



**Proceedings of the 4th HEA Forward-Look Forum:
Skills, Employability and the Post-Secondary Sector: What is the Role for Higher
Education?**

**11th November 2015
Auditorium, St. Patrick's College, Drumcondra, Dublin 9**

Introduction

The HEA Forward-Look Forum, 'Skills, Employability and the Post-Secondary Sector: What is the Role for Higher Education?', was convened at St. Patrick's College, Drumcondra on 11th November 2015 to examine the role of higher education in responding to the demand for graduates, in addressing skills shortages in the short term, and in meeting societal and labour-market requirements in the long term. The Forum was the fourth in a series of fora which the Higher Education Authority is hosting bi-annually to provide opportunities for forward-looking and disruptive thinking about the future of the sector amongst key stakeholders, thereby enhancing the policy-making capacity and capability of the Irish higher education community. Cognisant of the global context within which Irish higher education operates, and of Ireland's potential to emerge as a strong player within the 'knowledge society' of the twenty-first century, the fora aim to support the cultivation of fresh, long-term perspectives on topical, cross-cutting themes through inclusive, participatory, and action-oriented discussion and debate.

The fourth Forum brought together representatives from across the higher education sector, the education sector more broadly, industry and the government to examine the challenges faced by the higher education sector in responding to skills needs and to explore how best to address these, providing an opportunity for the leadership of Irish higher education to develop its collective vision. Keynote addresses were provided by Ms. Amy Laitinen (Director for Higher Education, New America) and Professor Ewart Keep (Chair in Education, Training and Skills and Director of the Centre on Skills, Knowledge and Organisational Performance, University of Oxford), to which Professor Seamus McGuinness (Research Professor, Economic and Social Research Institute) and Dr. Mary-Liz Trant (Executive Director, Skills Development, SOLAS) respectively responded. In addition two four-member panels, comprising representatives drawn from across Ireland's education, training and recruitment sectors, as well as from industry, debated the topics under consideration.

It is clear that, internationally, the higher education sector has a key role to play in meeting the skills needs of the wider economy and society, and that this is a policy-priority for many countries. That in Ireland in the mid-twentieth century concerns were raised about the introduction of free secondary education, which it was feared would diminish the pool of unskilled labour needed for agriculture and industry, illustrates the extent to which policy-makers face a challenge in predicting emerging skills needs. School-leavers currently studying in higher education will be active in the workforce for the next 40 years, during which time



the pace of change is likely to be rapid. In the skills forecast for Ireland to 2025, the European Centre for the Development of Vocational Training (CEDEFOP) has predicted that, over the next 10 years, the Irish economy will need an additional 600,000 highly skilled employees.¹ Since approximately 40,000 students currently graduate from higher education institutions each year, a proportion of whom emigrate or do not enter the workforce, this represents a significant challenge for the sector. As the Irish economy emerges from a recession that has resulted in a significant decline in Exchequer funding for higher education, ensuring continued responsiveness to the growing skills needs of the recovering economy will pose a particular challenge for higher education institutions. We therefore need to consider how we will meet the country's skills needs across all areas of the economy over the next decade, and how we will ensure equity of access to higher education to provide equal opportunities for all members of society.

Many questions have been raised about the value of higher education, the work-readiness of graduates and the relevance of their skills to the world of work, and about whether over-education is becoming a problem. Whether higher education provision should be focused on specific disciplines, or whether the challenge is to ensure that all graduates are broadly employable within the economy, are also questions which need to be considered.

Managing supply and demand in higher education and for the labour-market

Amy Laitinen (Director for Higher Education, New America)

The question of how higher education can best meet the needs of nations' economies is a global concern in respect of which common challenges emerge across borders. Globally the pace of technological change is rapid and is driving skills needs. Consequently individuals' credentials are of increasing importance, and in the U.S.A obtaining qualifications is increasingly costly, focusing students' minds on the economic return on their programme of study. The economic return on state expenditure on higher education is being scrutinised, and the fundamental purpose of higher education is being re-examined.

Increasingly graduates' skills are under the microscope, with research published by the U.S.A.'s Department of Education in 2006 indicating that 70% of graduates have a poor level of literacy, numeracy, and technological literacy. The results of the OECD's 2012 Survey of Adult Skills (PIAAC) showed that in Ireland 60% of those with post-secondary education and 32% of those with a bachelors' or masters' degree failed to achieve baseline levels of literacy and numeracy.² This suggests that there is a need not merely to provide more education, but to re-focus existing educational provision on the attainment of skills.

