

FOLLOWING UP THE WILSON REVIEW OF BUSINESS-UNIVERSITY COLLABORATION

Next steps for universities, business and Government

JUNE 2012

Contents

C	ontents	2
F	oreword	3
1.	Introduction	5
2.	Globalisation, Global Competitiveness and the Challenges for the UK Economy	6
3.	Graduate Employability and Student Experience	. 10
	3.1. Higher Level Apprenticeships	. 12
	3.2. Foundation Degrees	. 12
	3.3. Sandwich courses and work placements	. 14
	3.4. Internships	. 16
	3.5. Enterprise	. 17
	3.6. Graduate Recruitment	. 20
4.	Research and Innovation	. 22
	4.1. People Interchange	. 24
	4.2. International People Interchange	. 26
5.	System Wide View and Information to Drive Choice	. 29
6.	Universities at the Heart of the Local Economy	. 31
	6.1. Attracting investment and promoting exports	. 32
	6.2. Simplified planning and Business Rates support	. 33
	6.3. UKTI	. 34
	6.4. Education Exports	. 34
	6.5. Investment in Growth	. 35
7.	Conclusion	. 37

Foreword

Universities are complex institutions that play a variety of important roles in our society. Our universities are centres of critical inquiry and free-thinking; they instil civic values in their students; and they extend understanding through teaching and research. Increasingly they lie at the heart of a city or region's economy and wider civil society; it is well-nigh impossible to imagine any of our great cities without their universities. Universities are at the forefront of a quest to further our knowledge of the world around us, and to pass this knowledge on to future generations. As the Robbins Report stated almost fifty years ago, 'the process of education is itself most vital when it partakes of the nature of discovery.'

Lord Robbins also identified the need for universities to provide 'instruction in skills', to promote the 'general powers of the mind', as well as take responsibility for 'the transmission of a common culture and common standards of citizenship'. ² This chimes with the aims of Professor Wilson's review. We rightly value critical enquiry and the generation and preservation of knowledge; we also recognise the value of entrepreneurialism, the practical application of research, and graduates who are not only well informed and educated, but are also well-rounded and employable. These are values that are vital in creating economic growth and enhancing human prosperity, and which are best exploited through effective business-university collaboration.

Universities, and other Higher Education Institutions (HEIs), that connect with businesses gain access to potential private funding for research and other initiatives; partners in realising the commercial value of research; mentors for student entrepreneurs, and a potential employer and provider of work placements and internships for their students and graduates. This helps to ensure that our universities maintain their world-class status and that our graduates leave university with the skills they need to succeed in the labour market. As Professor Wilson rightly highlights, universities must be open to and accessible to local businesses, particularly SMEs that may not realise the mutual benefits that are on offer, or are otherwise tentative about engaging with their local HEI.

Through universities, businesses can gain access to the latest research in their field and innovative employees in the form of students on work placements and graduates - enterprises that are "innovatively active" have roughly twice the share of employees educated at degree level than non-innovatively active. They also gain the opportunity to influence the design of higher education courses to ensure that graduates leave university with the skills that their businesses need now and in the future. While many businesses do engage with universities, and there are excellent examples of this collaboration that have been highlighted in Professor Wilson's review and in this pamphlet, there are still too many businesses that are not reaping the rewards of collaboration.

3

¹ *The Robbins Report*, quoted in Anderson, R. 'The 'Idea of a University' today'. History & Policy. http://www.historyandpolicy.org/papers/policy-paper-98.html

² *The Robbins Report*, quoted in Anderson, R. 'The 'Idea of a University' today'. History & Policy. http://www.historyandpolicy.org/papers/policy-paper-98.html

³ Wilson, T., February 2012, A Review of Business–University Collaboration http://www.wilsonreview.co.uk/review/

⁴ DTI Occasional Paper 6, "innovation in the UK", July 2006

Students, graduates, universities and businesses all clearly benefit from improved business-university engagement. However, the positive effects of collaboration reach across our economy. Cutting-edge research and technological innovation will be developed and applied through businesses-university collaboration; many of the entrepreneurs who will utilise research and technology to develop new businesses will have developed their skills on our university campuses, while the employees that will keep our businesses competitive in a knowledge economy will be graduates.

As Professor Wilson acknowledges in his review, we are already doing well in business-university collaboration, but there is more that we must do to make sure the potentially huge rewards of effective engagement are not missed, and that we do not squander the opportunities afforded to us by a world-class higher education system. Universities, business and Government must all play a role in making the UK the best place in the world for business-university collaboration. Our response to this challenge is outlined here.

David Willette

VINCE CABLE

DAVID WILLETTS

1. Introduction

The Higher Education White Paper announced that Professor Sir Tim Wilson would undertake an independent review of business-university collaboration. Professor Wilson presented his review findings in February 2012 with recommendations for a range of organisations, including but by no means only Government, on how to improve universities' partnership working with business to:

- ensure graduate skills and employability meet the needs of business;
- maximise the university sector's capabilities in business-led research and innovation; and
- realise the benefits of a strong HEI role in development of its local economy.

The review took a collaborative, interactive approach to gathering evidence and seeking the views of stakeholders. The result of this innovative approach is wide consensus across stakeholders on the broad thrust of recommendations.

Since the review publication, BIS has been working with business, universities and other organisations on how collectively we can best respond to the recommendations Professor Wilson makes. This document considers the context for business-university collaboration, and sets out what we will do to build on our acknowledged strengths to create the best conditions for universities and businesses to work together to create prosperity over the next decade.

2. Globalisation, Global Competitiveness and the Challenges for the UK Economy

• In OECD economies, a 1% increase in the number of graduates has been associated with a 1.1% point rise in GDP growth rates ⁵

Our Higher Education Institutions (HEIs) have always operated with a large degree of autonomy and this 'arms reach' approach from Government is one of the reasons for their success. While it is for the Government to provide the right framework in which HEIs operate and collaborate with business, universities need to be in control of their own destinies. As has been shown in the past, HEIs themselves are best placed to know how to adapt to new challenges.

The University of Sheffield

The University of Sheffield was founded in 1904, after the working people of Sheffield gave £50,000 in penny donations to support the creation of the university on the promise that a university in their city would not only 'help the local industries' but 'bring the highest education within the reach of the child of the working man'. After its foundation the university lived up to its promises, providing courses that covered not only many conventional academic subjects but also occupation-focused subjects such as cowkeeping, railway economics, mining and razor- grinding.

This year the university won the accolade of University of the Year in the Times Higher Education awards. The judges highlighted the university's strategy, which is based on its roots in the local community and its determination to live up to its original promises to the people of Sheffield. This has required the university to continue to develop and adapt to new challenges. For example, the university provides an excellent example of Higher Education delivering research and promoting innovation that benefits the local as well as national economy, through the development of one of the UK's leading university-manufacturing collaboration, the Advanced Manufacturing Research Centre with Boeing (AMRC).

