# GLOBAL UNIVERSITY SUMMIT

28-30 May 2013

Whitehall **London** 

# Universities and economic growth

Pre-summit report



### Universities and economic growth

This report provides an overview of the themes and issues to be explored by the 2013 Global University Summit, hosted by the University of Warwick in London in May 2013.

Incorporating the thoughts and contributions of many of the Summit's exceptional line-up of speakers and discussants, the report sets the scene for two days of vibrant and challenging debate on the topic of 'universities and economic growth'.



28-30 May 2013
Whitehall London

To find out more please visit www.gus2013.org



#### **Contents**

1.0	Introduction4-5
2.0	Universities as drivers of economic growth 6–9
3.0	Changing world orders10–15
4.0	Growth through technology16–19
5.0	Universities 2025 20–23
6.0	Responding to business24–27
7.0	Transnational education27–31



Higher education has, for centuries, been at the vanguard of globalism – with academics and students swapping ideas and spreading innovation long before the current system of economic globalisation emerged.

This system is now in trouble, and the cure is beyond the capacity of any single national government, institution or actor. Recovering from economic depression and improving the principles and structures upon which our global system is founded requires a global response and international collaboration; not just between states, but between citizens, businesses and ideas.

The 2013 Global University Summit, hosted by the University of Warwick in London, will explore the relationship between universities and economic growth. This relationship is founded upon the core contribution to economic development that almost all higher education institutions make as regional employers, by providing sources of innovation and through our graduates.

However, universities can also play an increasingly significant role in inspiring the global response that sustainable economic recovery requires. We lead the way by demonstrating how global collaboration, driven by innovation, intellectual curiosity and underpinned by mutual respect, can have a transformative effect on economies and societies.

The Global University Summit provides an excellent opportunity, at an opportune moment for university leaders, the international business community and policy-makers, to frame the relationship between universities and economic growth in a way that transcends national boundaries.

Nigel Think



**Professor Nigel Thrift** 

Chair of the 2013 Global University Summit, London Vice-Chancellor and President of the University of Warwick

### 1.0 Introduction

# The view from the Summit

"

- 1.1 At one time sceptical of each other, universities and businesses are working together more closely than ever before.
- 1.2 In Asia and Latin America, governments are encouraging universities to work with industry to propel their economies with cutting-edge technologies. In the West, economic pressures are forcing universities to act in a more commercial manner, a cultural shift that is making them more willing to work with business. The UK's newly established National Centre for Universities and Business, a network of business executives and Vice-Chancellors, has argued: "There is a global trend towards greater openness in research and collaboration between companies and research institutions."
- 1.3 The key word in this paper is not a new one, but it is an increasingly important part of the modern university's lexicon: "collaboration". The more universities and businesses collaborate, the better understanding they will have of each other's needs, fears, and problems and the better contribution they will make towards reinvigorating economies and addressing major societal issues.

In Asia and Latin America, governments are encouraging universities to work with industry to propel their economies with cutting-edge technologies. In the West, economic pressures are forcing universities to act in a more commercial manner...

1.4 Familiarity will build trust, resulting in the new ideas and work-ready graduates that create economic growth. In the West, where public funding, consumer confidence and business investment are trapped in a cycle of mutual attrition, such a boon must be cultivated. Fast-growing nations already recognise this relationship as a key catalyst for their economies.

#### **Eric Thomas**

Vice-Chancellor, University of Bristol and President of Universities UK

"Higher education is an international enterprise. Our comparators, and our competitors, are found all over the world. At my own university, Bristol, we have staff and students from 112 countries. 30% of our students and around 14% of our staff are from outside the UK. We have partnerships in many countries around the world and each year we help about 500 students go abroad as part of their degrees. We're in the business of educating global citizens.

That is one reason why the Global University Summit is such an important event in the higher education calendar. It is particularly important for us in the UK at this moment because, like so many other countries, we are in the middle of a period of serious fiscal retrenchment."

# The view from the Summit



#### Wendy Piatt

Director General, Russell Group of UK Universities

"All the evidence shows our leading research-intensive universities are the engine room of long-term, sustainable growth and prosperity. You only have to look at the value-added contribution universities make to regional economies to appreciate that our universities are far removed from the image of remote ivory towers. A recent report by the World Economic Forum ranked the UK among the best countries in the world for business-university collaboration. It is discoveries like graphene and spinouts like the University of Oxford's Natural Games Motion, now widely used in the film and games industries, which will lead to real growth."

- 1.5 A major challenge for universities and a concern for employers everywhere is the need to better prepare their students for employment, which means an appreciation of technology must become part of the curriculum and courses designed for a more well-rounded education. It follows that businesses must work more closely with higher education bodies to ensure that they ultimately get the right calibre of candidates upon graduation though the benefits, such as joint research and cross-funding, go much deeper.
- 1.6 Universities in countries that rely on a tuition fees model for funding, such as the UK, where this year's Global University Summit is taking place, must remember that institutions that fail to prepare students for work will see a decline in entry applications. As the UK's Business Secretary, Vince Cable, told the country's major manufacturing organisation, the EEF, earlier this year, students are determined to get what they pay for: "People are thinking in a much more hard-headed way about what they do at university."
- 1.7 The issues discussed here are ones that universities the world over must face. However, just as the previous five hosts of the Global University Summit have managed to imbue a unique flavour derived from their own particular national context, so too does this report incorporate the voices of some of the UK's most influential thinkers on the relationship between universities and economic growth.
- 1.8 Finally, the purpose of this paper is not to come up with recommendations, rather it aims to frame the debate and form the basis for discussion at this Summit.

<sup>&</sup>lt;sup>1</sup> NCUB (Formerly CIHE), "Growing value: business university collaboration for the 21st century", p.6. 2012.

# 2.0 Universities as drivers of economic growth

2.1 Universities have often been ignored as being businesses in their own right, particularly in countries where much of their work is supported by the state. Some have even felt compelled to commission research to prove their economic worth: UC San Diego, for example, proved that its impact on California was \$4.022bn in total spending,

supporting 34,230 jobs - 55.1% of which were not direct employees<sup>3</sup>.

- 2.2 Nigel Thrift neatly sums up four clear ways that his and other institutions benefit their regional and wider economies: "First, there is the bottom line: we're very large employers Warwick has nearly 5,000 staff, which makes us one of the biggest employers in the [West Midlands] region; second, students are an enormous economic multiplier if you go into a university town at the weekend you can see that and they support the landlord industry; thirdly, there's research and development (R&D): if you asked 20 years ago 'how does research inject into the economy?', people wouldn't know but they do now, through spin-outs on campuses like the Warwick Manufacturing Group<sup>4</sup>; and fourth, universities are still building on their campuses."
- 2.3 However, as public policy academics Shiri Breznitz and Maryann Feldman have argued, it should be noted that universities are very different from other economic institutions as their impact is so much broader and long-term. "First, their primary mission is teaching and augmenting human capital. This is perhaps the greatest impact of universities, although the process of education takes time. Second, universities provide long-term impact through research and subsequent knowledge transfer and technology commercialisation, thus creating jobs and new businesses that promote local economic growth. Knowledge transfer may be direct through licensing or may be less direct through partnerships with local companies, through consulting or simply as a result of conversations."<sup>5</sup>
- 2.4 Perhaps not always recognised as such, universities were in fact among the pioneers of the globalisation economic model that dominates today. For centuries, academics have exchanged and developed each other's ideas, the natural extension to this is for them to work more closely with governments and industry to develop the research and graduates needed to bolster businesses and the wider economy.



#### **Universities UK**

Driving Economic Growth: Higher education – a core strategic asset to the UK, 2012

"Innovation plays a critical role in producing [economic growth], demonstrated by the disproportionate level of job generation in innovative companies and the resilience of innovative, graduate-led organisations during recession... When compared to other... businesses as a whole.