In the U.S.A. a recent survey showed that, while only 11% of employers think that colleges are performing well in preparing graduates for the world of work, 96% of university-officers

¹ See European Centre for the Development of Vocational Training, 'Ireland: Skills Forecasts up to 2025' (2015), <http://www.cedefop.europa.eu/en/publications-and-resources/country-reports/ireland-skills-forecasts-2025>.

² See OECD, 'Skills Surveys: PIAAC', <http://www.oecd.org/site/piaac/>.



think that this is the case—a very marked difference in perception. While employers are seeking specialist skills they are also looking for graduates with generic core competences, such as the ability to write, think critically, and communicate. Meanwhile academics tend to cleave to the view that tailoring higher education provision to meet employers' needs is vulgar and instrumentalist, focusing on the value of studying the liberal arts as essential to having a good life. With most students entering higher education with a view to enhancing their employability and earnings, it is imperative that we acknowledge that there is a problem and consider how to address this. In particular it should be recognised that the provision of higher education in the liberal arts is of varying quality, with individual instructors rather than institutions setting students' learning outcomes in the U.S.A.. There is a clear need to ensure, not only that the skills needed within the broader economy are taught, but that they are *learnt* by students. Strengthening data-collection on the assessment of students' learning-outcomes and on graduates' employment-outcomes will help to address this issue, ensuring greater transparency in respect of higher education institutions' performance. There is also a need for greater dialogue between higher education and industry to ensure institutions' responsiveness to emerging skills needs.

The College for America at Southern New Hampshire University offers associates' degrees which focus on the development of foundational, interpersonal and business skills. Developed in consultation with employers, these degrees are earned by mastering 120 competences through project-based work and are offered on a flexible basis with a view to catering specifically for working adults. With tuition fees of \$2,500 *per annum*, these courses are affordable and enhance students' employability.³ This successful model is being emulated by many colleges in the U.S.A., presenting a significant challenge to the continued viability of graduate schools. The rise of massive open online courses (MOOCs) and the increasing availability of online higher education—either free-of-charge or at a much lower cost than campus-based provision—are also challenges to the hegemony of the traditional university. With the increasing usage of professional networks such as LinkedIn and of online platforms for the self-accreditation of skills, such as Degreed.com, employers are becoming more concerned with prospective employees' skills rather than with their qualifications, creating a strong imperative for change within higher education.

Professor Seamus McGuinness (Research Professor, Economic and Social Research Institute)

There is a need to foster a strong connection between higher education and the labour-market in Ireland, and to improve data-collection on Irish graduates' employment-outcomes. At present there is a paucity of data available on this within national datasets—a deficit in the evidence-base that is exacerbated by the fact that Ireland has not participated in key international comparative studies such as the REFLEX survey of higher education graduates.⁴ By comparison with other European countries, we are therefore poorly informed about the mismatch between graduate-supply and labour-market demand in Ireland at present.

³ See <http://collegeforamerica.org/adult-education-degree-programs/associates-degree/>.

⁴ See <http://roa.sbe.maastrichtuniversity.nl/?portfolio=reflex-international-survey-higher-education-graduates>.



Yet despite the high demand for skilled and experienced graduates, over-education is a problem in Ireland, indicating a clear disparity between the labour-market demand for graduates and the graduate-output from universities. Those who are over-educated for their job incur (on average) a ~15% wage-penalty and experience less job-satisfaction by comparison with their similarly educated peers. The Economic and Social Research Institute (ESRI)'s mapping of PIAAC data shows that, while over-education is declining in some countries and is at a stable rate in others, in Ireland it has steadily increased over time; and that Ireland now has one of the highest levels of over-education in Europe, second only to Spain. While the concept of 'over-education' is a statistical artefact, the low job-satisfaction and low-pay which are attendant upon it are serious issues for the individual and society. The available data shows that there is no cyclical element to over-education, but rather that it is a constant trend, and also suggests that young women in the arts, humanities and social sciences are the most likely to be over-educated.

