

The Case for a New, National Assessment System

Introduction

The coronavirus pandemic has highlighted deep cracks in the UK's higher education (HE) sector. Yet, as of 2019, there have never been more UK students going to university. Concerted efforts made by successive UK governments to increase participation in HE since the 1990s, have been predicated on the assumption that it holds – in the words of Tony Blair – the '*key to success*'. It was declared that improved employability and social mobility would lead to a stronger economy. While efforts to expand higher education in the UK have been extremely successful, it is less clear that the anticipated gains in social mobility and economic prosperity have been realised.

In spite of the expansion of the UK higher education in the second half of the twentieth century, the GDP growth rate remained consistent at around 2.5%. With regards to social mobility, in 2018, an OECD report found that almost one third of graduates in England and Northern Ireland occupy non-graduate-level jobs, five years after completing their degree. The OECD's Director of Education and Skills, commented that, '*when you test the skills of [graduates] you actually see that [many] don't have the kind of skills that would be associated with a university degree*'. For around 25% of graduates, the income uplift from their degree is low to non-existent, and it is estimated that between 40-45% of the value of UK tuition fee loans will never be repaid. Despite the fact that a continued average salary uplift for graduates has allowed the UK government (and, indeed, the OECD) to affirm that a UK degree is still a 'worthwhile investment', this report's authors conclude that for many graduates, it is not. This report addresses why that is. A subsequent report, due for publication by end March 2022, shall offer a compelling vision for a far brighter future for education and assessment.

Poor graduate outcomes are harmful to almost every actor with a stake in the recruitment and employment of our nation's young people – but particularly disadvantages less-privileged graduates, non-graduates, and employers.

Indistinguishable qualifications are harming less-privileged graduates

The weakening currency of higher education credentials in the job market has led to the rise of alternative and unregulated indicators of graduate competencies. Beyond a university degree, the various unofficial proxies commonly used to assess a candidate's skills and suitability are rarely equally accessible or meritocratically distributed. As individuals mobilise whatever forms of capital are available to them to gain

positional advantage over their peers, those with the most economic, social or cultural capital tend to prevail.

Much has been made in recent years of the increasing number and unfairness of unpaid internships, which are inaccessible to the vast majority of students. Even where internships or work experience are paid, such positions are extremely competitive and often based in economic hubs such as London or Manchester, where the cost of living is prohibitively high. While 62 percent of employers in London offered internships, only 31 percent of employers in the East of England did the same. Undergraduates often seek a second or master's degree from a prestigious university to help them stand out from the crowd but attendance at any of the UK's 'golden triangle' universities means living in one of England's most expensive cities and spending thousands on the degree itself.

While graduates can expect to earn £10,000 more on average than non-graduates, demographic attributes were found to have an almost equal impact on graduate earning potential; with male graduates earning an average of £9,500 more per year than female graduates, and white graduates earning £9,500 more per year than black graduates. Similarly, a 2017 IFS study found that male graduates from the top 20% of households for income earned £8,000 more per year on average, 10 years after graduating, than graduates from the other 80%. The equivalent figure for female graduates was £5,300 per year.

The surplus of graduates is penalising non-graduates

As up to a third of graduates compete for non-graduate level positions, a 'top-down' poaching of non-graduate, non-vocational jobs is inevitable. From the perspective of employers and recruiters, many suitable candidates who do not possess a university degree appear less qualified alongside their graduate competitors – even for jobs which do not strictly require an undergraduate qualification. The surplus of graduates in the labour market appears to employers to represent a 'cost-free' supply of highly-qualified candidates. Thus, employers and recruiters have traditionally supported the expansion of higher education, and adjusted the job requirements of many positions upwards, in line with degree inflation. With this dynamic at play, perfectly competent and otherwise suitable non-graduate candidates may find themselves excluded from jobs which, just a few decades ago would not have required a degree, as employers are now recruiting from an exclusively graduate-level pool. This is despite the fact that, in the vast majority of cases, the actual skills and competencies required to carry out such work have not changed.

Research shows that while young people wish to attend university for a variety of reasons (not least the 'university experience', which our country's unusual residential HE system affords), there is significant awareness among school leavers that higher education is a necessary, defensive expenditure. Thus, many

young people are investing a lot of time and money in higher education, to ensure access to job opportunities, without the hope or expectation of any significant uplift in income or career progression.

