



**Proceedings of the 5th HEA Forward-Look Forum:
The “Unbundling” of Higher Education: What are the Implications and
Opportunities for Ireland?**

19th May 2016

Olympia Suite, Camden Court Hotel, Camden Street, Dublin 2.

Introduction

The HEA Forward-Look Forum, ‘The “Unbundling” of Higher Education: What are the Implications and Opportunities for Ireland?’, was convened at Camden Court Hotel on 19th May 2016 to examine the ‘unbundling’ of higher education in terms of programme-provision, modes of delivery and the emergence of alternative models of higher education. The forum was the fifth in a series of fora which the Higher Education Authority hosts 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 fifth forum brought together representatives from across the higher education sector, government departments, state agencies and industry to examine the opportunities and challenges for Irish higher education presented by the diversification of higher education provision and the emergence of new modes of, and models for, programme-delivery within the rapidly evolving global higher education landscape. Keynote addresses were provided by Dr. Paul Le Blanc (President, Southern New Hampshire University), Professor Mark Brown (Director, National Institute for Digital Learning, Dublin City University) and Ms. Goldie Blumenstyk (Senior Writer, The Chronicle of Higher Education). In addition two four-member panels, comprising representatives drawn from across Ireland’s higher education and training sectors, as well as from industry, debated the topics under consideration.

The vital importance of higher education for society and the economy is well-established along with the need to continue to widen access to higher education and to enhance the flexibility of provision to respond to the needs of an increasing diversity of students. Yet at the same time funding the continued expansion of higher education on a sustainable basis represents a challenge for countries around the world—a challenge which is exacerbated within Ireland by demographics which will create a steady rise in the demand for higher education from school-leavers over the next decade. At the same time there is a significant shortfall in the capital funding available to the sector from the exchequer. Against this background there is a strong imperative for the sector to engage with new opportunities to innovate in order to enhance programme-provision. As the HEA reviews the progress made



in the implementation of Ireland's *National Strategy for Higher Education to 2030*, the 5th HEA Forward-Look Forum provided a timely opportunity to explore emerging trends, new ideas and innovative practice in this area.

“Unbundling” educational provision and delivery modes—what’s ahead?

Dr. Paul Le Blanc (President, Southern New Hampshire University)

In the United States there is a perfect storm in higher education, with a crisis of access, cost, debt and sustainability. There is a need to educate millions more people; there are 35 million adults who have attained some credits but not a degree, many of whom are in debt; the quality of programme-provision is being called into question; there is a disconnect between graduate-supply and employers' skills needs, with 500 unfilled jobs in IT; and higher education institutions face new competition from alternative providers.

With more than 3,000 on-campus students and over 60,000 online students, Southern New Hampshire University (SNHU) is the fastest growing university in the U.S..¹ A private, non-profit institution founded in 1932, SNHU aims to offer affordable and accessible education on campus, through regional centres and online. As an institution which offers a traditional campus-based student-experience, as well as tailored courses for military-service personnel and career-focused online programmes, SNHU gives the lie to the notion that there is only one model for higher education. The diversity of the sector in the U.S.—comprising research-led universities, faith-based institutions, academies with a military focus, and ‘coming of age’ higher education provision—reflects the wide range of priorities of students, who are variously concerned with moving away from their parents to live independently, with their living conditions, with their employability and with acquiring international experience, amongst other considerations. While it is typically 18-year-old school-leavers who enrol on full-time campus-based programmes at SNHU, the average age of those enrolled in the College of Online and Continuing Education is 30. For many of these mature students, who have typically already acquired some credits for courses previously undertaken, education is the third priority behind their work and family, and is principally a means to advance their career. The increasing diversity of students and their range of priorities poses a challenge for providers of higher education seeking to clarify their mission.

Within this context higher education institutions' engagement with technology is often sub-optimal, failing to support innovation and driving up costs. The use of the overhead projector in educational settings from the 1950s onwards had little impact on pedagogical innovation, just as the introduction of check-in terminals at airports merely assigned to machines a task previously performed by airport-staff. While today in the sphere of higher education faculty members continue to design and revise their programmes, increasingly teaching-content is developed by instructional designers rather than by academics. In addition a host of private companies now offer a range of services to support higher education providers, including the

¹ See <http://www.snhu.edu/>.



provision of hardware and software as well as of technicians to maintain this. Nevertheless it is clear that, as well as providing quicker and cheaper ways of getting jobs done, technology does have revolutionary potential, with the locus of the potential for innovation lying in the intersection between the job to be done, the disaggregation of its component tasks, and technology.

Traditionally the credit-hour has been the primary unit for the investment of billions of dollars in higher education, providing the basis for the calculation of faculty members' pay and pensions as well as for work-load management and space-allocation. This is despite the lack of correlation between the time which students spend in the classroom and their learning outcomes. However the competency-based degree programmes designed by SNHU in response to the needs of the labour-market and offered through the College for America at SNHU represent an alternative to this model.² The traditional model of higher education is institution-centred, faculty-centred and expensive, entailing the completion of a course of study over a predetermined period of time with undefined learning outcomes and leading to the acquisition of a transcript detailing the modules studied. By contrast the competency-based programmes offered at SNHU's College for America can be completed over variable time-periods, are student-centred, are cheaper to run and provide evidence at a granular level (in the form of competency statements) of the competencies which the student has acquired (such as, for example, communications skills, quantitative skills, critical and creative thinking, digital fluency and information literacy). These competencies are bundled together, with associate degrees and bachelors' degrees accrediting 120 competencies acquired by students during their course. While campus-based degree courses at SNHU cost \$120,000 and online degree courses \$40,000, enrolment on the College for America's competency-based degree programmes for employees of companies partnering with SNHU is from \$2,500 *per annum*.