A number of factors could be contributing to the problem of over-education, such as graduate-numbers exceeding employment-vacancies, communication problems in the labour-market, and decision-making by graduates who choose to take a less demanding job in order to maintain a work-life balance. Increased flexibility in recruitment on the part of employers might have a role to play in addressing the problem. Nevertheless, analysis undertaken by the ESRI and CEDEFOP of data on the 28 EU member states shows that over-education only accounts for approximately 50% of the wage-gap between workers with equal levels of education.⁵

While over-educated workers tend to lack work-experience and to be in jobs that do not require high levels of literacy or numeracy, those who are more successful in the labour-market tend to have a good understanding of the skills which employers require. Evidence suggests that over-education is a greater problem in certain sectors and in smaller firms, and that a person who is mismatched in their first job is likely to experience continued under-employment. Those who obtain employment through university careers offices or work-place programmes have the best outcomes while those who obtain their position through the public employment service, through agencies, or through family and friends have the worst outcomes.

Higher education institutions have a role to play in addressing the problem of over-education by ensuring that graduates acquire the skills which employers need and by expediting the transition from education into employment. Employers have a role to play in reducing the constraints on entry to their businesses, especially given the challenges inherent in seeking to predict future skills needs.

⁵ See <http://www.cedefop.europa.eu/en/publications-and-resources/statistics-and-indicators/statistics-and-graphs/esisurvey-insights>.



Professor Andrew Deeks (President, University College Dublin)

There are dangers attendant upon considering university graduates as a homogenous group. The history of universities has been strongly influenced by the Oxbridge model, but today higher education has a binary structure reflected in Ireland (with the coexistence of the universities and institutes of technology) and in the U.K. (with the so-called ‘new universities’ which were granted university status in 1992 coexisting with traditional universities). Accordingly there are now many undergraduate degree courses which are professionally focused, reflecting the vocation remit of the former regional technical colleges (in Ireland) and polytechnics (in the U.K.). Universities have always offered specialist professional courses in areas such as medicine, veterinary medicine, and engineering—courses which entail a high level of engagement with employers and which lead to professional accreditation. However these are of an entirely different nature to the degree courses provided in the arts, humanities and social sciences. Today universities deliver courses across the entire spectrum, with a wide range of vocational degrees on offer, many with some form of professional accreditation. However other courses are not so well-defined and have only vague accreditation—particularly those in areas also offered by private providers. There is a question mark over whether engagement between a higher education institution and employers is appropriate in general science degrees and in the arts, humanities and social sciences. This would, for example, raise the question as to which employers universities should engage with in the development of curricula for degrees in philosophy and history. There is therefore a need to recognise that higher education institutions have a dual mission.

Given that the skills needs of the economy are continually evolving, and given the time-lag between an individual student’s selection of a course at the end of their secondary education and their graduation, there is only a limited amount that higher education institutions can do to respond to short-term labour-market demands. In some countries shortages of skills are addressed through immigration policies and through controlling the number of places on courses within higher education. However civil servants are no more able to predict graduate-demand in the broader economy than higher education institutions, and attempts to do so are inherently risky. Accordingly the decision as to what programme of study should be pursued is a matter for the individual student, and this should be respected. The importance of the link between teaching and research in higher education should also be acknowledged as students develop the transferable skills which employers demand by working with researchers in research teams. Within this context, the rise of online higher education is arguably a cause for concern as, while it supports students to learn about a topic, it does not support them to develop the leadership and team-working skills needed in the work-place.

Richard Eardley (Managing Director, Hays Ireland)

In partnership with Oxford Economics, Hays publishes the annual Global Skills Index, which shows that Ireland has a very high level of ‘talent mismatch’ between the skills that businesses



are looking for and the skills which are available in the labour market.⁶ While medium-term and long-term planning is a challenge given the nature of economic cycles, employers could do more to engage with the education sector and to communicate more effectively the nature of their businesses. Employers require a breadth of education and skills, including ‘soft skills’, among which the ability to collaborate remotely across countries and time-zones through technology is of increasing importance. Accordingly online education has an important role to play in meeting future skills needs.