Innovative countries tend to have higher proportions of graduates, with graduates accounting for, on average, 37 per cent of the general population in high-innovation countries, 31 per cent in medium-innovation countries and 26 per cent in low-innovation countries."<sup>2</sup>

#### Case study



#### University of British Columbia, Canada

UBC found that one in 100 employees in the Vancouver Census Metropolitan Area worked for the University and that its direct spending in the region was \$1.9bn. More than 30,000 students were spending just shy of an additional \$306m. There was also a conservative estimate that some 200,000 people visited UBC, be they parents, conference delegates or those interested in its Museum of Anthropology. By 2007-08, the University had created 130 spin-out companies, including five that year. Those spin-outs have formed the basis of British Columbia's 'biotech cluster', which then was made up of 100 companies and was the seventh biggest in North America, employing 2,600 people. The 16 public companies in the cluster had a market value of \$3bn.

Source: Walter Sudmant, Economic Impact of the University of British Columbia. 2009.

- 2.5 Governments must weigh up how much they are willing to spend on universities, particularly in cash-strapped regions in the West that have been ravaged by the financial crisis, in order to reap the rewards. Tertiary institutions clearly rely far more on private sector money than primary or secondary forms of education, but the difference in state support across the OECD is remarkable. More than 95% of funding for universities in Denmark and Finland comes from the state, against less than 30% in Japan, Chile, South Korea, and the UK, albeit these last two countries derive much of their higher education incomes from tuition fees. The majority of OECD nations have seen a rise in private backing against public expenditure, with an average increase across these nations of 5% between 2000 and 2009. Universities, then, must develop deeper, more symbiotic relationships with business to compete regionally, nationally and internationally – or make a better economic case to governments about why they should receive greater state backing.
- 2.6 The Global University Summit will submit a formal Declaration of policy recommendations to the G8 Summit of World Leaders, taking place in the UK later this summer. Within this policy context, it is worth reviewing the relative state-of-play with regards to the relative national investment in tertiary education across these eight countries.

Table 2.1 Expenditure on tertiary education as a % of GDP

	Public	Private	Total
Canada	1.55%	0.91%	2.45%
France	1.29%	0.22%	1.51%
Germany	1.08%	0.20%	1.28%
Italy	0.77%	0.22%	0.99%
Japan	0.55%	1.01%	1.56%
Russian Federation	1.18%	0.64%	1.82%
United Kingdom	0.56%	0.75%	1.30%
United States	1.01%	1.64%	2.64%
G8 average	1.00%	0.70%	1.69%

Source: OECD, 2009

6 | Global University Summit 2013

<sup>&</sup>lt;sup>2</sup> Abridged, from Universities UK, Driving Economic Growth: Higher education – a core strategic asset to the UK. 2012. Available at: http://www.universitiesuk.ac.uk/highereducation/Documents/2011/DrivingEconomicGrowth.pdf

<sup>&</sup>lt;sup>3</sup> CB Richard Ellis Consulting, A Study of the Economic Impact and Benefits of UC San Diego, pp.48-49. 2008.

<sup>&</sup>lt;sup>4</sup> Founded in 1980, the Warwick Manufacturing Group looks to collaborate with industry to help manufacturers develop technologies. For example, in collaboration with Jaguar Land Rover, Warwick is building a £92m National Automotive Innovation Centre on the Warwick campus.

 $<sup>^{\</sup>mbox{\tiny 5}}$  Shiri Breznitz and Maryann Feldman, The Engaged University, 2010

#### The view from the Summit



Warw

8 | Global University Summit 2013





#### Professor Dirk Van Damme

Head of the Centre for Educational Research and Innovation

Simon Bradley Vice President, EADS

**Professor David Ward** Chancellor, University of

Wisconsin-Madison

"According to the findings of a new report, which I will present for the first time at the 2013 Global University Summit, the earnings premium for tertiary qualified people remains high, despite massification of higher education participation and graduation. On average across OECD countries a person 25-64 years old with a higher education degree could expect to earn 55% more in 2010 than a person with a secondary school qualification. Since 2008 the earning premium has continued to increase. As far as we can see now, the impact of the recession on labour demand concerns mostly low- and middle-level skills; employment and earnings premiums for the highly-skilled remain high.

In terms of the public return on investment in higher education, over a lifetime a highly-skilled man will deliver contributions that are many times higher than the initial public investment. Public costs amount to \$36,000, while public benefits over lifetime total on average \$137,000, meaning the net public value for each higher educated man across the OECD is \$101,000 USD (\$278,000 in the USA, \$117,000 in the UK, \$96 000 in Canada, \$67,000 in Spain). It is, however, notable that the figures for women are much lower.

Over the decade 2000-2010 more than half of the GDP growth in OECD countries was related to labour income growth among tertiary-educated individuals. While GDP shrank by almost 4% across OECD countries in 2009, labour income growth among tertiary graduates still made a positive contribution to GDP of 0.4%. OECD countries maintain a competitive advantage through technology, innovation and skills development that boosts productivity, all generated by higher education."

"The key to successful and sustainable innovation-driven economic growth is the "research triangle" of stakeholders - industry, academia and government. For EADS, a global leader in aerospace, defence and related services, upstream investment is vital to the success of the group and has enabled us to design and build truly historic products, from the engines on-board the LZ-1 Zeppelin as it flew in 1900, the world's first commercial radio broadcast in 1920 through to Concorde in 1969 and today with the Airbus A380.

Finding the jewels that transfer from ideas into real technology that delivers business benefit is a non-exact science, which requires all parties to understand the value of failure as well as that of success. For every project that delivers there are perhaps five, ten or even 100 that do not. Critical breakthroughs happen in our labs but crucially they also happen in universities, SMEs and other companies. We need to be able to locate, nurture and integrate these breakthrough technologies in a manner that benefits all stakeholders. We need to engender trust relationships so that long term partnerships can flourish and people are open to sharing their technology."

"Over the past two decades, external pressures on higher education have stressed the positive and generative connections between national and regional economic growth and comprehensive research universities. Today, more critical issues of accountability prevail in discussions of how public policies can enhance economic advancement. Political pressures to do more for local or regional employment bring into question the value of knowledge transfer that does more nationally and globally than locally. Even in local environments where the risk culture necessary for a start-up success is weakly developed, there is an assumption that university research should and can overcome the limitations of local capital markets. Clearly without some comparative regional advantage in access to capital and attractiveness to entrepreneurs, research universities will be unable to meet the expectations of regional economies.

Over the decade 2000-2010 more than half of the GDP growth in OECD countries was related to labour income growth among tertiaryeducated individuals. While GDP shrank by almost 4% across OECD countries in 2009, labour income growth among tertiary graduates still made a positive contribution to GDP of 0.4%. OECD countries maintain a competitive advantage through technology, innovation and skills development that boosts productivity, all generated by higher education.'

6 OECD, Education at a Glance 2012, pp251-253. 2012.



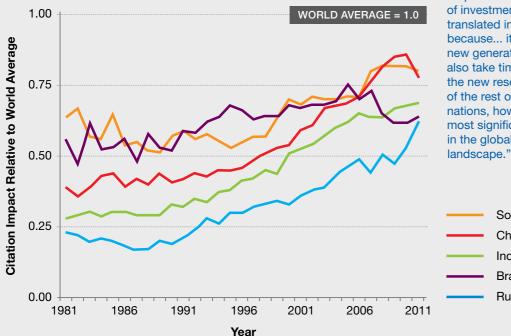




# 3.0 Changing world orders: a global perspective

3.1 The world's wealth is no longer concentrated solely in the traditional economic powerhouses of the West. Political influence is moving eastwards and towards Latin America as their populations grow and consumption rises. University research is following the same pattern. Barely half of the 1.75m research publications indexed by Thomson Reuters has an author from one of the G7 countries, down from two-thirds of the 400,000 archived 40 years ago. This change can be attributed to academic growth in Brazil, Russia, India, China and South Korea - the so-called 'BRICK' nations in this context satisfyingly finished off with a 'K'.