In the traditional model of higher education which predominates today, the higher education institution serves as a gatekeeper, assessing prospective students for their eligibility to attend against rigid criteria in order to enable them to commence a linear course of study which is spiced up with study abroad, internships, career counselling and participation in sporting activities. However the new and emerging role for the institution is as a curator, providing students with the learning experiences which they need and mapping the competencies which they acquire, with subscription models obviating the need for students to enrol on courses of pre-specified duration. As Todd Rose highlighted in his recent book, *The End of Average*, traditionally universities have been extremely poor at the performance-based assessment of students, with some areas of notable exception such as nursing and aviation.³ However engagement with new technologies and approaches to assessment is helping to gradually improve this.

² See <http://collegeforamerica.org/>.

³ See Todd Rose, *The End of Average: How We Succeed in a World that Values Sameness* (New York: HarperCollins, 2015).



Professor Mark Brown (Director, National Institute for Digital Learning, Dublin City University)

The unbundling of higher education is akin to the unbundling of the CD rom by Apple Inc. when the company launched iTunes, enabling customers to purchase individual tracks of a CD for the first time. Traditionally the bundling of higher education provision into degrees has been central to its delivery, providing a framework for institutions to combine their services within one product. However today the unbundling of higher education, which Ryan Craig explores in his recent book, *College Disrupted: The Great Unbundling of Higher Education*, has six dimensions, which pertain to the clock, the mode of delivery, the border, the credential, the content and services.⁴

The unbundling of higher education has its roots in the small nation state and in *laissez-faire* economics which prioritise individual freedom over government regulation. As the time-honoured tradition of the ‘learning society’ has been challenged by the emergent ‘knowledge-economy’ so the role of higher education has evolved from serving to maintain cultural heritage and provide human capital to supporting the skills needs of the free market. The unbundling of higher education is facilitating this evolution, supporting the democratisation of knowledge-acquisition, the widening of access to higher education, and lifelong learning in order to underpin the creation of a more just society and sustainable future for all citizens. It is against this complex background that, at the EUA 2016 Annual Conference, ‘Bricks and Clicks for Europe: Building a Successful Digital Campus’, on 7th April 2016, the President of Ireland, Michael Higgins, presented a critique of the increasing instrumentalism of higher education, calling on universities to play a greater role in addressing the key challenges of our time—in the areas of poverty, climate change and sustainable development.⁵

It is the clock, as the first of the six dimensions of the unbundling of higher education, which has been at the heart of the proliferation of accredited online courses, severing the link between the credit-hour, course-duration and the attainment of qualifications, and lowering costs for students. In the U.S. students can now complete a degree through over 100 accredited online courses offered by Straighterline, a private company which works in partnership with accredited colleges and universities to offer courses with flexible start-times on a subscription basis, enabling students to study at their own pace.⁶ Similarly Arizona State University has partnered with EdX to create the Global Freshman Academy, through which accredited freshman-level courses are provided online.⁷ That these courses are being offered by Starbucks to its employees illustrates how they are successfully challenging the hegemony of the credit-hour as the primary unit of learning in higher education.⁸ Given that the number of students participating in higher education in Ireland on a part-time or flexible basis is low

⁴ See Ryan Craig, *College Disrupted: The Great Unbundling of Higher Education* (New York: St. Martin’s Press, 2015).

⁵ See Carl O’Brien, ‘President Higgins: Universities Facing Intellectual Crisis’, *The Irish Times*, 8th April 2016, <http://www.irishtimes.com/news/education/president-higgins-universities-facing-intellectual-crisis-1.2602607>.

⁶ See <http://www.straighterline.com/hp-t4/>.

⁷ See <https://www.edx.org/gfa>.

⁸ See <http://www.theatlantic.com/magazine/archive/2015/05/the-upwardly-mobile-barista/389513/>.



by comparison with other countries, there is an imperative to examine how this can be supported through the funding model for higher education institutions.

The second dimension underpinning the unbundling of higher education is the mode of delivery. The higher education institution is no longer a static, bounded place within the confines of which learning takes place. Rather higher education occurs on and off campus and in the physical and virtual worlds within the modern learning ecology. Within this context Ireland is 'behind the curve' in the constraints placed on participation in part-time and flexible higher education by the funding model, despite the recommendation of the European Commission's High Level Group on the Modernisation of Higher Education for

national funding frameworks [to] create incentives, especially in the context of new forms of performance-based funding, for higher education institutions to open up education, develop more flexible modes of delivery and diversify their student population.⁹

As technology transforms the global higher education landscape, the current focus on online learning as a separate mode of delivery of higher education is short-sighted.¹⁰ In recognition of this, and of the increasing demand for flexible learning, Dublin City University has adopted the 'DCU Connected' slogan to describe the range of courses on offer, on campus and online.¹¹

The third dimension of the unbundling of higher education—the border—alludes to the transformation of international education by technology. In 2015 71% of those enrolled on EdX courses were studying outside of the U.S., with India representing the second largest group of learners; and it is anticipated that, by 2025, the untapped market for online learning will be in excess of 1 billion students. Against this background the distinction between massive open online courses (MOOCs) and accredited courses is becoming increasingly blurred, with 9,445 distance-learning programmes on offer through the StudyPortals website.¹² Within Ireland DCU is offering online programmes in partnership with a range of other higher education institutions. However in addition there are an increasing number of prospective commercial partners who are eager to work with the higher education sector, as illustrated by the interest of Tata in establishing a platform for online courses in Irish higher education. This raises the question of how Ireland can best respond strategically to these emerging opportunities and of the implications for policy-making of prospective Irish students' access to high-calibre courses around the world. The advent of the blockchain technology which underpins Bitcoin enables student-data to be shared by multiple parties, potentially

⁹ High Level Group on the Modernisation of Higher Education, *Report to the European Commission on New Modes of Learning and Teaching in Higher Education* (Luxembourg: European Union, 2014), 35, http://ec.europa.eu/education/library/reports/modernisation-universities_en.pdf.