Una Halligan (Chair, Expert Group on Future Skills Needs)

Ireland’s Expert Group on Future Skills Needs (EGFSN) was established in 1997 at a time of full employment to advise the Government of Ireland on the current and future skills needs of the economy and on other labour-market issues which have an impact on the country’s enterprise and employment.⁷ In today’s more febrile economic climate, the work of the Expert Group is of even greater importance. That there is greater collaboration between higher education institutions and multi-national companies than there is with indigenous Irish firms is a problem which needs to be addressed through broader higher education–industry engagement. Higher education institutions need to cultivate greater awareness of employers’ skills needs, which generally encompass ‘soft skills’ and often a requirement for foreign-language skills. While emphasising the value of obtaining a degree, there is also a need for improved communication with young people to raise their awareness of the breadth of career opportunities available in today’s labour market. The potential of many indigenous Irish companies to expand internationally is not realised because of the shortage of graduates with fluency in foreign languages.

Professor Brian Norton (President, Dublin Institute of Technology)

We need to ensure that students make an informed choice when selecting their course of study in higher education especially as, in Ireland, there is still not parity of esteem between traditional university courses and professional courses. Ensuring that the higher education sector comprises a diversity of institutions is crucial to meeting all students’ needs. While it has been acknowledged that the concept of ‘over-education’ is a statistical artefact, use of this terminology may nevertheless have adverse consequences for policy-making which use of the more neutral, and arguably more accurate, phrase ‘graduate-talent mismatch’ would avoid. It should be noted that the moratorium on recruitment and salary-reductions in the public sector in Ireland in recent years have exacerbated the skills mismatch, in response to which we need to develop a strong indigenous industry-base.

Open discussion

It was acknowledged that online higher education provision is of mixed quality, with some supporting remote collaborative working between students and the development of their soft

⁶ See <http://www.hays-index.com/>.

⁷ See <http://www.skillsireland.ie/>.



skills while others merely serve as a conduit through which information is disseminated. The potential of blended learning to address skills needs was also highlighted. The important role to be played by the internationalisation of higher education in meeting skills needs was remarked upon, particularly as many undergraduates who study foreign languages do not attain the level of fluency required by employers. Integrating more international students into Irish higher education will help to address this skills-deficit.

The value of the work of the EGFSN was recognised, although it was acknowledged that it is very challenging for employers to adopt a long-term perspective and to engage with higher education institutions in relation to their skills needs when they may be struggling to keep their businesses afloat. A question was raised as to whether there is an optimal level of over-education which would support economic growth, in response to which Professor McGuinness pointed out that being unemployed is never optimal, adversely affecting employers' perception of individuals as potential employees, and that there are heavy costs associated with over-education.

A question was raised about the policy-implications of the high level of over-education in Ireland and it was suggested that greater focus on students' learning outcomes by higher education institutions might help to address this. It was emphasised that there is also a need to examine the causes of over-education, including the mechanisms through which people enter the labour-market.

Embracing a post-secondary education approach

It is well-established that the supply of skilled human capital is crucial for economic development. Within this context, the interrelationship between higher education and further education is under increasingly close scrutiny and will be strengthened through the new national skills strategy, the development of which is being led by the Department of Education and Skills.

Professor Ewart Keep (Chair in Education, Training and Skills and Director of the Centre on Skills, Knowledge and Organisational Performance, University of Oxford)

While there are different approaches to addressing skills needs in England and in Scotland, in the U.K. debates about skills and employability are often quite dysfunctional, with measures of employability ill-defined and the reciprocal responsibilities of higher education institutions and employers not discussed. Increasingly employers are retreating from their responsibility to train and re-train employees, with the number of training days provided by U.K. employers falling by 50% between 1997 and 2010. This transfers more of the burden of responsibility and cost for upskilling to the higher education sector and to other education-providers.

Nevertheless after years of experimentation and practice, higher education institutions have a good sense of the generic skills required of graduates by the majority of employers, and we know how we can support students to acquire these skills across the broad range of



disciplines taught. Research suggests that the employability of graduates can best be fostered within higher education through activities that enable students to develop team-working, communication, and problem-solving skills on the one hand, and through high-quality work-experience on the other. Employers' principal criticism of young people entering the labour-market at all levels is their lack of work-experience. Addressing this problem and ensuring that graduates are work-ready requires employers to step up to assist with the provision of work-placements for students.