Figure 3.1 - Citation impact of the five 'BRICK' countries relative to world average - Thomson Reuters (2013)9



emerging economies that are looking to R&D to help them catch up and surpass developed nations. Simon Pratt, product manager for are very much driving research expenditure to then drive economic side." China is planning meticulously to move from a manufacturing vast population to have invention patent ownership by 2015, nearly double that of 2010.8



#### **Thomson Reuters: Building BRICKS:**

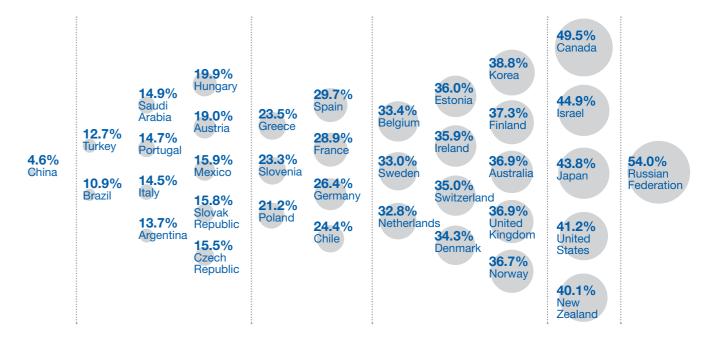
Exploring the Global Research and Innovation Impact of Brazil, Russia, India, China, and South Korea (2013)

"Investment in higher education and research builds up a country's knowledge capacity, its ability to use discovery and innovation to create economic wealth, and its potential to realise benefits in health, culture and the quality of life. The increases in output that reflect the growing level of investment will not immediately be translated into world-class research because... it will take time to train a new generation of researchers. It will also take time to draw the quality of the new research to the attention of the rest of the world. The BRICK nations, however, represent the most significant growing influence in the global economy and research



3.2 Increased GDP means more research money for academics in the institutional research at Thomson Reuters, says: "The 'BRICK' nations growth. Chinese academics, for example, don't have to pay a fee for a patent, which is a distinctive difference [from the West] on the policy to a knowledge economy, and has targeted that 3.3 per 10,000 of its

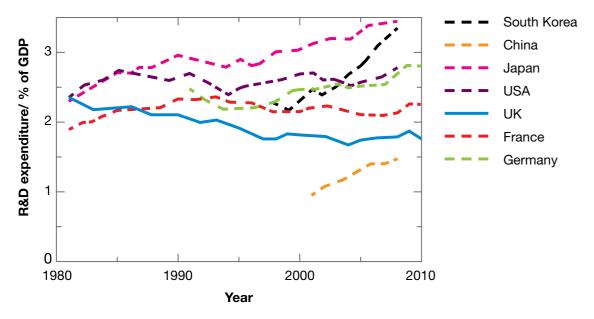
Figure 3.2 - Proportion of 25-64 year olds with a higher education qualification in 2009 (UUK)9



- 3.3 There have been attempts to relax the cost of patents in the West, though not on China's scale. The European Union is looking to establish a single patent across 25 member states that will remove duplication and translation. The bloc believes this will reduce costs by up to 80%. 10 Britain has introduced a 'patent box', which means that companies pay reduced corporation tax of 10% for new products and ideas. As so much research is conducted on university premises, this should encourage businesses to invest more in joint industryuniversity facilities as they seek to take advantage of the tax incentive.
- 3.4 Research expenditure as a percentage of GDP is nearly 2% in the EU, but China has caught up and South Korea is approaching 4%. Russia is some way behind, though this is partly the result of a brain drain when the Soviet Union collapsed. Brazil and India also spend less as a percentage of GDP than is typical across the OECD, but it should be noted that R&D expenditure has at least kept pace with their fastgrowing economies.11

10 | Global University Summit 2013 Global University Summit 2013 | 11 3.5 However, it is when viewed over the last 30 years that the nature of the shift in national R&D investment becomes most apparent. In 1981 the UK was one of the world's most research and development intensive economies, with large-scale R&D efforts being carried out in government and corporate laboratories in many sectors. Over the 30 years between then and now, this situation has dramatically changed. A graph of the R&D intensity of the national economy, measured as the fraction of GDP spent on research and development, shows a long decline through the 1980s and 1990s, with some levelling off from 2000 or so. During this period the R&D intensity of other advanced economies, like Japan, Germany, the USA and France, has increased, while in fast developing countries like South Korea and China the growth in R&D intensity has been dramatic. The changes in the UK were in part driven by deliberate government policy (reduction of government R&D investment and the false-assumption that the private sector would pick up the slack), and were in part the side-effects of the particular model of capitalism that the UK has adopted.12

Figure 3.3 - Gross expenditure on research and development as a % of GDP from 1981 to 2010. (Data from Eurostat)



3.6 Over the last 30 years, the research intensity of the UK's university sector has increased, from 0.32% of GDP to 0.48% of GDP. This reflects, to some extent, real-term increases in government science budgets, together with the growing success of universities in raising research funds from non-UK government sources. The resulting R&D intensity of the UK HE sector is at the high end of international comparisons (the corresponding figures for Germany, Japan, Korea and the USA are 0.45%, 0.40%, 0.37% and 0.36%). But where the UK is very much an outlier is in the proportion of the country's research that takes place in universities. This proportion now stands at 26%, which is much higher than international competitors (again, we can compare with Germany, Japan, Korea and the USA, where the proportions are 17%, 12%, 11% and 13%), and much higher now than it has been historically (in 1981 it was 14%).<sup>13</sup>

Businesses, governments and universities must agree the technologies they need and how they can bring them to market quickly.

- 3.7 Differences in academic research are not fully illuminated by statistics alone. Pratt says that Asian universities in particular are focusing on areas that can be commercialised far more quickly than research undertaken in countries where the work itself is considered to have its own intrinsic value. "Science is theoretically based [in many Western universities] and might be of economic benefit in 20 years, like astrophysics and particle physics. It's not clear how that research drives economic growth now. China looks at, say, nanotechnology, which can be used in the market in a matter of years as opposed to a number of decades."
- 3.8 Given how badly the financial crisis has hit much of the world, businesses, universities and governments in the older powers could look to adopt this model as they attempt to rebuild their economies. Businesses, governments and universities must agree the technologies they need and how they can bring them to market quickly.

Case study



3.9 In his eponymous Government Review of Business-Industry Collaboration, Professor Sir Tim Wilson, the former University of Hertfordshire Vice-Chancellor, came up with a recommendation that might help universities adapt aspects of what might be termed this 'Asian strategy' of improving researchers' understanding of business needs via increased direct researcher—industry interaction. He proposed that "all full-time postdoctoral research staff should have the opportunity to benefit from eight to 12 weeks' work experience outside of academe every three years during their contract". Wilson argued that this would "potentially improve the impact of the research

undertaken", as those staff would have a far better understanding of

3.10 However, despite these emergent trends, the BRICKs are by no means the sole beneficiaries of the relatively recent and significant changes in the national share of global university rankings. As Dirk Van Damme of the OECD points out, "the ranking shifts between individual countries are remarkable. Between 2011 and 2012 the US and the UK lost respectively 5.4% and 7% of their total rankings. The geography of academic excellence is diversifying, with countries such as the Netherlands, France, Sweden, Germany, Switzerland or Belgium improving their global positions. Universities in Singapore, Korea or China are also making their way into the global higher education system, but this movement is, for the moment, still rather hesitant."

what businesses are after.14

#### KAIST, South Korea

In the 1960s and 1970s, politicians in Seoul were keen to develop South Korea from an agrarian economy to a technologically and industrially advanced nation. They looked to education as the way to perform this transformation, and the Korea Advanced Institute of Science and Technology, now known simply as KAIST, was founded in 1971 with government money to be South Korea's first graduate school specialising in engineering research. By 2012, KAIST had the fifth highest number of international patents among universities worldwide, having worked with government and businesses to look into areas that would benefit the economy. Research grants for state and private sector commissioned work on on-going projects currently total around \$320m.