Indistinguishable qualifications have led employers to administer their own assessments

Employers, faced with a cohort of identically qualified candidates with varying underlying degrees of competency, are placed in a position of inefficiency and uncertainty. Employers have sought other indicators of, or means of assessing, exploitable skills – such as internships, work experience, or the reputation of the institution attended – in the full knowledge that such opportunities are not fairly accessible and may lead them to select a less worthy candidate. Alternatively, they may decide to invest in complex and more meritocratic, in-house recruitment systems.

Many of the UK's largest graduate employers are utilising verbal reasoning and situational judgement tests in order to more accurately assess candidates' skills; some are pioneering new assessment processes incorporating the latest technological advances, such as Accenture's 'Virtual Reality Assessment'. Recruitment processes among the top 10 graduate employers of 2019-20 include: online tests and questionnaires; pre-interview in-person assessment sessions; educational and career guidance resources; and interactive tools to feedback candidates' personal suitability for given roles.

While such schemes reveal a commitment to meritocracy and equality of opportunity amongst the large graduate employers, only the very biggest companies have the resources to invest in such robust systems. These skill- and attribute-based recruitment systems are a boon to many candidates, who have few other opportunities to differentiate themselves in the labour market, but the competition for roles in these top employers is extremely fierce. The application processes are time-intensive yet unsuccessful applicants will crucially be left with little to nothing to show for their efforts. Indeed these experiences can be debilitating and expensive with no gain, other than experience, for the considerable majority of candidates.

Indistinguishable qualifications are harming less-privileged graduates, increasing job competition for non-graduates, and leading employers to administer their own assessments of candidate suitability. It seems high time to consider whether a more informative, effective, and authoritative method of assessing the skills and competencies of graduates might be possible.

A proposal for a new form of national assessment

It is proposed that a new, national online assessment system, capable of presenting a detailed profile of a graduate's skills, knowledge, aptitudes, and character, should be made available to everyone wishing to

enter the labour market. Such a system would offer HE graduates and non-HE graduates alike the opportunity to highlight the unique value that they offer to employers. Employers would be at least partially relieved of the burden of administering in-house assessment processes and would find it easier to find suitable candidates. An authoritative and centralised assessment system would allow smaller employers, as well as larger employers, to benefit from a more accurate assessment of a prospective employee's suitability.

The content of such an assessment system would accommodate the needs of recruiters and employers, and could offer several, individual tests from which candidates and employers could 'mix and match' to create a tailored personal profile/ set of requirements. The system would have the capacity to test for the 'basic skills' as well as give an accurate and detailed picture of the individual's competencies in specific areas. Competencies such as: written and oral communication skills; the ability to work without supervision; critical thinking; team-working skills; and the ability to think innovatively; are all, according to a 2010 study, considered by employers to be desirable attributes of higher education graduates.

The designers of a new assessment process could conduct a comprehensive evaluation of existing assessment methods, in order to select and improve upon the most effective means of evaluating candidates' abilities. The assessment system could also be expanded to host tests for more personal or presentational attributes, such as the Myers Briggs personality test, or similar 'psychological' categorisation tests. If a new assessment process is to succeed in its aim of reducing the impact of inequalities for young people entering the labour market, it may be necessary to incorporate systems that aim to mitigate the impact of existing inequalities – such as socioeconomic background, or neurodiversity – upon the student's outcomes. The assessment system would be designed to be flexible and adaptable, recognising the dynamism of the labour market and be subject to continual review by educational experts and psychologists.

The system should be trusted, authoritative, secure, and flexible. Candidates should be able to show or hide results from their personal profile, in order to highlight their strengths and decline to reveal a particular result even if an employer had requested it in a job application. Potential employers could dictate the minimum 'results' that candidates should reveal. Job seekers could elect to undergo an assessment of an aptitude with particular relevance to a prospective vacancy. In the event that a participant does not perform as well as they hoped, it would be necessary to allow them to retake certain assessments at intervals – perhaps with the option to display their improvement, as well their final results. By having one authoritative system that could assess any number of skills or aptitudes, any assessment 'grades or results' would be portable between employers, and one assessment system would be suitable for all job applications, all job applicants, and all employers.