However the longer-term challenges of ensuring the employability of graduates lie elsewhere. Many of the complaints about the lack of work-readiness of graduates voiced in surveys of employers are rooted in employers' unrealistically high expectations: they demand graduates who are job-ready for a specific job in their organisation. This is deeply problematic because it sets up providers of education to fail, unless the course of study is a tailored, company-sponsored programme. It is rational and economical for employers to seek to reduce the amount of initial training of new employees which they need to undertake, and to seek to transfer this burden onto the publicly funded education system. Employers have also become accustomed to finding that governments respond to their needs, usually through the expansion of further and higher education. However this has led to the emergence of the full-time, 3-year bachelor's degree as the default option for 18-year-olds, while the development of other routes into work, such as apprenticeships and part-time study, has been neglected.

In the U.K. 45% of post-secondary students study for a full-time, 3-year bachelor's degree—a high rate of participation in higher education which has been driven by government-targets. Meanwhile the paucity of apprenticeship places has not been addressed. At present only 6% of 18-year-olds in the U.K. obtain an apprenticeship with proportionally fewer participating in apprenticeship schemes in England than in Scotland and Wales. Overall there are many more applicants for each apprenticeship place available in the U.K., with Rolls Royce Aerospace and BT receiving 200 applications per apprenticeship. That it is more difficult to obtain an apprenticeship with these companies than to secure a place to study at Oxford or Cambridge illustrates the imbalance in provision within the education ecosystem. Furthermore, while there are plans to expand sub-degree and degree-level apprenticeship in areas such as engineering and accountancy, the extension of apprenticeships into service sectors has created much short, low-quality provision at secondary level. (By comparison, in other northern European countries, employers play a much stronger role in meeting skills needs.) Employers complain that life-science graduates lack the practical laboratory skills required of technicians because they fail to train their own staff to undertake this work, and the lack of availability of jobs for which such graduates would be well-suited then necessitates their re-training in the further education sector at the expense of the taxpayer.

In the wake of the publication of the OECD's *Skills Beyond School* report of 2014, new national colleges and institutes of technology are now planned in England to provide the sub-degree level professional and technical education once offered by the polytechnics.⁸ However

⁸ See OECD, *Skills Beyond School: Synthesis Report* (2014), <http://www.oecd.org/edu/skills-beyond-school/Skills-Beyond-School-Synthesis-Report.pdf>.



currently nearly all students who are qualified to enter post-secondary education progress to higher education and so there is no pool of prospective students for this planned new vocational education sector. By comparison, Scotland has maintained a stronger sub-degree route for students and a clearer distinction between further and higher education.

There has been an intermittent crisis in respect of the supply of graduates in science, technology, engineering and mathematics (STEM) since the 1970s, which has never been clearly defined. It is argued that we fail to produce enough STEM graduates, and that by encouraging students to study other disciplines we fail them in respect of their future employability. However the reality is that, while the number of STEM graduates has climbed and is on an upward trajectory, in some disciplines less than 10% of such graduates enter professions linked to their degree while there remain skills shortages in other areas.

Across the OECD, governments support the development of pathways within education, but progression routes into and within employment are lacking, with many graduates ending up in dead-end jobs. At the same time the notion that there is scarcity of 'talented' graduates is propagated by companies such as McKinsey, who have predicted a global 'war for talent' but for whom 'talent' is confined to the graduates of a tiny sub-set of elite global institutions.⁹ There is a clear need for employers to be more proactive in seeking out graduates who could meet their needs.

While employers have a legitimate interest in wanting those who emerge from the education system to be employable, students, governments, and society at large have a legitimate expectation that the skills acquired at the expense of the tax-payer will be utilised in the labour-market. The under-utilisation of skills in the U.K. is a matter of huge concern, with the OECD's Survey of Adult Skills (PIAAC) suggesting that the U.K. has the second highest level of over-qualification (after Japan), running at 30% of the workforce. Furthermore in the U.K. Commission for Employment and Skills (UKCES)'s Employer Skills Survey 2013, 48% of employers admitted to the under-usage of skills, collectively identifying 4.3 million workers (16% of the workforce) as over-skilled and over-qualified for their current job.¹⁰ The survey also found that, in the U.K. in 2014, 21% of administrative jobs, 13% of sales and personal service jobs, and 8% of elementary occupations were undertaken by graduates. Forty-five percent of graduates in the U.K. are forecast never to fully re-pay their student loan, with re-payment commencing when graduates earn £21,000 *per annum*. Meanwhile the European Social Survey indicates varying degrees of graduate-over-qualification across Europe, which declined in Ireland between 2004 and 2010, but rose in many other countries, standing at 50% in Romania in 2010.¹¹

⁹ See http://www.mckinsey.com/insights/economic_studies/talent_tensions_ahead_a_ceo_briefing. See also Phillip Brown, Hugh Lauder and David Ashton, *The Global Auction: The Broken Promises of Education, Jobs and Incomes* (Oxford: Oxford University Press, 2011).