Sources: KAIST, World Intellectual Property Organisation

President, New York University

"The evolution of a 'spiky' world, with collections of talent, resources, and opportunities clustered in specific location, is one of today's most extraordinary trends. Universities see the appeal of idea capitals every day as they seek to attract and retain faculty.

The view from the Summit

Over the past decade, New York University has shaped itself into a global network university, with full campuses in New York, Abu Dhabi, and Shanghai complemented by a network of study-away sites on five continents. Our primary mission has been educational: to encourage young people to embrace ecumenism, bridge divisions with respect and comprehension, and confront complex global problems with nuance.

Universities see the appeal of idea capitals every day as they seek to attract and retain faculty: The most intellectually energetic scholars want to live in an environment that is as alive as they are. A leading genomicist wants to talk not only to other peer genomicists but also to philosophers, political scientists, and artists, to listen to a great opera, to attend a stirring play."

**Professor John Sexton** 

<sup>&</sup>lt;sup>7</sup> Thomson Reuters (Jonathan Adams, David Pendlebury, Bob Stembridge) Building Bricks: Exploring the Global Research and Innovation Impact of Brazil, Russia, India, China, and South Korea, p.4. 2013.
Available at: http://sciencewatch.com/sites/sw/files/sw-article/media/grr-brick.pdf

<sup>8</sup> Building Bricks, p.17.

 $<sup>^{\</sup>rm 9}$  Universities UK, Driving Economic Growth: Higher education – a core strategic asset to the UK. 2012.

Available at: http://www.universitiesuk.ac.uk/highereducation/Documents/2011/DrivingEconomicGrowth.pdf

<sup>10</sup> http://ec.europa.eu/unitedkingdom/press/press\_releases/2011/pr1138\_en.htm

<sup>&</sup>lt;sup>11</sup> Building Bricks, p.6.

<sup>&</sup>lt;sup>12</sup> Professor Richard Jones, University of Sheffield, The UK's thirty year experiment in innovation policy (2012), http://www.softmachines.org/wordpress/

<sup>13</sup> Ibid.

<sup>&</sup>lt;sup>14</sup> Sir Tim Wilson, A Review of Business-University Collaboration,p.56. 2012.
Available at: http://www.hefce.ac.uk/news/newsarchive/2012/name,69548,en.html

# 4.0 Growth through technology

- "
- 4.1 Five years ago, an Economist Intelligence Unit survey of 289 higher education and business executives found that "to attract corporate partnerships, institutions will need to demonstrate a commitment to advanced technologies". This has proven to be true, with businesses becoming increasingly selective in their university partnerships. For example, Royal Dutch Shell today largely chooses to collaborate with universities that have the type of advanced technologies that the oil giant itself has not invested in yet. A senior Shell figure has been quoted as saying: "It is important to ask yourself: what can these university centres do better or differently than we can?"
- 4.2 Students are also looking for universities that have the technology that will help them develop academically and allow them to study in a more flexible way. This latter point is particularly significant in fee-paying universities, which must recognise that the student is now the customer. Claire Arnold, managing director at private and public sector adviser Maxxim Consulting, has looked into how universities can maximise their appeal to students. She says: "They need to think about the pathway from further education to higher education for a 16 or 17-year-old and whether or not they are operationally flexible enough to accommodate them. Most universities are teaching people on-site, when lots of businesses are thinking about different channels and operating models."
- 4.3 Ed Parsons, Google's chief geospatial technologist, argues that the era of "sitting in some hall while the lecturer drones on" is coming to an end as the internet revolutionises universities in the same way it has other industries. He argues that lectures can be replaced with interactive graphics and videos, allowing academic staff to focus on smaller tutorials that are typically of more benefit for the student. Parsons argues: "You turn education upside down, meaning that lecturers have more contact time with their students."
- 4.4 In effect, much of the course is outsourced online to 'massive open online courses' or 'MOOCs'. These are open access courses, which can also provide online forums for debate, and so far are having a somewhat electrifying effect on the education industry. For example, Stanford University professor Sebastian Thrun started offering his Introduction to Artificial Intelligence course online in 2011, which in no time was being used by more than 160,000 students around the world¹8. Thrun's course and others were then spun-out as Udacity, which was backed with \$15m of venture capital and has since developed courses in association with huge businesses like Microsoft and other universities, such as San Jose State.

#### Sir Michael Barber, IPPR

An Avalanche is Coming: Higher Education and the Revolution Ahead

"The curriculum of a university, once a prized possession developed by the faculty members for the students, is increasingly becoming a commodity. MOOCs have opened up access to tried and tested curricula for anyone in the world to use. This is especially pertinent for the more basic courses that define a large part of the undergraduate experience. Though some universities are sceptical of the movement, others are calling MOOCs the 'Napster moment' for higher education." <sup>115</sup>

#### Case study



## Tokyo Institute of Technology, Japan

Around one billion people worldwide are affected by neglected tropical diseases, which are spread by bacteria and parasites. Among the most neglected are those caused by dengue virus. There is no drug available to treat dengue fever, but Astellas Pharma wants to develop suitable medicines. In March, the drugs group signed a collaborative agreement with the Tokyo Institute of Technology to find suitable treatments. Astellas chose Tokyo Tech because of its TSUBAME2.0 supercomputer, which will be able to data mine patents and articles for any information that might help develop a drug. TSUBAME2.0 will also help identify compounds that could help fight dengue fever.

Source: Wall Street Journal

- 4.5 Google has developed a MOOC to teach people how to navigate the search engine more efficiently, showing them shortcuts through using brackets and colons. Not only do MOOCs help with the IT skills that are so important in the business world today, but corporates have better visibility on just what prospective candidates are being taught. Businesses, then, can more easily work with the academics and universities behind the MOOCs to develop those courses to meet economic needs.
- 4.6 Equally importantly, standardising courses online with a free-flow of debate and interactive sources can free up space in universities for other work and cut the cost of degrees at a time of budgetary pressure. More data and information can now be held in the Cloud, slashing overheads, such as holding so many books in libraries.
- 4.7 However, a position paper produced by IT Company Atos points out a big concern with MOOCs: "If students can access the best teachers from the best universities free of charge, what is the role of the teaching college or university?" As well as the tutorials, universities will have to find ways of adding depth to how they teach in person another opportunity for businesses to play a more on-site role in working with students and academics.

 $<sup>^{\</sup>rm 15}$  Specific quote is from Shirky C (2012) 'Napster, Udacity, and the Academy', blog article. http://www.shirky.com/weblog/2012/11/napster-udacity-and-the-academy/

<sup>&</sup>lt;sup>16</sup> Economist Intelligence Unit, The future of higher education: How technology will shape learning, p.4. 2008.

<sup>&</sup>lt;sup>17</sup> MIT Sloan Management Review, "How to create productive partnerships with universities", June 2012.