¹⁰ See Craig Weidemann and Karen Pollack, 'The Death of "Online" Learning in Higher Ed', *University Business*, March 2016, <https://www.universitybusiness.com/article/death-%E2%80%99Online%E2%80%9D-learning-higher-ed>.

¹¹ See <http://connected.dcu.ie/>.

¹² See <http://www.distancelearningportal.com/>.



supporting the emergence of international consortia of higher education providers with whom students can engage online.¹³

That the development of blockchain technology supports students' acquisition of 'digital badges' for 'nano-degrees' and 'micro-qualifications' illustrates the strategic importance of the fourth dimension of the unbundling of higher education, namely the credential. The emergence of digital badging is challenging the status of traditional degrees, with the increasing availability of just-in-time, bite-sized courses which symbolise the neo-liberal commodification of education. How Irish higher education institutions respond to these emerging trends remains to be seen: some institutions may become premium providers while others may join international consortia to offer unbundled courses by subscription.

The open educational resources (OER) movement underpins the fifth dimension of the unbundling of higher education: content. The emergence of 'open textbook' initiatives in Canada and Poland have illustrated the potential for technology to support engaged student-learning, raising the question of whether Ireland should seek to develop an open textbook platform.¹⁴

Finally the unbundling of student-support services—the sixth dimension of the unbundling of higher education—has the potential to support greater efficiency and effectiveness in service-provision, with Pearson's 'Smarthinking' enabling students to receive feedback on assignments within 24 hours and the Dublin-based 'Write My Assignments' offering similar services.¹⁵ That the growing market for online student-support services has a dark side, which enables plagiarism and the purchase of completed essays, is well-known and illustrates the risks attendant upon the unbundling of higher education without adequate strategic oversight.

In conclusion the unbundling of higher education is daunting. In New Zealand a public consultation process has been initiated to explore how best to tackle the emerging challenges this presents.¹⁶ The question of how the Irish higher education sector can best engage with these challenges remains.

Professor Sarah Moore (Chairperson, National Forum for the Enhancement of Teaching and Learning)

The student is at the centre of higher education and it is important that the student-voice is heard within discussions on its strategic development.

¹³ See Kerrie Leomie, 'What Blockchain Means for Higher Education', *EdSurge*, 12th May 2016, <https://www.edsurge.com/news/2016-05-12-what-blockchain-means-for-higher-education>.

¹⁴ See <https://open.bccampus.ca/> and <http://www.thegreatcourses.com/> for examples of open textbooks.

¹⁵ See <http://www.pearsoned.com/higher-education/products-and-services/smarthinking/> and <http://writemyassignments.com/>.

¹⁶ See <http://www.productivity.govt.nz/inquiry-content/2683?stage=2>.



There are two polarised views of the mission of higher education. The new and emerging model is to support lifelong learning, undertaken with limited resources and time, often over an indefinite period, for the acquisition of identified competencies. The old, elite model is focused on the provision of higher education as a time-bound, campus-based experience, within which the number of contact-hours, institutional reputation (as reflected in university rankings), heritage and tribal affiliation are all primary concerns. While we may be dismissive of the old model, there is an imperative to be creative about how we adapt aspects of this for assimilation within the new model.

The unbundling of higher education appeals to governments because it offers the prospect of lowering the cost of provision without a negative impact on its quality. However it will be important to ensure that this does not lead to the creation of a two-tier system comprising elite institutions on the one hand and the provision of mass higher education by ‘big business’ on the other. The unbundling of higher education raises important questions such as, for example, how campuses should be used and how investment in higher education should be made. As the boundaries between higher education institutions and other stakeholders become blurred, institutions experience an identity crisis as their degree-awarding prerogative is challenged. Dialogue about the unbundling of higher education needs to encompass consideration of how it is to be ‘re-bundled’.

At the pedagogical level, the assessment of learning is an important consideration within the unbundling of higher education, about which students are seldom consulted despite the time invested in designing assessment methods. Further to sector-wide consultation, the National Forum for the Enhancement of Teaching and Learning has identified ‘assessment of / for / as learning’ as its ‘enhancement theme’ for 2016–2018. Examinations are viewed as the most efficient and least costly way of assessing students, but their authenticity as a means of assessment is questionable. Improving levels of literacy and numeracy is a concern of many governments, which the establishment of writing centres (initially within the U.S. and latterly in Ireland) has helped to address. Such centres are focused on addressing the learning-needs of students to support their successful participation in higher education. When the National Forum asked Irish students about the factors which have best supported their learning, the provision of pastoral care and the respect accorded to them by their tutors, along with their sense of belonging to the community of their institution, are often cited, rather than the use of technology. Such interpersonal interaction will always be expensive to provide and so this is an important consideration for future-planning.

Paul Healy (Chief Executive, Skillnets)

Skillnets is an enterprise-led agency which funds groups of companies within a region or sector to deliver subsidised training courses through ‘training networks’ in order to meet shared training needs.¹⁷ Partner companies, of which there are 1,300, match the funding provided by the grant which they receive.

¹⁷ See <http://www.skillnets.ie/>.