⁵ Department for Business, Innovation and Skills, *Supporting Analysis for "Skills for Growth: The national skills strategy"*, March 2010, p.5

⁶ The University of Sheffield, *A truly civic university*, Retrieved 10th May 2012 from http://www.shef.ac.uk/about/the-university

⁷ The University of Sheffield, *Historical note*. Retrieved 10th May 2012 from http://www.shef.ac.uk/about/history

The autonomy of our universities will help us to adapt to the dramatic changes the global economy has undergone in the last three decades. World trade in goods and services has increased more than sevenfold since the 1980s, and emerging economies have seen their share of trade quadruple, while their integration into the global economy has underpinned a fourfold increase in the effective global supply of labour. This trend is expected to continue, with China and India alone expected to add over 300 million workers to the global labour pool by 2030.⁸

Emerging economies are moving up the value chain to compete with Western companies in the manufacture of high-tech products and in attracting R&D investment. ⁹ ¹⁰ Indeed the OECD has stated that if 'developed countries are to remain competitive in the global economy, they will have to rely more on knowledge, technology and intangible assets'. ¹¹ The students and graduates of today will in the future be providing us with the cutting edge research that will help ensure our future prosperity.

How we respond to growing international competition will determine how the UK pays its way in the world in the future, and how much we benefit from the development of the global economy. Effectively exploiting our research, encouraging an entrepreneurial culture and developing a highly skilled workforce is therefore critical for the future growth of our economy, and graduates have a vital part to play – through their ability to challenge assumptions, to energise and to innovate.

Graduate skills, utilised effectively, contribute to economic growth by driving increased productivity and improving employability, thereby contributing to increased employment levels. Entrepreneurial skills, in particular, are vital in achieving a more innovative and competitive economy and Higher Education can help foster this through entrepreneurship education. Lord Young's recent report 'Make Business Your Business' emphasised the importance of enterprise education in schools and HEIs. ¹² Such training will ensure that graduates are equipped to create their own businesses.

The students and graduates of today will in the future be providing us with the cutting edge research that will help to ensure our future prosperity. The development of a highly-skilled and entrepreneurial workforce will ensure that as some low-skilled jobs migrate to lower cost economies, the UK will continue to create jobs and attract investment.¹³

As a recent World Economic Forum report stated, 'talented human capital will be the most critical resource differentiating the prosperity of countries and companies' Already there

⁸ Department for Business, Innovation and Skills, *Supporting Analysis for "Skills for Growth: The national skills strategy"*, March 2010, p.7

⁹ Department for Business, Innovation and Skills, *Supporting Analysis for "Skills for Growth: The national skills strategy"*, March 2010, p.8

¹⁰ OECD, Moving Up the Value Chain: Staying Competitive in the Global Economy – Main Findings, 2007, p.21

¹¹ OECD, Moving Up the Value Chain: Staying Competitive in the Global Economy – Main Findings, 2007, p.20

¹² Lord Young, *Make Business Your Business: supporting the start-up and development of small business*, 28 May 2012. http://www.bis.gov.uk/assets/biscore/enterprise/docs/m/12-827-make-business-your-business-report-on-start-ups

¹³ Ashton D., Brown, P., Lauder, H. *Education, globalisation, and the knowledge economy: A commentary by the Teaching and Learning Research Programme*, September 2008, p.4

¹⁴ World Economic Forum, *The Future of Manufacturing: Opportunities to drive economic growth, April 2012, p.60*

has been a near- doubling of university enrolments around the world from around 33 million in 1995 to almost 63 million in 2005. ¹⁵ Continuing increases in student numbers in the developed economies and the growth of Higher Education in the BRIC nations, and emerging economic powers such as Indonesia, Mexico and China will drive this rate of increase higher.

The UK is in a strong position to benefit from globalisation and technological advancement; we have a highly-skilled workforce, a world-class education system and an excellent research base. But we cannot be complacent. Professor Wilson recognises the quality of our higher education system and identifies effective collaboration between business, Higher Education and Government in fostering talent as essential to ensuring the UK continues to compete and succeed in the global economy. The quality and good practice Professor Wilson identifies needs to be developed into systematic and high-level collaborative leadership between universities and businesses across the wide ranging landscape of partnership activity.

Through our Higher Education reforms, the Government is ensuring that the UK continues to have global leadership in our ability to develop high-level skills and research-driven innovation. The Higher Education White Paper outlines how the Higher Education system will be placed on a sustainable basis for the 21st century. It gives learners and employers greater choice, and ensures that they will have the right skills to meet the career ambitions of individuals and the needs of businesses.

Since the publication of the White Paper we have taken a number of important steps to put students at the heart of the system. The Key Information Set will be available from autumn 2012, which will give prospective students access to high quality information about different courses and institutions, enabling them to make informed choices. And we are freeing the current, restrictive approach to student number controls, introducing competition into the sector to drive quality and value for money for students.

We will further stimulate competition in the sector by reducing the 'numbers' criterion for university title from 4,000 higher education students to 1,000. This will widen access to university title for small, high quality providers.

Fair access is a fundamental principle of our reforms. It is vital that everyone who has the necessary ability should have access to higher education. We have introduced a new National Scholarship Programme, which will begin in the 2012/13 academic year, and will provide financial benefit to some of the least well-off young people and adults as they enter higher education. And we are taking action to strengthen the Office for Fair Access to ensure that it can provide support and challenge to institutions on fair access.

The Government is committed to putting innovation and research at the heart of its growth agenda. Innovation is essential to competitiveness and higher living standards and the Coalition Government published an Innovation and Research Strategy for Growth on 8

8

¹⁵ Brown P., Ashton D., Lauder H. and Tholen G. *Towards a High-Skilled, Low-Waged Workforce? A Review of Global Trends in Education, Employment and the Labour Market,* Monograph No. 10, October 2008, p.8

December 2011 that ensures that we maintain and strengthen our position as one of the most innovative economies in the world.

3. Graduate Employability and Student Experience

- Employability skills have been defined by the CBI as 'a set of attributes, skills and knowledge that all labour market participants should possess to ensure they have the capability of being effective in the workplace to the benefit of themselves, their employer and the wider economy'. 16
- A recent CBI survey found that 82% of employers identified 'improving student's employability skills' when asked what universities should prioritise.¹⁷

Professor Wilson identifies increased work experience opportunities and enhanced employability skills for graduates as key to ensuring a smooth transition between university and business environments. He also highlights the importance of business involvement in programme delivery, design and sponsorship.

A degree remains a good investment in the long term and is one of the best pathways to achieving a good job and a rewarding career. Demand for more highly skilled employees continues to increase, with forecasts suggesting that half of the jobs that will become vacant this decade will be graduate ones. We must continue to encourage people to enter Higher Education, but we must also ensure that our students emerge from university with the right skills. That is why the Higher Education White Paper outlined proposals that will deliver a new focus on graduate employability.

In section five of this pamphlet, we set out what we are doing to provide better flows of information to potential and current students so that they can make good choices. This will unquestionably lead to greater demands from students on what universities can do for them, but those demands are entirely legitimate ones. The challenge for universities is to respond to this better informed demand and devise an all round experience that fully equips their students. Universities increasingly recognise the importance of employability skills: recent evaluation of Higher Education Innovation Fund (HEIF) strategies found a large and growing emphasis on enhancing student employability and enterprise skills by universities, with 71% of HEIs seeking to expand their work experience and internship offers. ¹⁹

¹⁶ CBI and UUK, Future Fit: Preparing graduates for the world of work, March 2009, p.8

¹⁷ CBI and UUK, Future Fit: Preparing graduates for the world of work, March 2009, p.7

¹⁸ BIS, Higher Education at Work: High Skills: High Value, http://www.bis.gov.uk/assets/BISCore/corporate/MigratedD/publications/H/Higher Education at Work.pdf

¹⁹ PACEC, Strengthening the contribution of English higher education institutions to the innovation system: knowledge exchange and HEIF funding, 2012

Liverpool John Moores University (LJMU) - World of Work

World of Work at LJMU is a programme that is co-designed and co-delivered with employers to enhance the employability of students and that is integrated into every degree course offered at the university. There are 3 inter-related elements:

- Work related learning: Every student is offered work related learning as part of their course, including opportunities to undertake a 1 year paid placement, as well as shorter placements and day long "World of Work Uncovered" visits to employer facilities.
- Graduate skills: Development of soft-skills as a part of degree, with academic modules integrating simulations of workplace situations and curriculum input from employers and careers advisors. Students can receive a 'graduate skills transcript' upon graduation.
- World of Work Skills Certificate: After completing a process involving an online virtual interview, attending careers workshops, writing 3 skills statements and finally a filmed interview with an employer, students can be awarded a World of Work Skills Certificate, alongside their degree.