<sup>18</sup> http://www.nbcnews.com/id/46138856/ns/technology\_and\_science-innovation/#.UWVg8Mu9KSO W

<sup>&</sup>lt;sup>19</sup> Atos, Shaping schools and universities for a digital world, p.5, 2012

<sup>&</sup>lt;sup>19</sup> Atos, Shaping schools and universities for a digital world, p.5. 2012

#### The view from the Summit

#### Srikanth lyengar

Vice President and Head of UK, Infosys

"Economic regeneration begins with innovation. Successful corporations are using technology to remain agile enough in what can be an uncertain and volatile economy. They are also using mobile and internet innovations to develop new business models.

Of course, the most disruptive technologies don't mean much if they don't have the right people behind them. Infosys cherishes its partnerships with Cambridge University and Belfast's Queens University. The British university system nurtures the kind of innovation that drives success within global corporations.

At the corporate level, disruptive innovation is transforming companies that embrace change. BBC iPlayer, for instance, is a leading mobile television technology. British supermarkets were the first to pioneer loyalty cards; online grocery shopping is more advanced here than anywhere else. Innovations like "click and collect" are helping high street companies like Argos to compete with the likes of Amazon."

#### **Ed Parsons**

The Geospatial Technologist, Google

"Over the last year you could not fail to pick up on the emergence of MOOCs, as both private enterprises and established universities began to offer new or existing courses online via the web. This is still an establishing field with many questions to be answered before MOOCs become mainstream not least regarding their sustainability commercially (many are free) and their true value to students (the validity of qualifications awarded).

I would argue the best designed MOOCs will invert the mainstream higher education experience, making the lecture experience a commodity and increasing the value of personal interactions with fellow students and most importantly tutors. What MOOCs represent is a step-change in the accessibility of higher education and, as is often the case when such explosions of content occur, disruption of existing practices will occur."

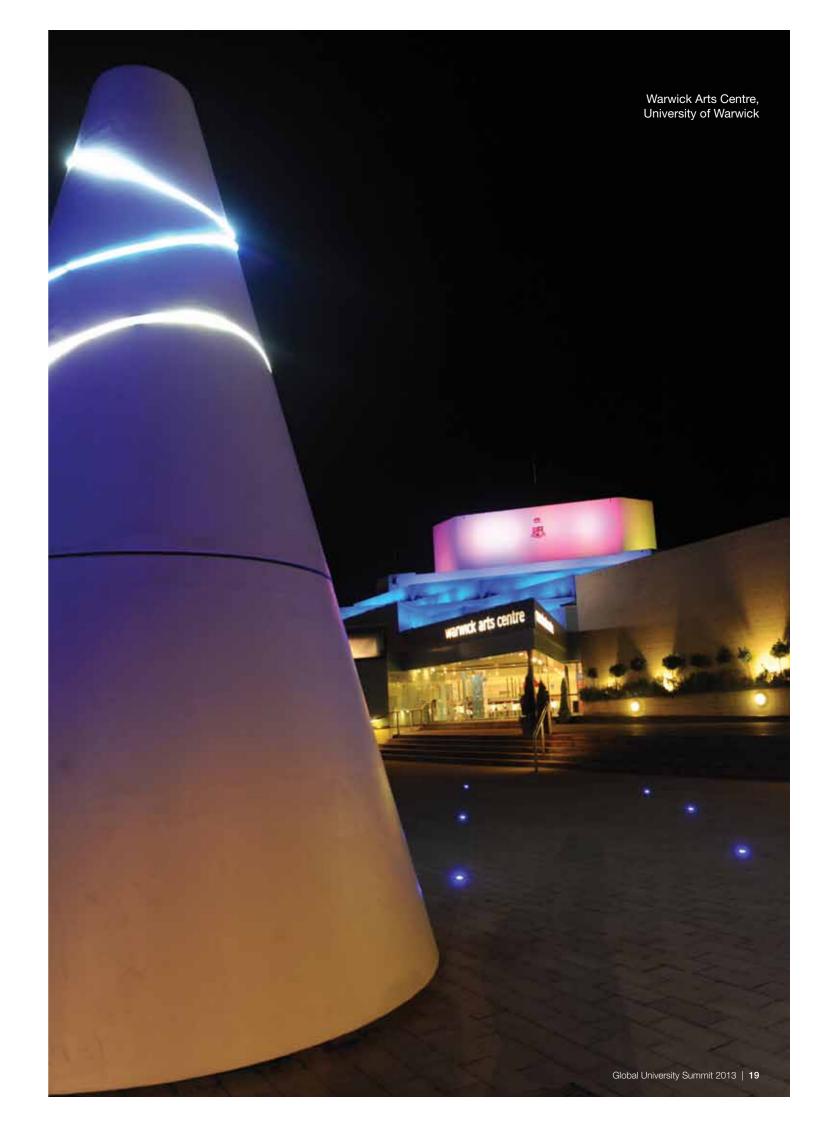
#### Simon Nelson

Chief Executive Officer, Future Learn

"A transformation is underway. Across the world, evidence grows of the power of technology to help bring education to the previously unreachable, the unconfident and the socially and economically excluded. Yet it would be wrong to define this growth simply in technological terms. Rather, it is engineers' appetites to work with visionary academics that ensures this technology delivers the thing great educators have always known to be important - captivating the audience.

But as this transformation takes its grip, challenges are emerging which anyone working in this space needs to consider. The wider digital landscape is blighted with examples of new ventures whose light shone all too briefly. In our world, providers have a lot to deliver if they are to avoid the same fate. Reproducing "lectures online" is unlikely to be enough for increasingly sophisticated online learners.

The transformative power of technology when applied to education can be in no doubt. It is something that non-academic professions have been harnessing for years. The exponential growth of social media platforms and digital communication vehicles continue to impact on our ability, and willingness, to search for and share knowledge. Growth is here to stay; the next battle is to ensure that quantity comes with quality."



# 5.0 Universities 2025: the changing role of universities

- 5.1 Aside from technological advances, universities in countries that have come under economic strain are undergoing huge structural change. Paul Lester, the Chairman of Britain's third biggest private company, petrol and diesel supplier Greenergy, says: "Universities have become much more business-like in the last five years because there has been so much stress on their budgets. They've had to become more business-like in the management of their costs they've installed more business people on their boards." And then there is the need to address the increasing demands that students are expecting of their institutions.
- 5.2 Communication is, in fact, a key word here as the greater the collaboration between business and universities, the more each will listen to what the other needs. For example, Big Four accountant KPMG two years ago started a programme with Durham, Southampton and Exeter Universities where they sponsor students through an accountancy degree. The firm itself sources the students - 87 in 2011 and 141 in 2012 - and pays their fees provided they work for KPMG for around three years on completion of the degree. Although the Universities have the right to veto any candidates who they deem unacceptable, KPMG is able to select promising sixth formers who might not meet those Universities' normal academic grading criteria. The students take internships at KPMG during summer holidays, meaning they are far more prepared for the world of work than many of their peers. "I can see this programme expanding." says KPMG Head of Corporate Affairs Marianne Fallon. "What we're trying to do is point out school leavers who are talented that we might not necessarily find among graduates."
- 5.3 Mark Taylor, the Dean at Warwick Business School, has brought in a roster of lecturers from the City of London in what he describes as "professor of practice" roles. For example, Jon Rushman who developed the IT for the trading platform used by Blackrock, the asset management company, teaches how to design software to support investment bank decision-making. "The finance industry employs so many IT graduates who have no finance background," explains Taylor. "They're developing sophisticated platforms without any real knowledge of what they're supporting." But Rushman's lectures mean that students with good IT skills are tempted to join the business school. When they graduate, they will have a far greater understanding of the company that ends up employing them.