Competency-based models of education and training underpin the recruitment and promotion of employees by employers. Competencies attest to what employees know and can do, with generic competencies (such as leadership, innovating and team-working skills) complementing the bespoke competencies required by individual employers. This is reflected in the submissions which have been made to Skillnets' public consultation on the agency's 'Statement of Strategy 2016–2019' by employers, which highlight the need for work-ready graduates with transversal skills. While arguably the greatest challenge in the unbundling of higher education is to win over hearts and minds, the question of its affordability also arises.

Professor Vincent Cunnane (President, Institute of Technology, Sligo)

The students in Ireland's institutes of technology are diverse. At the Institute of Technology, Sligo, while approximately 50% of students apply through the Central Applications Office (CAO), the remainder are mature students. 72% of students represent the first generation of their family to participate in higher education and 64% of students are in receipt of a grant from SUSI (Student Universal Support Ireland). In catering for the diverse needs of such students IT Sligo recognises that a one-size-fits-all approach is an impossibility and therefore offers a range of courses at NFQ levels 6–10 as well as apprenticeships and online programmes.¹⁸ The institute is a national leader in the provision of online learning, which is the mode of study for a third of its students, and offers 64 online programmes in partnership with 23 companies. Further to the investment of €1.5 million in online and 'flipped classroom' development, through which instructional designers have supported lecturers to move their teaching materials online, IT Sligo's online programme-provision has ensured that the institute is financially secure. It has also enabled the existing campus-based staff to teach an increasing number and diversity of students, enhancing the quality of both face-to-face and online programme-provision. Many of IT Sligo's online learners are adults over the age of 40 who are engaged in continuing professional development (CPD), and this is a potential growth area for the institute.

The unbundling of higher education represents a huge opportunity for an institute which is already engaged in online programme-provision. In 2013 IT Sligo launched Ireland's first MOOC in 'Lean Sigma Quality', which has been completed by 1,700 of the 6,000 students who registered on the course—a high completion-rate for a MOOC. Building on this success IT Sligo has recently launched a MOOC on how to make MOOCs, which is targeted at companies engaged in low-cost MOOC-development. In addition IT Sligo is leading a collaborative, inter-institutional project to develop a MOOC to support students' transition from secondary to higher education, funded by the National Forum for the Enhancement of Teaching and Learning.¹⁹

Recognising that, with the increasing availability of information, the role of the higher education institution is focused on assessment and accreditation, IT Sligo is moving towards

¹⁸ Ireland's National Framework of Qualifications (NFQ) can be found at <http://www.nfq-qqi.com/index.html>.

¹⁹ See <http://www.teachingandlearning.ie/a-mooc-to-improve-the-transition-from-2nd-to-3rd-level-education/>.



the introduction of competency-based examinations. While this poses a challenge in laboratory-based disciplinary areas, such as science and engineering, it is nevertheless feasible. IT Sligo provides competency-based education within the online B.A. in Mechatronics, in which students spend four days per year within a laboratory at the institute programming machines as well as benefitting from integration within a community of scholars which supports group-work.²⁰

As an English-speaking country with a good reputation for higher education, Ireland has a great opportunity to engage with the development of online education. This needs to be supported at national level, along with the recognition of prior learning and the enhancement of careers advisory services.

Colleen Dube (Chief Executive, Uversity)

The unbundling of higher education represents a tremendous opportunity. Uversity may be one of the world's largest blockchain providers of higher education. As a recognised college of the National University of Ireland (NUI) which was established in 2012, Uversity works in partnership with 24 higher education institutions across the island of Ireland to offer students a personalised, unbundled Master of Arts in Creative Process, during which much of participating students' learning takes place outside of the classroom.²¹ This course comprises a core module in 'Creative Process and Immersive Practice', currently delivered by the University of Limerick; experiential elective modules (offered across 24 institutions); and a research or practice-based project (at the student's chosen institution).

Since Uversity is currently privately funded, the sustainability of its programme-provision is a key concern. Deconstructing the master's course currently on offer, and developing the provision of bespoke educational content which draws on the assets of Ireland's cultural institutions, represent possibilities to be explored.²² Uversity's current mission is to make Ireland an international destination for education in the creative arts, but this mission may evolve through collaboration and the diversification of the company's revenue-streams. Supporting access to higher education for students from disadvantaged backgrounds is an imperative within Ireland, which may be advanced through the innovative unbundling of higher education.

Open discussion

Recognising that there is a strong imperative to unbundle higher education in order to meet the rising demand for higher education and the emerging skills needs of the economy, a question was raised about how the funding model for Irish higher education institutions can best support the unbundling of provision, with a view to ensuring that Ireland is at the

²⁰ See <https://itsligo.ie/courses/beng-in-mechatronics-2/>.

²¹ See <http://www.uversity.org/>.

²² The 'Inspiring Ireland' project aims to make Ireland's digital heritage available to all. See <http://www.inspiring-ireland.ie/>.



forefront of developments in this area. It was suggested that, given the current constraints under which institutions operate, this might entail funding programme-provision in a different way or ensuring that institutions have greater flexibility in how they use their human resources to deliver programmes. In response to the question it was recommended that the development of the funding model should be strategic, with reference made to the establishment of a national portal for higher education and to national investment in programme re-design in New Zealand as examples of good practice to be emulated.²³ The importance of providing space within the regulatory framework for innovation was also highlighted, with a call for higher education to be treated as an enterprise and for research-funding to be ring-fenced to support experimentation. It was noted that, in the U.S., there is a 99% employment-rate for graduates of 15-week boot-camps in coding, and that the challenge is to provide such higher education provision for students who are unable to afford the high level of fees charged for participation in such camps. It was observed that there is a risk that the imperative for the higher education sector to be adequately funded in order to meet the rising demand for places over the next decade will mask the need for organisational change and innovation. Within this context it will be necessary for innovation within the Irish sector to be incentivised with additional strategic investment which is not constrained by adherence to traditional key performance indicators (such as student-numbers).