Ensuring graduate employability skills is a challenge for businesses as well. Universities form the skills supply chain for business: and in any supply chain the secret of success is consistent detailed dialogue and mutual problem solving. Businesses that sit back and wait to be supplied with high level skills will inevitably be disappointed. As well as providing training for their employees, they need to engage with universities about their constantly-evolving needs, and to provide high quality work experience opportunities for students.

The University of Kent – Employability Points Scheme

The Employability Points Scheme rewards students who actively engage in extra-curricular activities with work-related opportunities. Students who have part-time employment, learnt a new language, engage in business engagement and enterprise activities, or are active members of clubs and societies, can earn points for their active engagement with university life. They can then apply for employability enhancing rewards, sponsored by their corporate partners, and ranging from work experience and shadowing, to training and summer-long paid internships from companies across a broad spectrum of sectors.

This year the scheme has managed to engage 1932 students and 86 companies, and has awarded over 95,300 points, with an average number of 50, and a top award of 345, across all students signed up to the scheme. They delivered over 275 work experience related rewards in 2012 across a diverse range of fields and sectors, with sponsors in the fields of Publishing, Marketing, Consulting, IT, Hospitality, Retail, Arts and Heritage, and Journalism. Their sponsors range from local companies and governing bodies such as Kent County Council, to international giants such as Penguin Books, Tesco, and Coca Cola Enterprises.

3.1. Higher Level Apprenticeships

Higher Apprenticeships at Level 4 and above allow people to develop technical and work based qualifications whilst working. Many will comprise a mix of qualifications which will be delivered by Higher Education Institutions, Further Education Colleges or private providers. The Government are keen to see more Apprenticeships linked with or leading to higher levels of learning. Higher Apprenticeships have the potential to deliver high level skills tailored specifically to individual business requirements.

In order to expand provision and make more Higher Apprenticeship opportunities available, the Government made £25 million of grant funding available through the Higher Apprenticeship Fund. This competitive process has allowed consortia to build new Advanced and Higher Level Apprenticeship schemes to address skills gaps.

In the academic year 2010/11, there were 2,200 starts on Higher Apprenticeships on just 8 different frameworks. Through the Higher Apprenticeship Fund many more frameworks will be available to employers and apprentices with demand from employers meaning that we already expect over 25,000 places over the next three years.

The new Higher Apprenticeships will be available in key growth sectors and occupations, including construction, renewable energy, advanced engineering, insurance and financial services, space engineering and commercial airline pilots. PWC, AXA Insurance, Rolls Royce, Jaguar Land Rover and JET2 are just a small number of the many employers involved in the development of the new Higher Apprenticeships.

3.2. Foundation Degrees

The number of foundation degree students enrolled was 99,475 in 2009-10 ²⁰

The previous Government promoted the Foundation Degree as the vocational qualification of choice within vocational higher education. As a result, after a prolonged period of low activity, Foundation Degrees have become an established qualification, with some highly successful examples of employer engagement.

-

²⁰ HEFCE, http://www.hefce.ac.uk/pubs/year/2010/201012/

Newcastle College – Foundation Degree Programme for Contitech Beattie

Newcastle College has developed a bespoke foundation degree in Leadership and Management to assist with succession planning at Contitech Beattie, a key manufacturer of products to the Oil, Gas, Power Generation and Chemical Industries.

The qualification comprises a blend of on-site delivery, E-learning delivered through the college's Virtual Learning Environment Blackboard, and workshop sessions facilitated at the college. Work based learning is an integral part of the course with students submitting projects on issues such as the development of new marketing strategies, implementing new quality procedures and managing complex change in the oil industry.

Effective collaboration between Contitech Beattie and the college has ensured a 100% retention rate for students entering the programme. Students can go on to enter the BA (Hons) Leadership & Management Programme, which allows them to further enhance skills that are relevant to their employment.

Equally, however, qualifications such as the HNC and HND have been enduringly popular, and this is to be welcomed. Programmes and qualifications should in the end be determined by signals about what students and employers decide that they value, rather than centralised attempts to impose a pattern. Professor Wilson rightly pointed out (recommendation 9) that the value of the Foundation Degree in its own right rather than as a stepping point towards a full Honours degree should be celebrated; but the Foundation Degree is not the only terminal qualification of value.

This Government's policy is not to promote artificially one form of qualification over another. Qualifications are a vital indicator of an individual's level of skills. It is important that a range of qualifications are available in the marketplace – Higher National qualifications; professional awards; higher level apprenticeships; foundation, undergraduate and postgraduate degrees – with all necessary information available for employers, employees and students to figure out the best route for them.

Foundation degree awarding powers were introduced in 2008 and since then there have been two successful applications. There is consequently only limited evidence of how they have worked to date. We will continue to monitor their development as uptake and experience increases and we welcome Professor Wilson's recommendations as a contribution to the developing evidence base.

3.3. Sandwich courses and work placements

- Graduates from sandwich courses are more likely to enter employment 6 months after graduation (78% vs. 71%) and less likely to be unemployed (8% vs. 9%) than other graduates.²¹
- For engineering graduates, the proportions for those entering employment were 74.6% for sandwich students and 67.8% for others.²²

Sandwich placements and work experience placements are widely acknowledged as being of great benefit to students, businesses and universities. The average salary of students who have completed sandwich placements is 8% higher than those that didn't six months after graduating, and completing a work placement has been found to augment students' academic performance. ²³ ²⁴ ²⁵ ²⁶ Offering students placements allows employers to trial a potential employee, as well as gain a direct link to the university research that applies to their sector.

As Professor Wilson has noted, there has been a decline in the number of students taking sandwich placements over the last ten years, and 70% of those placements are now provided by just twenty HEIs. The present regulations permit institutions to charge new students starting their courses from September 2012 onwards a fee of up to £4,500 for sandwich years (50% of the maximum fee cap).

We believe that a fee of only 15% of the maximum fee cap more reasonably reflects the costs of a sandwich place year, whilst still providing sufficient income to HEIs to meet their costs and to continue to invest in and expand sandwich course provision. We have asked HEFCE to monitor the costs of these courses.