#### Ben Sundell

President-elect, University of Warwick Students' Union

"Universities are facing challenges on all fronts – and the future complexities facing universities are only going to deepen while the business of managing change and improvements will become ever more challenging. In the maelstrom of innovation, efficiency and globalisation it is crucial that universities do not forget the demands and expectations of their core constituents – students. Equally, what will the civic role of universities look like in 2025? Nations and policy-makers cannot afford to let the 'anchor' role that universities play in their local communities and regions disappear through decaying recognition and investment. I hope instead that the changing role of universities will lead to an accompanying and complimentary transformation of both the student experience and the civic 'soul' of institutions, keeping universities rooted deep in public life for the next decade "

#### Case study



#### University of Illinois, USA

In January, Deloitte and Illinois University were awarded the American Accounting Association's prestigious innovation in auditing and assurance education award for a learning programme they jointly developed. Deloitte and Illinois' Centre for Professional Responsibility in Business and Society worked together on 'Auditor Independence Education Materials', which include a video, case studies and even an in-class market game. These cover five key topics, such as serving the public interest and the role of the accounting profession in capital markets, from different perspectives, including auditors, regulators, and academics. Since its launch four years ago, these materials have been used by around 400 professors in more than 300 businesses across 22 countries.

Source: Deloitte

- 5.4 The pace of change makes it difficult to forecast exactly how universities will look in a decade or so. However some clues are offered by an improved relationship with business and a student base that is more aware than ever that they must choose universities and courses wisely to enhance their job prospects. Lee McIntire, president and chairman at Colorado-based CH2M Hill, the engineering giant that is overseeing the \$5 billion expansion of the Panama Canal, says he has noted a recent surge in people taking dual degrees. McIntire points to the importance in his line of work of graduates who have taken finance with an engineering minor, or vice versa, which might mean the course takes a semester or year longer to complete, but gives them a more rounded knowledge. It's not enough to just be able to look over the books or focus on designing a bridge. What are useful are people who have enough technical expertise to work out how to design that bridge without busting the budget.
- 5.5 By 2015, students and universities should be 'unbundling' their curricula so that graduates have access to a broader range of skills and knowledge. But this is just one of many areas in which students are going to be pushing their institutions to change. At a conference of international student leaders, held recently at the University of Warwick as a precursor to the Global University Summit, a big agenda was set for universities on topics including finance and student funding; employability and the global graduate; communities, environmentalism and civic engagement; the digital revolution and borderless classrooms; and mobility and internationalisation.
- 5.6 Employability is a key area of concern for students. The Warwick Student Summit called upon universities to take a holistic approach to careers and skills, balancing the fostering of both hard and soft skills. They supported growth in intercalated years in industry and, via mobility programmes or exchange, with other (often international) institutions. Employer engagement was another area of concern and the Warwick Student Summit called for stronger leadership from businesses and employers to strengthen degrees in partnership with universities. Expansion and improvement in alumni networks a shared responsibility of universities and their graduates was seen as critical to support mentoring, work shadowing, and to expand the availability of graduate placements.
- 5.7 Undoubtedly controversial in some quarters, there is an inevitability that by 2025 businesses will be far more involved in university life than they are even today. Indeed, students are expecting this as much as anyone. Which brings us to how universities can better respond to business, so that this increasingly close relationship proves to be mutually beneficial.

# The view from the Summit





#### **Toni Pearce**

President-elect, National Union of Students (UK)

"MOOCs are an omnipresent phenomena in the news at the moment, with many questions being asked about how student representation might change to reflect this new, virtual future for higher education. If your student population is scattered around the globe and watching online, how do you ensure that quality and student rights are maintained? Indeed, how would you (completely hypothetically) ensure that the sense of community and student solidarity is maintained, despite the disparate nature of that education model?

We have the technology and the capability now to engage with thousands of students online and, if we put our minds to it, could create a sense of community and make sure that these people feel engaged. It's really important that they have the same rights to access student voice structures and democratic structures as our students studying within the UK have. That's a really difficult one to navigate."

#### **Professor Dame Julia King**

Vice-Chancellor, Aston University (Birmingham, UK)

"Too often universities are criticised for not providing employable graduates. In our current economic climate undergraduates and postgraduates are even more actively engaged in seeking real experience of working with businesses through placements, collaborative research and increasingly setting up their own start-up companies. The evidence, from our programmes at Aston University, is very strong that incorporating extended placement activity within an undergraduate course increases the employability of the student and allows an 'extended interview' process for the employer. Universities are working hard to improve employability skills but we also need businesses to create high quality opportunities for placements. It is easy to overlook the value of new graduates' expertise in social media to enhance the marketing and innovation capability of companies - a skill which is second nature to them."



# 6.0 Responding to business



- 6.1 A major challenge facing business is an acute skills shortage. In January, McKinsey & Company, the management consultant, found that 43% of employers in nine countries, including the US, Brazil, Morocco and Saudi Arabia, said that they could not find enough skilled entry-level workers. The report argued: "This problem is not likely to be a temporary dip; in fact, it will probably get much worse. The McKinsey Global Institute estimates that by 2020 there will be a global shortfall of 85m high- and medium-skilled workers... Clearly, employers need to work with education providers so that students learn the skills they need to succeed at work."<sup>20</sup>
- 6.2 McKinsey concluded that students, education institutions and employers lived in "parallel universes", each with different views on everything from why people drop out of university to just how prepared graduates are for the world of work. McKinsey found that the most successful programmes were those that saw "education providers and employers actively step into one another's world". The consultant highlighted schemes that saw employers help design curricula and offer students the opportunity to spend up to half their time on a job site.<sup>21</sup>
- 6.3 Setting up business advisory boards full of industry leaders is a useful first step, so at least there is a forum from which university executives and lecturers can receive some guidance. However, executives must choose their partnerships with businesses carefully, build a relationship and ensure that they will be able to work together for a long time. Dame Helen Alexander, the Chancellor of the University of Southampton and a business leader with roles such as being chairman at FTSE 250 event organiser UBM, says: "Both universities and firms need to work hard at their relationship, you can't just turn it on overnight. With a long-term partner you've got be willing to engage with each other, as [you might have a situation where] a firm wants to go in one direction with research and the university in another."

## Council for Industry and Higher Education

Growing Value: Business-University Collaboration for the 21st Century (2012)

"Innovation pathways vary by sector, depending for example on the 'clock-speed' of specific industries, industry structure, maturity, and the significance of IP. There is no single 'silver bullet' solution to enhancing the value and impact of university inventiveness that would work across all sectors. Equally, many technologies have multiple applications across many sectors."

#### Case study



#### Tsinghua University, China

In April, private equity magnate Stephen Schwarzman launched a \$300m scholarship programme with Tsinghua, which will see 200 students spend a year in Beijing. It apes the 111-year Rhodes Scholar system that allows foreign students to study at Oxford University and has been established to foster a better understanding of Chinese society and economy. However, as well as Schwarzman, the programme is backed by Western firms, including BP, Boeing, and Credit Suisse, illustrating that Tsinghua is a favoured university of big business. Last year, telecoms giant BT announced that it was going to establish a research laboratory co-located at Tsinghua School of Economics and Management to develop and demonstrate new intellectual property rights. This will, as BT puts it, "provide a bridge between Chinese innovation and BT technology". Nokia also has a research framework with Tsinghua.