It was suggested that a strategic aim for the sector should be to enable students to define their own pathways through higher education and that, to support this, it should be made easier for higher education institutions to collaborate. The value of engaging with private providers of higher education, from whom public institutions can learn about innovation, and of adopting a national approach to the unbundling of higher education for the benefit of all citizens was also emphasised. It was acknowledged that, with the advent of ‘big data’, higher education institutions can now accurately predict the performance of students and anticipate the supports which they require for successful participation, thereby improving student-retention. Ireland’s small size facilitates the development of a considered, national-level approach to supporting innovation, incentivised through the funding model for higher education.

“Unbundling” providers—are there alternative models?

Goldie Blumenstyk (Senior Writer, The Chronicle of Higher Education)

Recognising that the ecosystem of higher education is changing because of forces from within and from outside of the academy, *The Chronicle of Higher Education* has initiated a project entitled ‘Re:Learning: Mapping the New Education Landscape’ through which the on-going transformation of higher education through technological innovation and the emergence of new providers is being explored.²⁴ For many in American higher education ‘unbundling’ and ‘disruption’ are associated with the corporatisation of higher education and are perceived as threats to the civic mission of the university. Reflecting these concerns, the first article

²³ See <http://www.education-newzealand.org/>.

²⁴ See <http://chronicle.com/specialreport/Mapping-the-New-Education/21>.



published as part of the ‘Re:Learning’ project was on the rise of the ‘embedded for-profits’—companies which sell their services to higher education institutions.²⁵

When comparing the ecosystem of higher education in the U.S. and Ireland, it is important to be aware of the different scale of the two systems. While total student-enrolments in Irish higher education are in the region of 200,000, total enrolments at the University of Phoenix, are 176,000, subsequent to a dramatic decline within a year from 225,000, while 62,000 students are enrolled at Ohio State University, 83,000 at Arizona State University, and 60,000 at the University of Central Florida. With a total of approximately 19 million students, there is a lot of scope for innovation in American higher education—innovation which is being driven by a host of factors which may not be as salient in Ireland.

In the U.S. many students suffer from financial hardship, with 45% eligible for Federal Pell Grants and, more broadly, the affordability of higher education, the return on investment and student-debt are concerns which are reflected in the growing demands for faster and cheaper provision.²⁶ Economic and racial equality are significant factors influencing successful participation in higher education in the U.S., where a student from a rich family is nearly nine times more likely to have attained an undergraduate degree by the age of 24 than a student from a poor family, and where those of ethnic-minority backgrounds tend to be amongst the poorest. This is reflected in the demographics of higher education institutions, with white students predominating in the most selective institutions and students of colour predominating in community and for-profit colleges.

The quality and relevance of higher education is also much discussed, with grade-inflation and the ‘skills gap’ identified as particular problems. Performance-based funding has been introduced, with the funding of institutions in nearly half of the states now based on measures other than student-enrolments. The advancement of this accountability agenda is underpinned by the U.S. Department of Education’s introduction of the College Scorecard, on which a host of data (on, *inter alia*, graduation-rates, graduates’ income, and student-attrition rates) is recorded.²⁷

The authority of traditional higher education institutions and of their faculty is being challenged by the rise within the higher education landscape of organisations such as the Bill and Melinda Gates Foundation, the Lumina Foundation, New America, and the Center for American Progress. In addition new businesses and investors are funding companies to support higher education, with \$1.5 billion invested in such ventures in 2015. These companies—examples of which include Hot Chalk, SmartThinking and 2U—provide careers services, data analytical services, and online programme management.²⁸ The growth of this sector is reflected in the success of the ASUGSV Summit of ed-tech companies and investors,

²⁵ See <http://chronicle.com/article/How-For-Profit-Education-Is/234550/>

²⁶ See <https://studentaid.ed.gov/sa/types/grants-scholarships/pell>.

²⁷ See <https://collegescorecard.ed.gov/>.

²⁸ See <http://www.hotchalk.com/>, <http://www.pearsoned.com/higher-education/products-and-services/smarthinking/>, and <https://2u.com/>.



which was attended by 3,500 delegates in 2016—an increase of more than 8-fold on the 400 delegates who attended the first of these summits in 2010.²⁹ There is also growing concern within institutions about the bureaucratisation and corporatisation of higher education. Increasingly the responsibility for the administration of institutions is shifting from faculty-members to administrators, with a sharp decline in the number of tenure-track positions in the U.S. over the past 40 years (from 45% in 1975 to approximately 25% in 2016).

Against this background the leaders of higher education institutions in the U.S. are preoccupied with a business-model which seems broken and with the paucity of strategies available to address this. The provision of distance learning has been an important source of revenue for institutions, but this is becoming increasingly competitive, with significant start-up costs in terms of capital and human capital. Similarly the market for adult education has become tougher, with the emergence of a range of new providers such as Lynda.com, purchased by LinkedIn for \$1.5 billion in 2015.³⁰ As the level of accountability required of institutions has increased, so has government intrusion with, for example, political pressure being applied if too many international students are recruited or if too few programmes which will meet the needs of the economy are offered. The increasing ‘casualisation’ of academic labour is also a source of concern.