This change will take effect for students undertaking their sandwich year from 2014/15. A decision on maximum fee caps for 2014/15 has not yet been taken, but based on figures for 2013/14, fee caps would be equivalent to £1,350 for students attending HEIs where the higher tuition fee amount is permitted and £900 for students attending HEIs where the basic amount is permitted.

http://www.hesa.ac.uk/index.php?option=com_content&task=view&id=1899&Itemid=239

²¹ From internal analysis of DLHE (2009/10) data, http://www.hesa.ac.uk/index.php?option=com_content&task=view&id=1899&Itemid=239

²² From internal analysis of DLHE (2009/10) data, http://www.hesa.ac.uk/index.php?option=com_content&task=view&id=1899&Itemid=239

²³ From internal analysis of DLHE (2009/10) data,

²⁴ Driffield N., Foster C. and Higson H. (2011) Aston University: 'Placements and degree performance: do placements lead to better marks or do better students choose placements?' http://www.asetonline.org/documents/HelenHigson-2.1.4.pdf

²⁵ Mendez, R., *The Correlation between Industrial Placements and Final Degree Results: A Study of Engineering Placement Students*, Student Learning Centre, University of Leicester, September 2008

²⁶ Mandilaras, A. (2004) 'Industrial Placement and Degree Performance: Evidence from a British Higher Institution', *International Review of Economics Education*, 3:1, pp.39-51

No first time (eligible) undergraduate student is expected to pay fee charges up front, as subsidised loans will cover the sandwich year fee costs as well as university based course years. Students only need to repay their loans once they are earning more than £21,000 and then only at a rate of 9% of their income over this amount.

The 15% cap on fees is in line with the recently announced cap on fees for students at English HEIs undertaking an Erasmus or study year abroad from 2014/15.

Professor Wilson identifies a range of good practice in providing students with work experience as well as in sandwich course provision across institutions. The Government believe it is vital to encourage this diversity of approach, which builds on the strengths of universities and local economies. There is no 'one size fits all' solution to achieving increases in work experience place numbers and quality.

The Director of Fair Access - who must approve institutions' plans to promote access, retention and student success for under-represented groups before they can charge more than the basic amount for tuition - supports activities that improve graduate employability. In his guidance to institutions on how to prepare 'Access Agreements' he highlights for example initiatives that make placement years, or a year abroad, more attractive to under-represented students. The Director has also clarified that in some instances institutions might include in their access plans post-graduation activities and expenditure such as advice or funding for internships in professions where social mobility is low, as this could make undergraduate courses more appealing to disadvantaged groups by providing clearer pathways to jobs after graduation. It is for each institution to determine exactly how they invest in access, retention and student success activities within the guidelines set by the Director of Fair Access.

The Hull History Partnership

The University of Hull has developed partnerships with Hull History Centre and local schools and colleges to improve the employability of history students in the region. It provides training routes to and opportunities for young people wishing to develop careers in History teaching, archives and heritage work, research in universities, and work on public and community History projects.

The scheme embeds internships into the history degree through an Applied History module. Hull history students have benefited from work placements at the Hull History Centre, where some students ran history workshops for local primary school students. Thanks to their engagement, undergraduates in 2012/13 will now also be able to undertake placements at five local schools.

The University also has links with an internship scheme run by the Ferens Art Gallery and provides valuable work experience in the University's art collection. History students are very involved in archaeological digs and community-based activities in local maritime and slavery-abolition heritage through centres in the old town.

3.4. Internships

 A record 36% of this year's graduate vacancies with leading employers are expected to be filled by people who have already worked for the organisation during their studies²⁷

The Government is committed to helping prepare graduates for the workplace and in supporting them to develop the employability skills they need to access the widest range of opportunities. Last year's Social Mobility Strategy, the Supporting Youth Employment paper and Higher Education White Paper all outlined the benefits of internships, and the government's wish to see more businesses offering internship opportunities to young people, including graduates. The importance of internship opportunities is highlighted by the numbers of graduates who now obtain permanent work via the internship route.

Under the previous administration, and at the start of the recession, BIS funded a graduate internship initiative, managed by Higher Education Funding Council for England (HEFCE), Federation of Small Businesses and HEIs. It was designed to assist unemployed graduates, to provide support to employers in small businesses and priority economic sectors, and to encourage those employers to offer graduate internships and employment in the future. This was a temporary measure to help graduates through the worst of the recession. Evaluation has shown that participating students and graduates reported strong development of employability skills and an increase in confidence directly attributable to their internship experience. The majority of employers reported that the interns brought a new energy and fresh insights to their business and the value of the intern exceeded expectations.²⁸ That is why many universities continue to work with SMEs to provide internships.

To provide sustainable support for SMEs in employing interns, BIS developed the Graduate Talent Pool (GTP) website, which was launched in July 2009. The GTP has been successful in encouraging more employers, especially SMEs, to offer graduate internships, by simplifying and demystifying the process of taking on interns. As a web based service, it is also able to make those internships available to the widest possible group of recent graduates. Employers can advertise vacancies without charge on the website, and recent graduates can then match themselves to vacancies. GTP helps to promote longer term engagement with the graduate labour market by employers, including SMEs, as internships and graduate recruitment become embedded in companies' HR practice.

• The Graduate Talent Pool service has been extended for a further three years from October 2012.

²⁷ High Fliers Research, *Graduate Labour Market in 2012*: *Annual review of graduate vacancies & starting salaries at Britain's leading employers*, 2012

HEFCE, Increasing opportunities for high quality higher education work experience, July 2011 http://www.hefce.ac.uk/pubs/rereports/year/2011/increasingopportunitiesforhighqualityheworkexperience/

 The service now includes a quality assurance process for new vacancies, which has contributed to a significant reduction in the proportion of unpaid internship vacancies on the site.

Manchester Graduate Internship Programme (MGIP)

The University of Manchester's Career Service manage MGIP, which provides opportunities for the university's graduates to gain employment in paid graduate level positions.

All of the roles are paid, with an average salary of £15k per annum pro rata, are based in Greater Manchester, and last for between 4 and 12 months. Graduates are given the opportunity to use what they have learnt through their studies, improve their skill sets, and advance their career prospects.

The number of vacancies available has grown each year that MGIP has been running. In 2011 they advertised over 180 vacancies.

3.5. Enterprise

- BIS research looked at the characteristics of the very fastest growing businesses and found that the majority of owners/directors were educated to at least degree level.²⁹
- Only 19% of students are actively looking for jobs in start-ups and small firms whilst over half seek employment in major national or international companies.³⁰
- The number of graduate start-ups increased by 21% from around 2,300 in 2009-10 to over 2,800 in 2010-11; turnover of these companies is estimated to be over £225 million ³¹

Entrepreneurial skills are essential to the creation and application of new ideas, and adapting to technological change. They transform ideas into new products, processes and organisational structures. This is recognised by many HEIs, with 63% of HEIs having

³¹ HESA HE Business and Community Interaction Survey Data – 2010-11

²⁹ BERR Economics Paper 3: High growth firms in the UK: Lessons from an analysis of comparative UK performance) Nov 2008

³⁰ High Fliers Research, UK Graduate Careers Survey 2011

enterprise and entrepreneurship as part of their core mission, and virtually all HEIs providing entrepreneurship support.³²

Lord Young's report, 'Make Business Your Business', shows that if we had the same rates of entrepreneurship as the US the UK would have 900,000 more businesses. We know that a relatively high proportion (17%) of 18-24 year olds have recently thought about starting a business, buying into an existing business or becoming self-employed, compared to 11% for all age groups.³³ 4.9% of 18-24 year olds said they intended to start-up in the next 3 years; this equates to around 100,000 young people.³⁴

We need to ensure that our graduates are equipped with the entrepreneurship skills to realise their ambitions for business ownership and to inspire them to consider business start-up as a career option at some point during their careers, not just to focus on corporate opportunities. Likewise, while many graduates aspire to work in the third sector, entrepreneurship skills will enable graduates to choose social enterprise options.