Establishing a national, online assessment system would benefit many

Whilst the primary aim of such an assessment system would be to allow participants to showcase their strengths, a thorough knowledge of personal preferences and weaknesses, is also extremely valuable to young people entering the workforce. The system would objectively inform the candidate about their skills and attributes, such as situational judgement and critical thinking, as opposed to only grading them on their knowledge of a subject. The system could offer educational or career guidance resources to help candidates better understand and utilise their unique profile. The system could even be combined with a recruitment portal, suggesting suitable jobs and opportunities to candidates, based upon their profile.

A national online assessment system, whilst being proposed for use in Scotland, would be highly replicable and would lend itself for rapid deployment in other nations of the UK.

Whilst being described as a tool to aid school leavers and graduates, the tool could be of equal value to older people wishing to change careers but who lack an authoritative account of their transferable skills and knowledge. According to several surveys conducted since 2016, anywhere between 47 percent and two thirds of the UK's working population have aspirations to change their career path, while, on average, only around 9% of people changed jobs each year, between 2000 and 2018. The proposed system, in affording candidates the opportunity to learn about their own strengths, preferences, and thus suitability for different careers – as well potentially facilitating their recruitment – could be extremely useful in addressing this disparity, and improve career satisfaction for many.

Machine learning could be used to analyse the entirety of candidates' interactions with the system, and reveal hitherto unrecognised aspects of learners and the educational system. For example, in a timed verbal reasoning test, it would be valuable to know how many times a candidate read a question before answering. Even how often a candidate interacts with their profile could, if supported by sufficient research, be used to draw conclusions about the candidate's attributes, which they could then choose to display. Particular educational approaches could be supported or debunked with more accurate and consistent data and larger data sets. However, it is essential to note that if the assessment system were to branch into these more innovative areas, the candidates should have full, clear and explicit knowledge of the ways in which their data would be used, and be able to easily opt out of such data collection, if desired.

Ethical considerations for a new system of assessment

The establishment of such a system of assessment would undoubtedly raise a number of profound ethical considerations; ultimately, these would be for society to deliberate and agree upon.

At the outset, it would seem that an individual and protected online profile would be an essential requirement. The participant would be able to show or hide their results in certain skills and attributes, before providing their prospective employer with a personalised link and passcode to access their individual profile. The system must also be secured against being gamed. As an online assessment process, gaming the system might naturally be a concern to both participants and employers. However, as we continue to conduct more and more of our business online, security solutions such as live, photo- identification and multiple- factor authentication have become commonplace, and it is likely that many such existing technologies could be adapted to minimise the risk of cheating or fraud on the platform. Indeed, the very fact that significant resources could be directed into preventing such abuses if necessary, is a unique benefit of a centralised and independent system.

Conclusion

After decades of higher education expansion, the UK higher education system has substantially weakened the currency of undergraduate qualifications; leaving a vacuum into which ineffective and unfair proxy measures have been drawn, and disadvantaging many stakeholders in the recruitment and employment of young people. The current situation is entrenching inequalities; harming a significant portion of higher education participants; and making it more difficult, expensive, and unfair for recruiters to select appropriate candidates from the perpetually expanding graduate pool.

A centralised, authoritative assessment system, capable of presenting a comprehensive and objective picture of a candidate's skills, knowledge, aptitudes, and character, would provide a much-needed meritocratic path to improved career outcomes for both graduates and school-leavers. In reducing the financial and administrative burden upon large graduate employers and offering accurate assessments to small employers too, employers would be better supported. There would be many beneficiaries of the new assessment system. There will also be substantial ethical considerations for society to address.

Note about the authors

The report was initially written by Andrew Paterson and Rachel Cairns.

Rachel is a first class honours degree graduate and was Senior Executive Officer of The Iris Initiative at the time this report was written. Rachel is now working as a Press Officer at The Scottish Parliament.

The report was subsequently edited by Andrew Paterson and Niall Dolan to accommodate opinions developed from improved knowledge arising from research undertaken by Niall about aspects of Artificial Intelligence.

Niall is a first class honours and masters with merit degree graduate. He was for eight years the Chief Executive Officer of The Iris Initiative, a Scottish registered charity set up to encourage dialogue about personal and societal values. Niall is now working as a freelance report writer.

Andrew Paterson is a retired former CEO, Chairman, NED and entrepreneur in the Oil and Gas sector. He is the principal architect and the sponsor of the report.