However there is a failure on the part of the professoriate to recognise the extent to which the role of faculty-members and campuses will change in the next 10–20 years. As detailed in Goldie Blumenstyk’s book, *American Higher Education in Crisis? What Everyone Needs to Know* (2014), researchers have suggested that the role of the professor could be unbundled into nine different parts, including instructional design, course-delivery, advising and tutoring—a trend which is already clearly in evidence at institutions such as SNHU.³¹ Indeed higher education institutions are themselves beginning to offer courses in instructional design to meet emerging demand. The role of the campus is also changing, arguably emerging as a ‘third place’ of higher education, competing with coding boot-camps for which young people pay up to \$10,000 for a short-course.³²

Within this broader context, a key area of focus for higher education institutions in the U.S. is now on improving student-retention. This is an area in which institutions increasingly rely on software for data-analysis provided by companies such as Civitas, Snapfish, EAB and Copley—software which tracks aspects of students’ behaviour, such as their progress with their assignments, their attendance at lectures and attendance at social events, enabling institutions to intervene with the supports required.³³ Enhancing the job-readiness of

²⁹ See <http://asugsvsummit.com/>.

³⁰ See <https://www.lynda.com/>.

³¹ See Goldie Blumenstyk, *American Higher Education in Crisis? What Everyone Needs to Know* (New York: Oxford University Press, 2014).

³² See Ray Oldenburg, *The Great Good Place*, 3rd edn (New York: Marlowe and Company, 1999), in which he argues that citizens’ lives should be enacted in three realms—the home, the workplace, and inclusive social spaces (the ‘third place’).

³³ On this topic see Goldie Blumenstyk, ‘Blowing Off Class? We Know’, *The New York Times*, 2nd December 2014, <http://www.nytimes.com/2014/12/03/opinion/blowing-off-class-we-know.html? r=3>.



students and lowering the cost of higher education are also key concerns, with competency-based higher education programmes and dual degree programmes (in which students commence courses in high school which contribute to their degree) becoming increasingly popular despite concerns about the quality of the latter being raised.³⁴ For example at the Missouri Innovation Campus, the University of Central Missouri collaborates with the Lee's Summit R-7 School District and Metropolitan Community College to offer a bachelor's degree, focusing on science, technology, engineering and mathematics and incorporating a paid internship, which is attainable with two years' study after high school.³⁵

Increasingly OERs are being utilised in lieu of textbooks with the University of Maryland University College following Tidewater Community College in offering a degree programme fully dependent on OER from the autumn of 2016.³⁶ A number of companies, many of them U.K.-based, are now offering 'adaptive' textbooks as the basis for courses, supporting personalised learning. While the algorithms underpinning these are of variable levels of sophistication, their emergence is gradually transforming the role of the professor. The Bill and Melinda Gates Foundation is investing heavily in this growing area, in which a number of private companies and researchers are active. Enabled by large companies such as LinkedIn, e-portfolios and digital badges are providing an alternative means of accrediting students' skills, eroding the premium traditionally placed on graduates of prestigious institutions by employers. In addition, while many assume that MOOCs are now *passé*, the 'MicroMaster's' courses of Massachusetts Institute of Technology and the University of Illinois are giving a new academic relevancy to the MOOC genre.³⁷ In the U.S. an increasing number of MOOCs are accredited and state financial aid is available for students to participate, supporting the continued rise of alternative providers.

Other emerging trends within the higher education landscape include the development of new models of accreditation, with the stacking of credentials within degree programmes incorporating industry-certified professional accreditation; the increasing prevalence of project-based learning within degree programmes; the rise of alternative providers, such as StraighterLine, offering subscription-based online higher education; the emergence of new models of colleges, with private providers developing plans for research universities and teacher education colleges; and the proliferation of 'learning platforms', many of which are seeking to offer accredited courses.³⁸ Increasingly institutions are partnering with alternative providers to offer innovative programmes, such as the M.Sc. in Data Science offered by the University of New Haven in partnership with Galvanize, a boot-camp provider;³⁹ and U.S. universities, such as Georgetown, are exploring the adoption of subscription models.⁴⁰

³⁴ See Jeffrey J. Selingo, *There Is Life After College: What Parents and Students Should Know About Navigating School to Prepare for the Jobs of Tomorrow* (New York: HarperCollins, 2016).

³⁵ See <https://www.ucmo.edu/mic/>.

³⁶ See <http://www.umuc.edu/> and <http://www.tcc.edu/>.

³⁷ See <http://news.mit.edu/2015/online-supply-chain-management-masters-mitx-micromasters-1007>.

³⁸ Examples of such learning platforms include Pluralsight (<https://www.pluralsight.com/>), Udemy (<https://www.udemy.com/>) and Oplerno (www.oplerno.com/).

³⁹ See <http://galvanizeu.newhaven.edu/>.

⁴⁰ See <https://futures.georgetown.edu/>.



Mentorship has become an important element of the higher education experience, with ‘education sherpas’ helping students to navigate the new, unbundled higher education environment; the increasing use of peer-to-peer learning; and the utilisation of alumni as mentors. Recognising that higher education institutions offer a unique experience in which the curriculum is married with internships, mentoring and extra-curricular activities, there is also a trend towards the ‘re-bundling’ of higher education, with the American Association of Community Colleges launching the ‘Pathways Project’ to design and implement structured academic and career pathways at scale for all students in the consortium of participating colleges.⁴¹

Cognisant of the danger that the unbundling of higher education could lead to the emergence of different classes of students, with those with the least agency receiving the lowest quality education, the fundamental question underpinning strategic planning in higher education should be ‘reinvention for whom’.