Many students still have a big firm mentality and aspire to work in large 'blue-chip' firms. Meanwhile there are talent-starved start-ups and small firms in university incubators, science parks and local communities across the country that may or may not recognise the value of taking on a graduate. As Professor Wilson highlights, there is a clear need to raise students' aspirations to work in start-ups and small firms, and to create platforms and opportunities for them to engage small businesses through summer internships and graduate jobs.

Enternships

Enternships.com provides an online platform to match students and graduates looking for work placements with SMEs looking for entrepreneurial interns or 'enterns'. Since formally launching in 2009, more than 4,000 companies in over 20 countries have used Enternships to find graduate talent, including companies like Groupon, PayPal and well known business figures like James Caan and Peter Jones of Dragons Den and Martha Lane Fox of LastMinute.com.

- Unleashing student and graduate entrepreneurial aspirations and providing them
 with opportunities to start and grow a business, is crucial to our long term economic
 success. We are addressing this through our support for the National Association of
 College and University Entrepreneurs (NACUE) where, this year, we are providing
 them with £1.3M.
- Our funding is enabling NACUE to build a self-sustainable model that will support the creation of student enterprise societies in every university by 2015. There are

³² NGCE in partnership with ISBE, The 2010 Survey of Enterprise and Entrepreneurship in Higher Education, November 2010

³³ BERR Household Entrepreneurship Survey (2007)

³⁴ 2010 Global Entrepreneurship Monitor

currently 75 such societies and they are working to drive the growth of entrepreneurship in universities, raising awareness of enterprise as a potential career choice and providing advice and support to students and graduates as they start up in business.

 Government is encouraging youth entrepreneurship through the new StartUp Loans, supported by global partners such as NACUE, which will provide support, training and potentially finance to applicants.

Surrey Entrepreneurs

Working closely with a local enterprise, Transformers & Rectifiers Ltd, Surrey Entrepreneurs have secured £10K in the form of an ever-green loan. The society opted to secure a loan, rather than grants, in order to reflect business reality. The loan enables students to realise their business idea and is supported by business mentoring. The student enterprise video production company, Envisage Studios, secured one such loan. They utilised £4,000 to purchase equipment for producing film industry standard videos and to win clients including Fulham FC, eBay & Nuffield Health. After four months of trading, Envisage have already begun making small contributions back to the fund.

- NACUE, with BIS funding, are piloting the delivery of a Start-up Career Milkround
 that will see them working with Enternships.com and university enterprise societies
 to create a national brand for an annual Milkround fortnight. It will provide an
 opportunity for students and graduates to engage with small businesses, securing
 summer placements, raising entrepreneurial skills levels and creating graduate
 jobs. Twenty university enterprise societies are piloting the initiative and NACUE will
 be reporting on the outcomes later in the year.
- Government support is also being provided to the National Centre for Entrepreneurship in Education as it builds a sustainable infrastructure to enable universities to better support entrepreneurship. Activities include the provision of an Entrepreneurial University Leadership programme to improve the capability of university leaders to deliver entrepreneurial training, thereby encouraging more graduates into self-employment.

3.6. Graduate Recruitment

- The AGR Graduate Recruitment Survey, summer 2011 found that 73.2% of AGR recruiters required a 2.1 classification as a minimum entry requirement for entry onto their programmes for the 2010-2011 recruitment season, a slight decline on 2009-2010 figure of 77.5%³⁵.
- Applicants' ability to demonstrate certain competencies is the second most cited entry requirement amongst AGR members at 63.9%, while relevant job experience maintains the third place.³⁶

As outlined above, the Government has initiated a range of work to improve the information available to prospective students to enable them to choose the right course for their individual career ambitions. However, communicating information to employers about the achievements of graduates is as important as providing information about Higher Education for students. Employers must receive clear signals from Higher Education as to what students are capable of and which are the most suitable for their business.

We know that the traditional model of degree classification is not sufficient alone to show potential employers the skills and achievements of an individual student. That is why BIS has encouraged the work of the Higher Education sector, led by Professor Sir Robert Burgess, to develop the Higher Education Achievement Report (HEAR). This provides a richer description of students' achievements, including information about module marks, academic credits and other achievements that can be verified by their institutions. We agree that because the Higher Education Achievement Report will provide a more extensive description of student achievement than a degree classification alone, it will help students to demonstrate to prospective employers their own achievements and skills, and we would encourage recruiters to make use of HEAR.

Some of the institutions which have been involved in trialling are already issuing the HEAR to their graduates and more will do so this summer. We expect the HEAR will increasingly be issued to graduates across the sector from the academic year 2012/13. Association of Graduate Careers Advisory Services and Association of Graduate Recruiters also have a key role in promoting effective take-up by students and by employers.

 BIS intends to provide some seed corn funding in 2012/13 to support Association of Graduate Recruiters and Association of Graduate Careers Advisory Services to work in partnership on the implementing of Wilson Review recommendations aimed at AGR and AGCAS.

³⁵ Association of Graduate Recruiters AGR Recruitment Survey, Summer 2011 Review

³⁶ Association of Graduate Recruiters AGR Recruitment Survey, Summer 2011 Review

 The BIS sponsored AGR/AGCAS work will include action to raise awareness of the HEAR.

University of Liverpool – Graduate to Merseyside

The University of Liverpool's Careers & Employability Service works extensively with local small and medium-sized businesses. Funded through an ERDF grant, the project 'Graduate to Merseyside', offers graduates from across the UK a unique opportunity to gain paid work experience within some of the most dynamic industrial sectors in the UK.

The Government's National Careers Service provides high quality information, and independent, professional advice and guidance; this is a vital part of an efficient labour market which drives growth. Careers services in Universities operate a range of successful and quality assured models for providing advice to students and helping them make contacts in work. National Careers Service providers already work closely with HEIs locally, but we want to encourage even closer working especially where individuals require specialist advice about specific occupations and subjects. We want people to make learning and careers choices that are well informed so there is a supply of training and higher education which reflects individual, employer and labour market demand

4. Research and Innovation

- The UK research community is the most productive in the G8: with 3% of the world's researchers we generate 6% of the world's academic articles, 11% of citations, and 14% of the most cited papers.³⁷
- Businesses, charities and other organisations invested £3.3bn in knowledge and services from UK HEIs during 2010-11.³⁸

Professor Wilson sets out a range of recommendations on research and innovation covering knowledge transfer, innovation vouchers, skills development for researchers, and the health of the future research base. His review complements the Innovation and Research Strategy and takes a forensic look at how good practice in university-business interaction can be improved.

The Government recognises that research and innovation, and the skills to exploit them, are the essential components that will allow the UK economy to prosper and grow. That is why, despite a difficult fiscal situation, in the most recent Spending Review the Government protected the £4.6bn per annum ring-fenced science and research programme budget in cash terms for 2011-15. And in addition to £1.9bn capital funding announced in the SR, Government has since announced a further £595m investment in science and innovation capital. This recognises the critical role of the UK's world-class research base as one of the key components in promoting economic growth.

Following on from the Higher Education White Paper, the *Innovation and Research*Strategy for Growth set out how the UK will maintain and strengthen our position as one of the most innovative economies in the world.