¹⁰ See UK Commission for Employment and Skills, *UK Commission's Employer Skills Survey 2013: UK Results*, Evidence Report 81 (January 2014), 11, https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/327492/evidence-report-81-ukces-employer-skills-survey-13-full-report-final.pdf.

¹¹ See <http://www.europeansocialsurvey.org/>.



The narrowness of job-specifications and the lack of job-satisfaction are also prevalent problems in the labour-market. A survey undertaken by Microsoft in 2013 showed that process-driven tasks dominate many workers' lives, with 71% of employees equating having a productive day in the office with clearing their emails and 51% of 18–25-year-olds opining that attendance at internal meetings signifies productivity. Twenty-three percent of respondents to Microsoft's survey expressed the belief that they have never made a major contribution to their organisation, while only 8% maintained that they had done so in the past year. Forty-five percent of respondents reported that they had less than 30 minutes per day to think without distractions; 41% reported that they did not feel empowered to think differently; 42% reported that they felt that they did not have the opportunity to make a difference at work; and 38% reported that they felt that their business was process-driven.¹²

Employers need to focus on how they treat, motivate, and reward their staff in order to address the high level of attrition of employees. Work-load pressures, incessant government reform, and a high-stakes inspection regime led 50,000 teachers to leave the teaching profession in England in 2014, while 40% of newly-qualified teachers quit within their first year of training, leaving 300,000 qualified teachers not working in schools. Michael Davis, Chief Executive of the UKCES has argued that employers' expectations of workers are entirely unrealistic, remarking in 2015:

Skills policy has for too long laboured under the false paradigm that education providers are responsible for providing oven-ready skilled labour to the workplace, that qualifications are a proxy for skills and that the role of business is to submit timely requisition forms to get the employees with the skills they need.

This simplistic and yet compelling narrative sets impossible expectations for everyone. Employers can be blamed for not clearly articulating the skills they need in a timely manner, awarding bodies and those responsible for setting standards for failing to translate skill needs into standards and qualifications, and 'providers' [...] for a failure to follow the 'recipe' given to them by the qualification and/or a failure to deliver the skills needed.

Yet that, notwithstanding all of the evidence, employers remain intractable in respect of their demands is illustrated by the complaint of Neil Robertson, Chief Executive of Energy and Utility Skills, U.K., in 2015 that 'people come out of the FE [further education] system work-ready rather than job-ready', and by his assertion that this 'is a bit of an indictment of the current and the past qualifications system' and that 'employers want more than that'.¹³

¹² See <http://www.microsoft.com/en-gb/enterprise/business-reimagined/articles/get-it-done-day-were-calling-time-on-the-daily-grind.aspx#fbid=nUF0BXa7Ulm>.

¹³ See OCR, *FE Week Annual Apprenticeship Conference March 2015*, 10, <http://fewee.co.uk/wp-content/uploads/2015/03/FEWEEKAAC2015.pdf>.



Dr. Mary-Liz Trant (*Executive Director, Skills Development, SOLAS*)

Employers have a responsibility to provide graduates with work-experience and to support the development of the work-force in order to enable all workers to move upwards. Further education and higher education institutions have a very important role to play in supporting this. However in addition there is a need for a stronger focus on work-place learning, in respect of which the development of new apprenticeships in accountancy and ICT in Ireland in 2014 represented a positive step forward on which we need to continue to build. Optimising engagement between providers of education and employers is a challenge, and there is an imperative to communicate the value of a broad education that ensures that graduates acquire the transferable skills required in today's dynamic job-market.

