies needed when working with others in the modern workplace. Moore and Morton (2017) explained that the lack of communication skills, conflict resolution skills or presentation skills poses a serious threat to the interaction process and the overall success of the project. This gap means the current educational curricula should include more complex soft skill training reflecting actual-life interactions and conflicts.

Insufficient preparation by higher education institutions

By analysing the employers' comments regarding the curriculum's relevance, it is possible to identify the gap between the academic programs and the needs of the business world. Organisations' academic programs remain isolated from the dynamic technological and operational

environments that define today's dynamic organisations (Pang et al., 2019). This has not only affected the employment status of the graduates but also burdened the companies to do training exercises to cover for these lacks. An interview said that:

Employer representatives identified that the curricula appear to be out of date with current industry practices, with little practical application of concepts even though there is a good deal of theory covered: 'a considerable deficit in terms of the level of preparedness for entering the workforce.' These are the employer representatives' concerns about the curricula and the preparation of the graduates for the workforce.

A university career services director shared:

'We have some relationships with local firms, but they are mostly not as comprehensive as we would like them to be,' Said one of the participants, 'These need to be richer, more embedded and reciprocal so that ideas can be continually fed back into the curriculum.'

This is worsened by the lack of sound relationships between educational institutions and industries that would provide a solid base for such programs. Sarkar et al. (2016) presented that although some attempts have been made to draw linkages, these linkages are not well-developed and do not sufficiently inform curriculum practice. Cohesive collaborations are essential to guarantee that educational programs adapt to the market's requirements while educating students on real-world practices early enough.

A mismatch between graduate realities and employer expectations

The gap between the employer's expectations and what the fresh graduates can offer reveals a significant problem when getting workers into the labour market. Employers expect the graduates to possess a certain level of 'work readiness', which means coming to the workplace with a fully equipped skill set that should enable him or her to perform the tasks assigned (Cappelli, 2015). However, the picture painted from the employers' side indicates that many graduates are deficient in some basic competencies, especially coping with organisations' dynamic and ICT-based environments. A participant replied that:

'It is not uncommon for graduates to expect themselves to be placed into various positions with little training needed because they studied the theory, and that is enough though they lack the

practical skills, especially in the rapidly growing technological companies. This leads to a misplacement and then requires many training sessions, which are sometimes impossible.'

This is due to many reasons, such as curricula that are out of touch with current trends, a lack of emphasis on practical skills in academic institutions, and many graduates who are new to the workforce. In addition, the ever-changing social environment where graduates operate makes it possible that some of the crucial skills today may not have been as essential when the current graduates enrolled in their study programs. This means the current education structure should be changed to fit market demands. An interviewee said that:

“The level of responsibility of a new employee is expected to perform simple acts of project management and interact with clients as soon as he or she joins the company, but what we have discovered is that most graduates lack the necessary qualifications to assume such duties and therefore need much training than is required, hence slowing down the company’s progress.”

It is important to note that such an expectations-reality gap reduces the output that such new hires can generate and hampers their career growth and job happiness in the long run. There is always a need for employers to make large investments of time and money in training and developing their employees in a bid to close these gaps (Osmani et al., 2015). For the graduates, this gap causes frustration and feelings of inadequacy in academic preparation for the job market might negatively impact the morale and development of the graduates.

Challenges in recruitment due to skill gaps

Academic skills create a lot of challenges in the recruitment exercise. Some of the things employers pointed out include the fact that it was difficult to find people with the right skills as required in the job specification; hence, the time taken, and money spent on recruitment has gone up. This explains why more graduates are recruited, but adequately skilled graduates are limited; companies spend more time conducting interviews and tests to get the right candidate (McMurray et al., 2016). This puts pressure on the available resources and hampers the process of acquiring essential talent to run the business. A participant said:

The skill gaps considerably enhance the duration of our recruitment process. In some instances, several interviews and even aptitude tests must be conducted to confirm whether or not the

candidates are capable of executing the tasks that they are to be hired for. This becomes time-consuming and expensive for us. "

However, relative skill deficiencies do call for a bigger investment in employee training and development, as was discussed earlier. This requirement can discourage employers from considering fresh graduates for the job and instead prefer candidates who are more experienced and, hence, can deliver their duties without having to undergo long-term training (Suleman, 2018). This trend can further compound the difficulties that graduates face in the job market today, which results in a cycle of underemployment and skills degradation. An interviewee said that:

Identifying candidates who are genuinely 'job-ready' has become a real challenge. The company often has to bring in candidates who lack specific skills but have the potential to learn, which then leads to the need to conduct further training after the candidate has been hired.