- Set out how the UK research base is a source of competitive advantage internationally, which is critical to future economic growth in this country and recognises that our universities produce vast amounts of high quality research.
- It showed how we have boosted the role of the Technology Strategy Board (TSB) the Government's prime channel for supporting business led technology innovation, which invests £300m pa in business led innovation support.
- Sets out how the TSB has taken on delivery of the Smart programme which is a
 national replacement for the RDA-led Grants for R&D. This has been very popular
 with business and is heavily oversubscribed the Autumn Statement provided an

³⁷ International Comparative Performance of the UK Research Base 2011, report to BIS by Elsevier (www.bis.gov.uk/ukresearchbase2011)

³⁸ HESA HESA *HE Business and Community Interaction Survey Data – 2010-11* http://www.hesa.ac.uk/index.php?option=com_content&task=view&id=2092&Itemid=239

additional £75m for TSB SME support which has been used to increase the budget for Smart.

- It announced a £200m investment in a network of Catapult Centres, which will create critical mass for business and research innovation - with each focusing on a specific technology where there is a potentially large global market and a significant UK capability. Catapult centres will provide an interface between universities and business including encouraging people exchange and three way secondments.
- Announced Research Council UK'S (RCUK) intention to fund a "Gateway to research". This will provide a single portal that will allow businesses to access the whole body of research activity funded by the Research Councils. Jimmy Wales who is behind the creation of Wikipedia is advising the RCUK project team to ensure the portal is user friendly particularly for smaller companies.
- It also announced implementation of a new innovation voucher programme to support collaboration between SMEs and external knowledge providers; and that we will work with NESTA to develop a new UK Prize Centre and Prize Fund to run innovation inducement prizes.

We continue to improve the incentives rewarding researchers for the economic impact of their research - through the Research Councils' Pathways to Impact, and HEFCE's Research Excellence Framework. And through HEFCE, we are further incentivising universities - through £150m pa Higher Education Innovation Funding (HEIF) – to increase interactions with businesses and other users. Investment in research provides excellent returns; and every £1 of HEIF investment gives a return of £6 in gross additional knowledge exchange income. And building on this, we recently announced £100m additional funding for research infrastructure to be invested in partnerships with business or charity.

We know that business does value university research, and university income from interactions with business and other users has more than doubled in real terms since 2001. We are aiming to increase this knowledge exchange income from external sources, at English HEIs, by a further 10% over the next 3 years.

⁴⁰ Department for Business, Innovation and Skills (BIS), *Innovation and Research Strategy for Growth*, December 2011, p.17

³⁹ Public and Corporate Economic Consultants (PACEC), Strengthening the Contribution of English Higher Education Institutions to the Innovation System: Knowledge Exchange and HEIF Funding, April 2012, p.83

Cranfield University

As part of the assessment of HEI strategies and allocation of HEIF, an expert group commended Cranfield University for its work towards creating an 'innovation habitat' with strong links to the HEI; for its efforts to make it easier for firms to 'do business with' Cranfield; for its approach to strategic collaboration involving a much deeper understanding of the needs of their partners; and for its efforts to increase the value for money of investments through a mix of continuous reviews of effectiveness/efficiency, outsourcing and streamlining.

Professor Wilson highlighted the excellent work that universities have done using vouchers to encourage business, especially small businesses, to engage. We announced in the Innovation and Research Strategy our intention to launch a new National innovation voucher programme to support collaboration between SMEs and external knowledge providers. This National scheme will be launched by the Technology Strategy Board in autumn 2012. The intention is that companies seeking information on the TSB voucher scheme will also be sign-posted to vouchers being offered by up to 20 individual universities.

This mirrors an intention by the TSB to continue to grow its role as the research and innovation champion for business.

The TSB, RCUK and HEFCE have committed to work together in partnership with universities and business, to make available data and information on research and innovation. This will build on the planned Gateway to Research thus enabling more effective business-university interaction.

TSB, HEFCE and CIHE will explore the potential for TSB and the National Centre for Universities and Businesses to work together to provide a better joined-up' intelligent networking offer for business across research, innovation, skills and enterprise. This will be from the local perspective, the National and the global. This will include exploration of innovative approaches such as use of "Connect" and social media; public, private and third sector approaches; and involve the widest range of contributing partners.

4.1. People Interchange

As part of the Research Councils "pathways to impact" all researchers have to stipulate how they are going to share the results of their research with the actual and potential users of that research. One of the most powerful ways of sharing this research is the interchange of people and many grants contain provision for collaboration and secondments with industry or other users.

There is substantial collaboration in postgraduate research (about 25% of Research Councils funded doctoral projects) and just over half the doctorate qualifiers are employed outside higher education. There is an intensity of interaction achieved through collaboration in postgraduate research whether through co-supervision and short

placements such as through CASE studentships, or longer immersion through KTPs or industrial doctorates.

Swansea University, University Technology Centre in Materials

For Professor Martin Bache, Director of the University Technology Centre (UTC) in Materials at Swansea University, people exchange is an important route for research dissemination.

"Over 90 percent of our postgraduate students go on to work for Rolls-Royce or similar companies in the aerospace industry. By the end of their EngD study our Research Engineers are recognised as a world expert in their field and are much sought after as engineering recruits. This is a great way of getting research findings and knowledge to the very heart of industry," comments Professor Bache.

Interchange of university staff and businesses can also occur in a consortia setting and for example:

Scottish Financial Risk Authority

The Scottish Financial Risk Academy (SFRA) is a consortium of over 20 financial institutions led by the Maxwell Institute for Mathematical Sciences, part-funded by the Scottish Funding Council. Its over-riding aim is to improve interaction between the academic sector and the financial services industry. One of its activities is a programme of 'PhD internships' within the member organisations. The companies host interns to undertake a three month research project, generally under the joint supervision of the company and a member of an academic department. This is intended to provide a practical mechanism for companies to start defining an R&D agenda, with the help of universities, giving the companies access to doctoral researchers with advanced skills. Typically the company pays the doctoral stipend for the duration of the internship, although it may also be undertaken as a series of short visits.

The Technology Strategy Board supports Knowledge Transfer Partnerships whereby companies receive support to engage a recently qualified person (termed an Associate) under the guidance of a senior academic to work on a specific problem for between 6 and 36 months. The benefits from KTPs include:

- Over 70% of the Associates are offered a job with the host company on completion of the project
- Each company on average increases its annual profits by £240,000
- Around 75% of businesses develop an on-going collaboration with the academic partner beyond the end of the KTP project

KTPS are flexible in delivery, can vary in length depending upon the nature of the business problem to be addressed, and can involve Associates with qualifications from Level 4 up to post doctorate level.

Knowledge Transfer Partnership

John Hogg Technical Solutions Limited (JHTS), a company that manufactures and sells dyes and markers to identify fuels (fiscal marking) for taxation purposes, needed a highly skilled associate to develop nonradioactive fuel markers for smart tankers.

Dr Victor Moll was looking for a fresh challenge following completion of his PHD and worked with Loughborough University on this project. The independent assessor said; "I was amazed to see that it had come to a conclusion in only 13 months. The fact that such a good Associate had been recruited obviously made a huge difference in the outcome of the KTP."

While Catapult centres will provide an interface between universities and business, including encouraging people exchange and three way secondments, Universities have also sought to take advantage of other funding streams to allow the transfer of skilled individuals between universities and business:

Nottingham Trent University with University of Nottingham

Nottingham Trent University and the University of Nottingham are collaborating in a joint programme, part-funded by the European Regional Development Fund, to offer industrial placements to postgraduates. This places postgraduates with local public or private sector organisations to undertake specific projects, for relatively short and/or flexible periods. To date 300 postgraduates have taken advantage of the scheme.