As Ireland emerges from the recession, the opportunity to ensure the employability of graduates is being seized. In 2014 the Department of Education and Skills and SOLAS published the *Further Education and Training Strategy 2014–2019*, which includes a strong focus on addressing employers' skills needs;¹⁴ and SOLAS has embarked upon a skills-profiling exercise, which will assess the skills of staff in the further and higher education sectors with a view to ascertaining skills-gaps. SOLAS is also engaged in establishing a Programme and Learner Support System (PLSS), which will comprise a national further education and training (FET) programme database, a FET course-calendar scheduling system, and a national learner database which will capture data on learners within the FET system. This will create a strong platform for evaluating the role played by the further education sector in the wider educational ecosystem in Ireland.¹⁵

In the higher education sector, the engagement of higher education institutions with enterprise has been greatly strengthened since the publication of the *National Strategy for Higher Education to 2030*, which identified engagement with wider society as one of the three core roles of higher education.¹⁶ Higher education institutions' engagement with enterprise and the community is now embedded in the compacts which are agreed between institutions and the HEA, which are the primary mechanism for the strategic performance management of the sector at national level.¹⁷ As the representation of organisations such as the American Chamber of Commerce, IDA and IBEC at the fourth HEA Forward-Look Forum illustrates, Ireland's small size facilitates close interaction between stakeholders across different sectors, helping to build trust and foster collaboration.

In order to optimise the contribution of the further and higher education sectors and employers in meetings skills needs we need to reach a clear consensus about the role which

¹⁴ See Department of Education and Skills and SOLAS, *Further Education and Training Strategy 2014–2019*, <https://www.education.ie/en/Publications/Policy-Reports/Further-Education-and-Training-Strategy-2014-2019.pdf>.

¹⁵ *Ibid.*, 88.

¹⁶ See Department of Education and Skills, *National Strategy for Higher Education to 2030* (Dublin: DES, 2011), <http://www.education.ie/en/Publications/Policy-Reports/National-Strategy-for-Higher-Education-2030.pdf>.

¹⁷ See <http://www.hea.ie/en/policy/national-strategy/higher-education-system-performance-2014-16>.



is to be played by each. Within Ireland, there is also a need to advance the vision underpinning the National Framework of Qualifications (NFQ) in order to promote students' progression through the Framework and into employment—an endeavour to which the establishment of Quality and Qualifications Ireland (QQI) makes an important contribution. In addition we need to examine how funding mechanisms and performance-management systems can be optimised to foster the coherence of further and higher education provision and to incentivise engagement with industry.

Professor Patrick Clancy (Emeritus Professor, School of Sociology, University College Dublin)

In *Irish Higher Education: A Comparative Perspective* (2015), Professor Patrick Clancy argued that, while approximately two-thirds of school-leavers can reasonably be expected to progress into higher education, there is a need to foster a continuum between further and higher education in order to support rising demand for post-secondary education. The evidence shows that, while from a comparative perspective overall rates of student-progression in higher education in Ireland are satisfactory, there are quite high non-progression rates at sub-degree level (NFQ levels 6 and 7) in STEM disciplines. (Use of the term 'progression' rather than 'drop-out' helps to shift the burden of responsibility from the student to the institution in respect of this issue.)

However the evidence-base for evaluating students' progression into the labour-market in Ireland is inadequate. The HEA has produced the 'First Destinations Report' on university-graduates' employment outcomes since 1982, and is currently preparing to undertake a new graduate-outcomes survey which will be sector-wide. While this will make an important contribution to addressing the data-deficit in this area in respect of the institute of technology sector, there will remain a gap in the evidence-base on the further education sector and on how this intersects with higher education. (There is, for example, no evidence-base at the present time for assessing the comparative success (in terms of employment-outcomes) of NFQ level 6 courses offered in further and higher education in Ireland.) The lack of data for the institute of technology sector on students' employment-outcomes during the recession will remain a deficit which cannot be addressed. That we can only assume that the trend, in evidence prior to 2007, for sub-degree-level graduates (of courses at levels 6 and 7 of the NFQ) to progress to undertake further study is continuing illustrates the need for good data in this area to support strategic planning. While it may be important for the HEA's new graduate-outcomes survey to provide data that is internationally comparable, there will be a need for more disaggregated data (by discipline) to support national-level planning. There is, for example, a need to highlight the factors leading to the dire shortage of medical graduates.

While students' choices in respect of the disciplines which they choose to study should be respected, these decisions should be informed by good-quality data on employment prospects. Planning for a unified further and higher education sector is desirable, but this must be premised on a strong evidence-base.