Dr. Seán Rowland (President, Hibernia College)

Higher education has never been ‘bundled’ in Hibernia College, as a private higher education institution offering programmes online and via blended learning with regional delivery around Ireland. The college focuses on the provision of teacher education, producing one-third of Ireland’s primary-school teachers. Accordingly most students are graduates who have completed a four-year degree who come to Hibernia to take a two-year Professional Master of Education (PME). While Hibernia College was met with aggressive resistance from the sector following its establishment in 2000, it has significantly boosted the supply of primary-school teachers while maintaining quality.

The success of Hibernia College raises a number of questions, including the practicality of four-year degree courses which run for two-thirds of the year and half of the week. There has been a strong tradition of ‘trophy building’ in Ireland, with significant investment in an array of buildings creating a sizeable network of campuses, the small size of the country notwithstanding. Given the projected rise in demand for higher education over the next decade, there is a strong imperative for the sector as a whole to operate in a more efficient and cooperative manner, overcoming the preoccupation with the distinction between the public and private sectors.

At present students in Ireland who study with a private provider of higher education are treated very differently to those who study in the public sector despite the fact that it is the student who should be at the centre of higher education. Furthermore the successful delivery of Springboard courses by Hibernia and other private colleges bears testimony to the scope for the HEA to engage constructively with the private sector.⁴² The time has come to acknowledge that while, unlike traditional institutions, unbundled private colleges like Hibernia do not incur expenses on facilities, they are nevertheless successful in marketing

⁴¹ See <http://www.aacc.nche.edu/Resources/aaccprograms/pathways/Pages/default.aspx>.

⁴² See <https://www.springboardcourses.ie/>.



courses internationally. Hibernia operates in the U.K. and was selected to partner with five U.K. universities to solve the shortages of science and mathematics teachers in England in 2010. The profits generated from such ventures overseas are reinvested in programme-provision, reflecting Hibernia's commitment to quality.

Professor Cathal Kelly (Chief Executive and Registrar, Royal College of Surgeons in Ireland)

Founded in 1784, the Royal College of Surgeons in Ireland (RCSI) is an independent, not-for-profit, specialist provider of higher education in medicine, the health sciences, and the allied health professions.⁴³ With almost 4,000 registered students, the RCSI has limited capacity but, with medical schools in Malaysia and Dubai and a university in Bahrain, the college has a strong international presence with three fully accredited medical programmes in three time-zones. The RCSI is also internationally renowned for its research.

In accordance with the mission of the college—'to educate, nurture and discover for the benefit of human health'—the RCSI's top priority is the education of health-professionals. The college's comprehensive provision in pharmacy—at undergraduate and postgraduate levels as well as, through the Irish Institute of Pharmacy, in CPD—provides a model for this. Competing with providers of medical education across Europe, the RCSI's vision is to be a world-leader in health education and research which is ranked in the top 100 of the THE World University Rankings.⁴⁴ Accordingly the college has embarked on an ambitious programme of investment to support the development of facilities and, in turn, the RCSI's international reach, research-capacity, operational excellence and strategic partnerships. Focusing on the education of healthcare professionals, the RCSI's priority is not to issue degrees but rather to support students' and graduates' career-development, from undergraduate level up to the provision of CPD for consultants. The RCSI's international alumni network supports the provision of research and clinical electives for students which are vital for their employability.

There is a strong imperative for institutions to be clear about their mission and marketplace: the RCSI is a specialist, internationalised institution. Recognising that international markets for medical education are changeable, the sustainability of the RCSI is a key priority. In his book, *Competitive Advantage: Creating and Sustaining Superior Performance* (1985), Michael Porter identified 'lower cost' and 'differentiation' as the two types of competitive advantage which an organisation can achieve relative to its rivals.⁴⁵ This is reflected in the fact that six of the top ten business schools in Europe are niche-providers along with five of the top ten institutions in the U.K.'s National Student Survey.⁴⁶

⁴³ See <https://www.rcsi.ie/>.

⁴⁴ The RCSI is currently ranked 286 in the THE World University Rankings. See <https://www.timeshighereducation.com/world-university-rankings>.

⁴⁵ Michael Porter, *Competitive Advantage: Creating and Sustaining Superior Performance* (London: Collier Macmillan, 1985); 2nd edn (New York and London: Free Press, 1998).

⁴⁶ See <https://www.ipsos-mori.com/researchspecialisms/socialresearch/specareas/highereducation/nss.aspx>.



In terms of the internationalisation of higher education, there is much that Ireland can learn from New Zealand. In particular there is a strong imperative to address small operational issues arising, such as the long delays currently experienced by international students seeking visas, in order to make it clear that Ireland is a serious player in the international-student marketplace.

Julie Spillane (Director of the Centre for Innovation in Dublin, Accenture)

Accenture is a leading global professional services company which employs nearly 400,000 people around the world.⁴⁷ One of the focuses of Accenture’s Centre for Innovation in Dublin, which will recruit 200 people in 2016, is on the future of work.⁴⁸ From an industry-perspective, the world is changing faster than ever before, with technological innovation having a huge impact across all sectors in the fourth industrial revolution. Accordingly organisations need to change and to recognise that, with the top three jobs on LinkedIn not recognised five years ago, the skills needs of the economy are rapidly evolving.

On the ‘supply side’ there is now a ‘liquid workforce’ which can be sourced from anywhere. The ‘digital natives’ of the twenty-first century will have multiple jobs and careers in their lifetimes, and this fluidity and flexibility are phenomena to which companies will need to adapt. There is currently a shift away from the model of having a job for life towards more contractual employment, which, by 2020, will be the basis for 45% of jobs. The formation of teams—both physical and virtual—will be increasingly important, with some companies (such as Stripe) now hiring teams rather than individuals.