4.2. International People Interchange

Outward student mobility exchange and work placements benefit students, universities and the UK as a whole. Students develop their confidence and interpersonal and language skills, together with greater cultural awareness and enhanced employability, while our HEIs benefit from the presence of overseas students that come to study in the UK and the opportunity to build links with overseas HE institutions and business.

We believe that UK students should be able to gain from work abroad and there are many ways in which in which UK students can gain this valuable experience, although it is for individual HEIs to determine how they credit or recognise individual placements.

To further promote UK higher education outward student mobility, the Government commissioned a sector-led working group (Chaired by Professor Colin Riordan) to review obstacles and incentives to mobility and identify actions that institutions might take to

increase the number of students going abroad. The Working Group's report was published on 3 May 2012 (available at http://www.international.ac.uk/policy/policy-positions-and-statements/mobility.aspx), and one of its main recommendations was the need to develop a national strategy to support outward student mobility.

Government has asked Professor Riordan, in his role as Chair of the UK HE International Unit, to take forward the recommendations of the UK HE Outward Student Mobility Report including engaging UK HE institutions on the development of a sector-led national strategy to support outward student mobility.

As part of the 3 May announcement, Government also set out new measures from 2014/15 to encourage outward UK student 'year abroad' mobility through the Erasmus Scheme and overseas study placements. These measures will replace the current Erasmus fee-waiver with two components:

- a) Allowing English HE institutions to charge students that take year abroad placements a tuition fee up to 15% of their maximum fee cap. In 2012/13 prices this is equivalent to £1,350 to students attending HEIs where the higher tuition fee amount is permitted and £900 for to students attending HEIs where the basic amount permitted; and allowing these students access to a tuition fee loan to cover these costs. This will apply to students taking:
 - Placements under the Erasmus Scheme (both study and work placements)
 - A study placement at an overseas institution outside the Erasmus scheme both within or external to the EU
- b) Payment of a grant to HEIs from HEFCE, who have been asked to consider providing supplementary funding to support institutions participating in overseas student exchange programmes. Subject to HEFCE Board decisions and, if necessary, a possible overall cap in numbers, it is envisaged that this might provide approximately £2,250 for students taking a whole year abroad under the Erasmus scheme or a non-Erasmus whole year study placement abroad.

Detail of the announcement is at

http://news.bis.gov.uk/content/detail.aspx?ReleaseID=424336&NewsAreald=2

Government is also active in supporting student work placement and experience schemes, for example, through the Erasmus Scheme and International Association for the Exchange of Students for Technical Experience Scheme, which cover multiple destinations. Plans are also being developed for exchange schemes with China and India under the UK China Partners in Education Programme, and UK India Education and Research initiative.

The UK's leading position in research is in part due to its effectiveness in attracting productive and internationally mobile researchers to work in the UK. This is for both those that began their research careers in the UK and those that began them elsewhere. The Government believes that the recent reforms to the immigration system take account of

the specific needs of the research base. These changes will ensure that companies are able to employ the highly skilled people they need from abroad in a multitude of research areas. These reforms include the fact that those working in PhD-level SOC codes receive extra points in the points based system, to ensure that they are given priority should the Tier 2 limit be reached.

Recent announcements on reforms to the immigration system will promote the ability of the UK to attract the best international researchers to work in the UK. For example, it was announced on the 29 February that scientists and researchers working in PhD-level SOC codes under Tier 2 (General) will be exempt from the £35,000 threshold for applying for settlement. We have listened to the sector and introduced changes to meet the specific needs of research employers. Changes announced in April 2012 include that for PhD and above level jobs a role can be advertised in a more appropriate place than JobCentre Plus and the Resident Labour Market Test period of validity will be extended from 6 to 12 months. These changes will make it easier for employers to recruit the best candidate.

We will continue to work with the Confederation of British Industry, RCUK, Universities UK and other stakeholders to look for any unintended consequences of the reforms and to address any issues surrounding the perception of recent changes to immigration rules.

Professor Wilson highlighted the excellent work that universities have done using vouchers to encourage business, especially small businesses, to engage. We announced in the Innovation and Research Strategy our intention to launch a new National innovation voucher programme to support collaboration between SMEs and external knowledge providers. This National scheme will be launched by the Technology Strategy Board in autumn 2012. The intention is that companies seeking information on the TSB voucher scheme will also be sign-posted to vouchers being offered by up to 20 individual universities.

5. System Wide View and Information to Drive Choice

Professor Wilson sets the scene of the diverse domains in which businesses and universities collaborate, for example on applied research, employee up-skilling and collaborative degree programme development, as well as across industry sectors. He emphasises the need to understand the entire landscape of collaboration if we are to attain world-leading excellence. He recommends that a source of authoritative knowledge should be established to provide a focus for all aspects of business and university collaboration, and that this should be the Council for Industry and Higher Education (CIHE).

The Government and HEFCE will support CIHE to create a National Centre for Universities and Business, which will gather evidence, bring together university and business leaders, and support engagement between the various stakeholders. It will facilitate the sharing of good practice, provide networking opportunities, and create high-quality information flows. The Centre will seek to develop a large membership base as part of the creation of a sustainable business model.

 BIS intends to provide some seed corn funding to CIHE in 2012/13 to support CIHE, HEFCE and sector partners to establish the National Centre for Business-University Collaboration on a sustainable basis.

It is sometimes difficult for aspirant and current students to know which information is authoritative. Professor Wilson sets out a range of recommendations aimed at improving information for business, universities and students.

Our strategy to support our high-level skills base takes into account the student journey all the way through from the process of applying for university to graduation. For those applying to university, the Key Information Set (KIS) will be available from autumn 2012, which will make vital information, such as employability statistics, easily accessible to prospective students. Included in the KIS will be information about professional accreditation, which highlights whether a course has been recognised by a professional or statutory body, and is therefore more likely to improve employment prospects.

 The new KIS website will be available from this autumn, making key information easily accessible for all undergraduate courses

Better informed students are more likely to choose a university and a course that provides them with the right learning experiences, and best prepares them for work in their desired career. Universities will need to respond to the demands of informed students and improve their practices in order to compete for students, and businesses will profit from being able to recruit energised and innovative graduates.

In addition to this, a number of STEM-focused Sector Skills Councils are looking at ways of helping industry to express a view on which courses and institutions turn out the best

graduates through industry kitemarking. This will give prospective students more information about how employers perceive the value of individual STEM courses.

We are exploring whether we can usefully provide additional information in a number of other areas. These include: encouraging HEIs to publish anonymised information about the qualifications and expertise of their teaching staff and to publish summary reports of their student evaluation surveys of teaching on their websites. HEFCE is working with partners to gather evidence of what potential users of information about teaching qualifications would find useful, before developing options informed by that evidence.

HEFCE is also commissioning two research studies on information for postgraduate taught students: on understanding their information needs and how these could be met; and the feasibility of developing a National Student Survey style approach for taught postgraduates. The research is expected to be completed by autumn 2012.