Bob Savage (Vice-President and Managing Director, EMC Ireland)

The multi-national company EMC has been present in Ireland for 27 years and is a global leader in technology and business-processes. Like other multi-national companies, EMC requires graduates with high-level foreign-language skills as well as specialist skills and soft skills. There is a need to embed lifelong learning into our culture in order to best utilise our diverse, multi-generational workforce to meet the emerging skills-needs of industry; and there is also a need to develop the provision of internships as these provide a pathway for graduates to enter companies. In Limerick there has been a successful drive to coordinate further and higher education provision to meet the skills-needs of industry, which provides a model which should be emulated at national level. This would help to change the present reality that only those who fail to progress to higher education participate in further education.

Jacinta Stewart (Chief Executive, City of Dublin Education and Training Board)

Ireland's Vocational Training Opportunities Scheme (VTOS) and the Post-Leaving Certificate courses offered by the education and training boards (ETBs) have been developed in response to employers' skills-needs.¹⁸ The geographically based ETBs are extremely active and dynamic in seeking to provide students with the skills needed for employment opportunities, but there is a need to foster linkages between the post-secondary education sector and the further and higher education sectors to develop a broad-based education and training system that will cater for the increasing diversity of students. It will be imperative for SOLAS, QQI and the ETBs to work together to advance this aim.

Open discussion

We know that there are certain activities (such as team-working on projects and international mobility) which enable students to develop their soft skills and emotional intelligence. However teaching such skills represents a challenge particularly as psychologists do not agree on the definition of 'emotional intelligence', and the soft skills required by employers are often specific to their organisation. Given that people are all different, the notion that it would be possible to create a population of uniformly socially skilled individuals is implausible. Furthermore charging higher education institutions with responsibility for teaching such skills raises the question as to whether, for example, a lecturer in physics can reasonably be expected to provide instruction in emotional intelligence. Likewise there is a question mark over whether managers in companies and organisations which employ graduates are sufficiently well-equipped with such skills to enable them to pass them onto interns in the working environment.

¹⁸ See <https://www.education.ie/en/Schools-Colleges/Services/Further-Education-and-Training/Vocational-and-Training-Opportunities-Scheme-VTOS-/> and <https://www.education.ie/en/Schools-Colleges/Services/Further-Education-and-Training/Post-Leaving-Certificate-PLC-Programme/Post-Leaving-Certificate-PLC-.html>.



The need for data, disaggregated by discipline, on graduates' employment-outcomes was emphasised, and in particular the need for the disaggregation of STEM disciplines to support policy-development. QQI has recently produced a study on the employment-outcomes of graduates from further education, and the HEA and QQI are working together to ensure the correlation of the two organisations' data-collection. In addition QQI is planning to undertake a review of the NFQ in 2016 in order to ascertain how its usage can be optimised.

The importance of the provision of high-quality advice about career-options to secondary school pupils was highlighted, along with the need for graduates to be global citizens with open minds and the curiosity which is a prerequisite for lifelong learning. The important role that research plays in the development of graduates' skills was also emphasised, along with the imperative for students to undertake postgraduate-level study in order to enhance businesses' capacity to innovate. While it was acknowledged that students need to share the cost of their higher education, there was a call for part-time and full-time study to be funded on an equitable basis, and for the development of pathways from education into employment.

Closing remarks

There are a range of challenges which are common to higher education in Ireland, the U.S.A. and the U.K., including demonstrating the public value of higher education, funding the sector on a sustainable and equitable basis, and ensuring that, with rising levels of participation in higher education, those who do not participate are not left behind. There needs to be greater focus on students' learning outcomes and how we assess these, as well as on pathways from education into employment. There is a need to consider whether, within Ireland, the funding system for higher education discourages flexible learning, forcing students to study on either a part-time or a full-time basis, and whether such a system is fit-for-purpose for a generation that will live into the next century.

While in the post-secondary system in the U.S.A., 45% of students are now over the age of 25, in Ireland the focus remains on catering for the young, with scant attention paid to the educational needs of those over 25 years of age and too little accommodation made for those who wish to move in and out of higher education. There is therefore a strong imperative to re-examine the architecture of the higher education system in Ireland to address this problem—an imperative that is shared by many other countries and jurisdictions, including Canada, New Zealand, Scotland and Wales.