Partnership-working between higher education and industry will be critically important in supporting tomorrow’s workforce. The key challenges which the higher education sector now faces pertain to fluid curriculum development and responsiveness to emerging skills needs, in which competency-based education will play an important role; and to the environment within which education is delivered, with immersive technologies helping to meet rising expectations of personalised education. There will be greater fluidity between education and the workforce in the future as well as opportunities for lifelong education. These all represent a huge opportunity for Ireland, as a country on the periphery of Europe with a large, digitally literate, international workforce.

Dr. Phillip Matthews (President, National College of Ireland)

The National College of Ireland (NCI) is a not-for-profit registered charity offering full-time and part-time undergraduate and postgraduate education.⁴⁹ While full-time undergraduate-students are often concerned with the social dimension of their higher education experience, part-time students’ primary concerns typically relate to the cost and duration of the

⁴⁷ See <https://www.accenture.com/ie-en>.

⁴⁸ See <https://www.accenture.com/ie-en/careers/dublin-innovation-centre>.

⁴⁹ See <https://www.ncirl.ie/>.



programme of study. Approximately 50% of the NCI's students are mature-students seeking to integrate study into their working lives.

At present there is inertia and complacency in the Irish higher education system despite the demographic and funding challenges which the sector faces. It is clear that there is no need for continued investment in bricks and mortar within Irish higher education: rather there is a need for virtual capacity-building. In addition there needs to be a stronger focus on skills to ensure that higher education is responsive to citizens' evolving careers. Emulating the model of competency-based education delivered at SNHU, the Irish higher education sector needs to ensure that higher education is delivered on a flexible basis, enabling students to study at their own pace while managing competing demands on their time.

Open discussion

It was suggested that, while the unbundling of higher education might become focused on the online programme delivery, Irish higher education faces the significant challenge of responding to workforce liquidity. This blurs the boundary between education and work, challenging the higher education sector to recognise and accredit prior and work-based learning, and necessitating closer partnership-working between academics and employers on graduate-formation. In response to this observation it was reported that, to date in the U.S., the unbundling of higher education has pertained principally to postgraduate education, with the majority of undergraduates still seeking to avail of campus-based higher education.

The continued importance of the campus within Irish higher education was emphasised, along with the fact that the growth and increasing diversity of the population is a new experience for Ireland which shines the spotlight on higher education institutions' civic and regional responsibilities. Within this context, the unbundling of higher education will be complementary to, rather than a substitute for, the current model, and there is a need for strategic planning in respect of this and for clarity about the change which is being sought. The Irish higher education sector needs to consider if the purpose of unbundling will be to support lifelong learning and to improve CPD provision, or whether it is to lower the cost of the delivery of undergraduate education by obviating the need for continued investment in facilities. It was observed that, if the latter were the aim of this unbundling, there would be a risk that a two-tier system would emerge in which the top tier of students would go to traditional universities to the exclusion of their more disadvantaged peers. Accordingly as the Irish higher education community grapples with the unbundling of higher education (in terms of engaging with alternative modes of delivery and learning), there is an imperative to ensure that the valuable elements of the existing system are retained. Moreover, cognisant of the fact that, as noted in a recent report of the World Bank, less than 50% of the world's population has access to the internet and inequality is growing faster than internet-access, it should be noted that the transformational potential of technology is limited.⁵⁰

⁵⁰ See World Bank Group, *Digital Dividends: World Development Report 2016* (Washington DC: The World Bank, 2016), <http://www.worldbank.org/en/publication/wdr2016>.



It was observed that, while in the U.S. students still have a strong appetite for campus-based higher education, affordability is an increasing problem and that the two-tier stratification alluded to has in any case already occurred. Previously higher education in the U.S. has been faith-based in the sense that a degree has been seen as a passport to good-quality employment. However this faith has been eroded, and competency-based education seeks to address this loss of faith by clarifying students' learning-outcomes. The delivery and assessment of competency-based education will be critical to maintaining the quality of programme-provision.

While the critical importance of lifelong learning for industry was acknowledged, caution was urged in respect of the enthusiastic embrace of the concept of the liquidity of the workforce. There is a strong imperative for employers to value and nurture their staff, and to treat them as they expect their staff to treat their customers, as well as supporting their lifelong development. The loyalty of staff to their employer will thereby be cultivated, enriching the culture of the organisation for the mutual benefit of all.

Discussion ensued about how the 'down-time' in the traditional academic-year can most usefully be exploited, and it was suggested that this could provide an opportunity for industry-engagement with higher education (through accredited work-placement provision). The success of IT Sligo in negotiating work-placements for apprentices during the summer months was commended. Nevertheless it was noted that there is a significant difference between time-management in the public and private higher education sectors in Ireland, with Hibernia College offering shorter courses within the calendar-year. It was suggested that, if public-sector campuses were used more efficiently throughout the year, the current shortfall in the capital funding available to the sector would be mitigated. The question of whether 4-year courses could be delivered in 2 years was also raised.

Closing remarks

Today's pre-school pupils will live into the next century and a large proportion of them will participate in higher education. In the globalised twenty-first century, the responsiveness of the higher education sector to emerging skills needs is vital for economic competitiveness. Within this context, and given Ireland's population-growth, there is a strong imperative to re-examine post-secondary educational provision in Ireland *vis-à-vis* the evolution of the world of work and of society more broadly. At the fifth HEA Forward-Look Forum a conversation was initiated about how the Irish higher education community can best respond to these challenges, learning from the lessons of countries such as the U.S. and New Zealand.