Sources: BBC, Bloomberg, BT

- 6.4 Alexander suggests that universities should look at which firms are willing to show commitment to the university as a sign that a partnership could work. For example, Lloyd's Register and Southampton University have collaborated on a £116m marine technology and research campus, incorporating the assurance company's global technology centre. This will bring together 300 academics working with industry and government, where ship designers and oceanographers will be able to better understand future and current maritime issues vital information for the running of Lloyd's Register's business. Science and universities minister David Willetts says of this development: "Industries and universities have a vital role to play collaborating together to achieve sustained economic growth... We want to see more examples of this kind of collaboration."<sup>22</sup>
- 6.5 This kind of intensive research should also result in spin-out companies, an economic driver for all those involved in the collaboration. Chancellor of the University of Warwick and former CBI director general Sir Richard Lambert argues that the US has been the "pace-maker" on developing spin-outs, as "you only have to look at the number of Fortune 500 companies that started up in the past 10-15 years from a university".
- 6.6 Sir Richard argues that businesses have changed and are more open to working with universities. Previously, so much was produced inhouse, in secret. With ideas needing to be developed more rapidly to reach market, this is less of a concern and instead businesses want to make use of the best researchers around. If this view is correct, then universities that are welcoming to businesses won't find it difficult to find good partners.

<sup>&</sup>lt;sup>20</sup> McKinsey & Company, Education to employment: designing a system that works, p.11. 2013. Available at: http://www.mckinsey.com/features/education to employment

<sup>&</sup>lt;sup>21</sup> Ibid, pp.18-21

 $<sup>^{22}\</sup> http://www.lr.org/sectors/automotive/News/237318-southampton-marine-and-maritime-institute-a-catalyst-for-research and-economic-growth.aspx$ 

#### The view from the Summit

#### Sir John O'Reilly

Director General of Knowledge and Innovation, Department for Business, Innovation and Skills

"In the UK, universities' income from engagement with business and community is at an unprecedented level, and has more than doubled in real terms since 2001 to £3.43bn per annum. Industry has been attracted to working in the UK by our universities, by our skilled people, by the quality of our research and the ease with which the UK transacts its relationships.

We often look to the US for lessons on university-business interactions: but the World Economic Forum rated the UK second in the world for universitybusiness collaborations - ahead of the US. UK HEIs generate a higher number of patents and more spin-outs per pound of research, and attract a similar proportion of industry funding as US HEIs.

Our universities are one of the UK's national assets. They have a worldwide reputation for teaching and research and make a valuable contribution to economic growth"

#### **Neil Carberry**

Director for Employment and Skills, Confederation of British Industry (UK)

"The current economic context offers a huge opportunity for a major shift in how businesses and universities co-operate, working together to seize the benefits for economy and society. The potential pay-off is huge for all of us. Strengthening research and innovation and having the right skills base will underpin a successful industrial strategy. Businesses and universities, not government, must seize the opportunity to work together and drive the agenda.

businesses and universities can work together to make real progress: firstly, on support for investment in research and innovation. Secondly, by tilting the debate towards the importance of science, technology, engineering and maths (STEM). And finally, in maximising the potential of new routes to higher level skills."

I see three key trends where

#### Dame Helen Alexander

Chancellor, University of Southampton (UK)

"The greatest collaborations between industry and universities involve true partnership. Developing these partnerships, however, is a slow process, and needs to be carefully nurtured.

Companies with good experience of a university and the graduates it produces often take the next step in the relationship; they identify individual projects where the university can help their business to develop further. To be successful, universities must see such contract research as a key part of their mission. They need both academic staff that understand and can deliver to business requirements and timescales, and processes which make such contract research easier to deliver within a busy university environment. The universities who are best at doing this, Southampton included, have developed this capability over many decades. They need staff with significant experience in working with companies, and often have dedicated units for contract research. It's essential that these units stay deeply connected to the rest of the university, and can draw upon expertise from across the disciplines.

Partnership brings huge rewards, but is hard, time-consuming and involves compromise. You only become the partner of someone you know well. The trust, the confidence, the comfort of working together in this way builds slowly. You can't rush it."

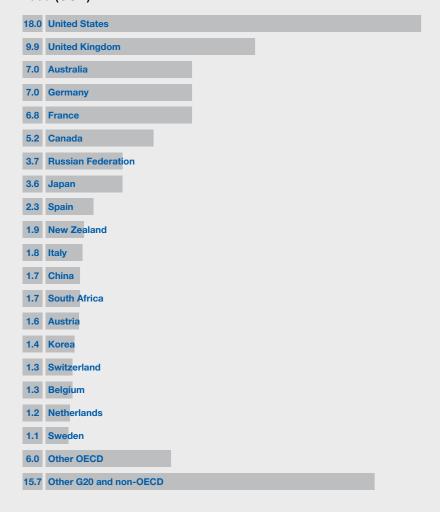


# 7.0 Transnational education

66

7.1 A globalised world means that the traditional local or regional university needs to think about how it can develop internationally, beyond just swapping research. Not only is the recruitment of overseas students lucrative for universities, but there are opportunities to expand abroad with campuses and courses beyond their borders. This helps the universities become more financially self-reliant, developing commercial opportunities overseas, so that any decline in state funding is easily absorbed. According to Professor Dirk Van Damme of the OECD, "there is a strong relationship (a correlation rate of .88) between the concentration of academic excellence in a country (number of universities in the top 200) and the attractiveness of that country for international students (in terms of the market share of total incoming students in OECD countries)."

Figure 7.1 - Market share of internationally mobile students (%), 2009 (UUK)<sup>23</sup>



#### University of Melbourne/ Universitas 21

Ranking of National Higher Education Systems 2013 (May 2013)

"The worth of a national higher education system is enhanced if it is well connected with the rest of the nation's society and is linked internationally in education and research. High connectivity provides two measures of the worth of a nation's higher education system: it is an indicator of the quality of teaching and research, and it is an indicator of absorption of new discoveries and ideas."

#### Case study



#### Monash University, Australia

In 1999, Melbourne-based Monash University set out a plan to be less reliant on Government funding by growing internationally. Today, Monash can reasonably claim for its students that "the world becomes their campus". Monash ensures that courses taken on four continents meet both local and international standards. As well as its domestic base, there are campuses in Malaysia and South Africa, as well as operations all over the world, including Italy, India, China, Indonesia and Sri Lanka, Victoria recognised Monash as the Australian state's exporter of the year in 2010, when it had 21,114 international students from 158 countries, generating \$250m in revenue.

- 7.2 Concerns that such expansion undermines the traditional, local geographic nature of the university system seem to have been overcome given that by 2011 there were more than 180 branch universities around the world. As a paper from the International Centre for Higher Education Management at the University of Bath concluded, university leaders "may no longer feel that establishing an international branch campus is a non-isomorphic action that is a threat to their legitimacy. For this reason, we might see more international branch campuses being established in the future." The paper also notes the main drivers include "money, influence and status".<sup>24</sup>
- 7.3 Michael Barber, chief education adviser at Financial Times owner Pearson, touched on this development in his report 'An avalanche is coming'. The report points out the importance of the state in helping universities with globalisation: "Governments will need to rethink their regulatory regimes which were designed for an era when university systems were national rather than global."<sup>25</sup> The UK is a nation that is struggling with this concept, as an immigration cap has been accused of "strangling" universities, resulting in a 21% decline in the number of visas granted to overseas students in 2012 alone. This is thought to have cost the economy as much as £3bn.<sup>26</sup>
- 7.4 A country with such closed borders loses immediately in terms of fees and then later the economic benefit of these skilled graduates being employed in that state. Neil Carberry, the CBI's Director for Education and Skills, says that countries need to make sure that they're not "placing restrictions of bona-fide students", particularly when universities are now essentially an export. Fees are just like, for example, receiving the price tag on a car that is sold beyond the domestic market. Also, if another country isn't able to easily buy that car, or see its promising students get on to those academic courses, why should they reciprocate? An immigration cap essentially acts as a barrier to trade.
- 7.5 Michael Peak, education and society research manager at the British Council, has found countries have used differing models of international partnership in order to grow their own economies. For example, the United Arab Emirates has established zones with tax breaks for universities, allowing foreign institutions to 100% own their operations so as to serve the growing ex-pat community; other countries, such as China, want to build capacity but maintain certain academic standards so insist that foreign universities run courses and campuses in conjunction with domestic players. Peak says: "Countries must set clear objectives of what they are working for and build the regulatory framework with those objectives in mind."