Recommendations for enhancing graduate employability

It is, therefore, important for educational institutions to ensure that they incorporate these technical and soft skills, which are in vogue in today's world. This could be done by constantly consulting with the industry players on the current demand for skills in the labour market. Furthermore, the use of real-life features, such as case studies and practical assignments in the curriculum, enables students to acquire professional experience. Ng et al. (2021) explained that enhancing career and employability skills support offered within university-based career services is also crucial. It would prepare the students with resume writing, job interviews, and job search skills to facilitate students' transition from studies to work. A participant said that:

"I believe that universities should update their curricula more frequently than they are already doing, and perhaps incorporating more real-life projects and industry internships with companies such as ours could make the difference in preparing the students better for what they are likely to encounter in the industry."

Also, there is a need to adapt to the fast-changing job market by promoting continued learning throughout one's career. Schools should insist that graduates continue with their professional development activities through workshops, online courses and certifications. A participant said that:

"It is high time that educational institutions started adopting technology in their teaching mechanism, such as online interactive environments that provide scenarios of real-life situations or virtual set-ups can provide the actual working experience to the students who actually make them much more desirable to employers such as us."

Another area that can be of huge importance in practice is the application of such technologies as virtual reality and web-based learning platforms to replicate real-life working situations and develop flexible skill-oriented training. Such involvement from the government and policymakers in the form of funding, incentives and friendly policies can go a long way to enhance the ability of educational institutions and businesses to collaborate (Succi and Canovi, 2020). All these strategies compiled try to synchronise the educational outputs with the demands of the market and to prepare graduates for today's world of work.

Conclusion

The present study, aimed at investigating the skill gap between fresh graduates and employers in the context of the UK, has considered and revealed several significant findings and/or implications for the stakeholders, particularly higher education institutions and industry. This study thus involved conducting interviews with stakeholders in various relevant sectors to ascertain the shortage of technical and necessary soft skills as major deficiencies between the education outputs and industry demands. These observations are a stark pointer to the fact that it is high time that curriculum developers made practical training and application of knowledge alongside academic work a norm.

It was found that while graduates are knowledgeable in the basics of their respective fields and concentration, their applied skills to make a positive work impact from the time of joining a company are undeveloped. This not only hampers the productivity of organizations but also puts the onus on employers to provide further training for their workforce. The difficulty in recruiting these graduates, coupled with unmet employer expectations, elongates the recruitment process and makes it more expensive, underscoring the severity of the issue.

There is a strong indication that collaboration between academia and industry should be stepped up to bridge the skill gap. This partnership should ensure that the curriculum is constantly updated,

and teaching methods are in harmony with current industry requirements. Increasing the scope of career services and the development of university employment services can efficiently link the educational process and work experience, further emphasizing the need for collaboration. The findings of this study provide recommendations that can be utilised to build a competent generation of qualified professionals for the job market and thus can enhance the economic and social development of the United Kingdom.

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Appendix

Interview Questions

1. What are the specific soft and technical skills that immigrants believe new holders are direly missing once they join the job market?
2. In what way does the lack of such skills affect your team's efficiency and your organisation's ability to change?
3. From your point of view, how well-prepared do students in the institution of higher learning in the United Kingdom prepare students for your industry?
4. In your opinion, how do the skills that fresh entrants possess relate to the skills that are ideal in your industry?
5. What incidences of skills have you noted that pose difficulties for you in the recruitment process?
6. Can you also give some examples as to what has, in your opinion, helped institutions in the preparation of students for the workforce?

7. Given the above observations, what advice can you give educational institutions to help prepare their learners for today's business organisations?