# The view from the Summit





#### **Anthony McClaran**

Chief Executive, Quality Assurance Agency (UK)

"Following a number of years of rapid expansion, transnational education (TNE) today is a larger, more diverse area of higher education than ever in terms of numbers and types of students, global locations and models of provision. This growth has been fuelled by the internationalisation strategies of higher education providers, alongside the ambitions of host countries to improve their own education, skills and ultimately, economic competitiveness.

This period of expansion, however, is now being followed by growing international focus on how to ensure the quality of TNE provision. There seems to be broad consensus that the quality assurance of TNE globally needs to be strengthened, although there is less agreement on how that will be achieved.

Who is ultimately responsible for the quality of TNE – the provider, the home country quality assurance agency, or the agency in the host country? And how do we resolve the logistical challenges presented as TNE continues to grow at a rapid rate, to ensure we can continue to assure it robustly protects the interests of students around the world?"

#### Michael Peak

Research Manager, Education and Society at British Council

"Transnational education (TNE) is increasingly seen as a growth area in international HE. The British Council's recent report, 'The shape of things to come' forecast that international student mobility would slow over the years to 2020 but that overseas delivery of HE programmes (either through teaching partnerships with local providers, or through international branch campuses) would grow in terms of the number of institutions participating, the variety of programmes on offer, and the volume of students enrolling.

TNE in its various forms can impact on individuals, institutions and nations in many areas. In terms of economic impact, TNE allows students to study (and gain international qualifications) whilst remaining in employment having positive consequences for labour market efficiency and economic output. Its academic impacts include the benefits to host country institutions from TNE partnerships with foreign providers when structured for mutual benefit. Finally, the socio-cultural impact of TNE can provide students and staff from both the host and the partner country with opportunities to gain an increased understanding of other cultures. A word of caution: the risk also has to be considered that the TNE activity could conflict with other host country HEIs and communities; and that 'Western-centric' approaches could be seen to be imposed on local HE systems."

- 7.6 While the numbers and types of Transnational Education (TNE) programs have increased substantially there is a dearth of available data on a range of outcomes: economic impacts, whether labour market needs are being met by skilled TNE graduates, or if overall access or quality of higher education is enhanced. The strongest contribution of TNE, however, is its role in capacity building at the institutional/program level in terms of quality assurance processes, teaching methods, program management and distance education.
- 7.7 TNE by definition produces something of a borderless educational experience. Multinationals are responding to this as they appreciate the need to move their best staff across borders, so that they can crack new markets or resolve issues in existing ones. Simon Bradley, head of global innovation at pan-European aerospace behemoth EADS, argues that companies are increasingly looking for staff with "experience of working in more than one country". Businesses need "increased mobility" among the graduates who they hire. Any experience of studying abroad will "help them settle in" when EADS needs an engineer to move from, say, Seville to Toulouse at short notice. Bradley points to countries that actively push their students to broaden their studies. France, for example, has the Volunteer for International Experience (VIE) programme, where the state pays for graduates to work in other parts of the world a system that EADS supports and ultimately benefits from.
- 7.8 Transnational education allows ambitious universities to better exploit their brands. New York University has been cited as the most aggressive in international expansion, having opened liberal arts campuses in the United Arab Emirates and Shanghai, as well as sites for "study away courses" from Argentina to Ghana. In fact, NYU has gone as far as rebranding itself as the GNU the Global Network University.<sup>27</sup> Mere matters of location should no longer be a barrier for universities and their growth plans, better reflecting the international flexibility of modern, big business.

<sup>&</sup>lt;sup>23</sup> Universities UK, Driving Economic Growth: Higher education – a core strategic asset to the UK, 2012

<sup>&</sup>lt;sup>24</sup> Stephen Wilkins and Jerone Huisman, "The international branch campus as transnational strategy in higher education", p. 15, 2012

<sup>&</sup>lt;sup>25</sup> Michael Barber, Katelyn Donnelly, Saad Rizvi, An avalanche is coming (IPPR), p.6. 2013. Available at: http://www.pearson.com/avalanche/

 $<sup>^{26} \, \</sup>text{http://www.huffingtonpost.co.uk/} 2012/08/30/\text{student-vias-immigration-decline-damian-green-targets\_n\_1842173.html}$ 

<sup>&</sup>lt;sup>27</sup> http://www.insidehighered.com/news/2013/03/11/nyu-establishes-campuses-and-sites-around-globe

# **Report Contributors**

#### Author

Mark Leftly, Associate Business Editor of the *Independent* titles and *London Evening Standard* 

#### **Editors**

Liz Bell, Policy and Data Analyst, Universities UK
Dr Edward Harcourt, Global University Summit Project Director,
University of Warwick

Alex Miles, Public Affairs Officer, University of Warwick

#### Contributors

Professor Nigel Thrift, Vice-Chancellor and President, University of Warwick Professor Eric Thomas, Vice-Chancellor, University of Bristol and President, Universities UK

Dr Wendy Piatt, Director-General, The Russell Group

Professor Dirk Van Damme, Head of the Centre for Educational Research and Innovation, OECD

Professor David Ward, Chancellor, University of Wisconsin

Simon Bradley, Vice President, EADS

Srikanth Iyengar, Vice President and UK Head, Infosys Ltd

Ed Parsons, The Geospatial Technologist, Google

Simon Nelson, Chief Executive Officer, Future Learn

Professor John Sexton, President, New York University

Professor Sir Leszek Borysiewicz, Vice-Chancellor, University of Cambridge

Toni Pearce, President-elect, National Union of Students

Professor Dame Julia King, Vice-Chancellor, Aston University

Sir John O'Reilly, Director General of Knowledge and Innovation,

Department for Business, Innovation and Skills

Neil Carberry, Director of Employment and Skills, Confederation of British Industry

Dame Helen Alexander, Chancellor, University of Southampton

Anthony McClaran, Chief Executive, Quality Assurance Agency

Michael Peak, Research Manager, Education and Society at British Council

## Global University Summit 2013



The Global University Summit meets annually and prepares a declaration of commitment and policy recommendations on a theme of topical and mutual interest for the G8 Summit of world leaders. The UK holds the presidency of the G8 Summit for 2013 and the Prime Minister has set a focus on securing global growth and prosperity for the Summit. The Global University Summit's Declaration will be sent to the G8 Summit meeting hosted by Prime Minister David Cameron in June 2013 at Lough Erne in Co Fermanagh, Northern Ireland.

Previous Global University Summits have taken place in: Sapporo, Japan (inaugural summit, 2008); Turin, Italy (2009); Vancouver, Canada (2010); Dijon, France (2011) and Chicago, USA (2012) and have addressed key issues such as 'Sustainable Energy, Health and Education' and 'Developing Talent to Drive Innovation in a Global Society'.

32 | Global University Summit 2013

## **Notes**



Universities are rightly regarded as critical national assets. Governments the world over see them as vital sources of new knowledge and innovative thinking, as providers of skilled personnel and credible credentials, as critical friends and auditors of policies, as attractors of international talent and business investment, as agents of social justice and mobility, and as contributors to social and cultural vitality. We store knowledge and pass it from one generation to another, we are part of the civic establishment, and we are national and regional symbols. No other sort of organisation has such an astonishing remit, and no other sort of organisation delivers such indispensable benefits to society.

It is a matter of fierce pride to all of us who work in universities that with astonishing frequency – though not regularity or predictability – we contribute ideas, technologies, and concepts that shatter preconceptions and change the world for the better.



**Sir Leszek Borysiewicz** Vice-Chancellor, University of Cambridge