6. Universities at the Heart of the Local Economy

• 60 per cent of HEIs highlight the infrastructure for innovation they provide for their local economies. This can bring together the various innovation support services in an area, and establish a university as an 'anchor' of its city or region.⁴¹

Professor Wilson sets out a comprehensive vision for universities in rebalancing their local economies and driving local economic growth and regeneration. Universities have the potential to make a contribution in a range of ways, including greater collaboration with local businesses - especially SMEs, through generating exports and attracting inward investment, and through developing specialist sectors and technologies. There is an also a role for universities in developing the evidence base for effective investment in skills, research, knowledge exchange and innovation to benefit the local economy, and in helping to respond to local skills needs.

Professor Wilson highlights the importance of building on the unique strengths of universities and local areas; there is no one size fits all approach to university involvement with Local Enterprise Partnerships (LEPs). The European University Association found that English institutions have substantially more autonomy than those on the Continent, including the ability to reach out to business and foreign markets.⁴²

The range of Government support available to universities and LEPs enables development of effective collaboration which meets local priorities without dictating to universities how this must be done.

Higher Education Innovation Funding, which is outlined above, also supports universities to help local businesses. This can stimulate economic growth in the local area, which in turn promotes business growth and further collaboration between businesses and HEIs.

LEPs play a key role in fulfilling the Government's aim of rebalancing the economy. They provide the vision, knowledge and strategic leadership needed to drive sustainable private sector growth and job creation in their area. By combining strong business leadership with groups of local authorities whose planning, regulatory and public realm roles are critical to growth, these bodies will be able to bring an integrated approach across real economic geographies.

The Local Growth White Paper set out the diverse roles the local enterprise partnerships can play depending on their local priorities. These could include ensuring that planning

⁴¹ PACEC, Strengthening the Contribution of English Higher Education Institutions to the Innovation System: knowledge exchange and HEIF funding, 2012

⁴² Estermann, T., Nokkala, T., Steinel M. *University Autonomy in Europe II: The Scorecard*, 2011, p.53

and infrastructure investment support business needs, and working with partners and Government to support enterprise, innovation, global trade and inward investment. Key to achieving this vision is the development of strong partnerships between LEPs and universities. The Government's Plan for Growth, published March 2011, set out some ways in which this is happening; the Higher Education White Paper, published June 2011, also describes joint working between employers and HEIs.

Universities are currently represented on 34 of the 39 local enterprise partnerships. All 24 formally approved LEP boards have Higher Education or Further Education representatives and these partnerships have already delivered real action Universities are taking a lead role on developing local economic and inward investment strategies, including Coventry, Warwick and Birmingham Universities, which are taking a key role in developing their local sector strengths.

Staffordshire - The Business and Innovation Group

The Business and Innovation Group was launched August 2011 and is aimed at encouraging and supporting high-growth businesses across Stoke-on-Trent and Staffordshire.

The new partnership brings together Keele University Science and Business Park (KUSBP), Keele, Staffordshire University and North Staffordshire Chamber of Commerce to provide organisations with specialist and strategic advice. The team work closely with the Stoke and Staffordshire LEP to deliver the service to companies across sectors, including professional services, creative, medical, manufacturing, technology and environmental.

The Group is able to harness the skills and experience of its members to support the region's businesses and raise the profile of its universities, as well as improve graduate retention and encourage graduate start-ups.

As part of a package to help mid-sized businesses announced in the Chancellor's Autumn Statement, November 2011, BIS has established a Business School Task Force to support the economic growth of mid-sized businesses in the UK, in particular by helping to strengthen their leadership capability. There are clear synergies between Wilson Review recommendations on the role of universities in supporting local businesses and the objectives of the Business School Task Force. The Task Force will be asked to ensure their work supports the Wilson agenda, and BIS officials will support them in doing so.

In addition to the work of the Business School Task Force, the Association of Business Schools has established an Innovation Task force made up from senior figures from the Business Schools and Industry charged with:

 (i) consulting on actions that should be taken to ensure that the actual and potential contributions of UK business schools to innovation and growth can be properly understood;

- (ii) considering barriers to success and examples from outside the UK and recommending how to encourage and support further innovation and enhancing the economic performance of the UK; and
- (iii) establishing links to policy bodies in order to ensure they benefit from management and research of relevance in a range of settings and objectives.

We look forward to the outcome of this review which will be published in the autumn.

6.1. Attracting investment and promoting exports

- According to UKTI, 1,434 investments occurred in the UK in the year 2010/11; these projects created and safeguarded over 94,500 jobs⁴³.
- Ernst & Young's European Attractiveness Survey 2011 has once again named the UK as the most attractive destination for foreign direct investment projects and associated jobs in Europe.⁴⁴
- In 2010 the value of HE exports to the UK economy was estimated to be £8.2bn⁴⁵

Professor Wilson highlights the key role that HEIs can play in local economic development and sets out recommendations to help ensure they take a key role in local enterprise partnerships and to facilitate inward HEI-led investment and local economic growth. A wide range of Government policies help to create the right conditions for HEI-led local economic development and inward investment.

6.2. Simplified planning and Business Rates support

The Government has created 24 Enterprise Zones across the country to give the private sector a real shot in the arm through a combination of fiscal incentives and simplified planning. In addition to these geographically defined Zones, the Government has also made some of the key benefits available in Enterprise Zones accessible to all local areas without the need for any additional involvement from Government.

Local planning authorities have the ability to simplify planning, for example through the use of Local Development Orders, and local billing authorities have, since April this year, been able to provide Business Rate discounts under powers in the Localism Act 2011. Both of these measures could be used now to support university linked science and innovation where local partners wish to use them.

⁴³ UK Trade and Investment, *UK Inward Investment Report 2010/11*, July 2011, p.2

⁴⁴ Ernst and Young, Destination UK: sustaining success in the new economy - Ernst & Young's 2011 UK Attractiveness Survey, 2011, p.2

⁴⁵ BIS Research Paper *Estimating the value of Education Exports to the UK economy*, June 2011, p. 10

6.3. UKTI

The exploitation of the high-level skills and leading-edge research provided by the Higher Education sector is aided by the work of UK Trade & Investment (UKTI), which works with universities across the UK in a range of ways both in helping them to export their specific offers and expertise, and in engaging with the Higher Education sector in attracting investors to the UK.

Universities are sent business leads in overseas markets and have access to the Overseas Market Introduction Service (OMIS). Universities join UKTI supported trade missions to overseas markets and participate in UKTI's events, foreign press tours and seminars held across the UK and globally. UKTI develops sector-based propositions for individual investors which encompass Science Parks and Universities' research strengths, and facilitates meetings and events for potential foreign investors. UKTI deploys a team of highly expert technology and sector specialists who maintain close links with the research base and use this to market the UK's knowledge assets. UKTI plays a key role in landing some of the highest value adding investments from internationally mobile, research intensive firms – from bio-tech start-ups to the largest global automotive manufacturers.

6.4. Education Exports

International students provide income for HEIs and benefit the UK both nationally and regionally. It has been estimated that in 2010, tuition fees from international students in the UK was worth £2.6bn, with a further £4.5bn spent on living costs. ⁴⁶ The HE sector has also been successful in working for collective benefit to attract overseas students and investment. For example, Universities UK has negotiated, under the Brazilian "Science without Borders" programme, a contract worth up to £170 million to educate up to 10,000 Brazilian STEM students at 110 universities over the next four years. In addition to tuition fees, each student is being provided with a bursary by the Brazilian Government to spend on living expenses whilst in the UK.

As well as educating international students in the UK, we are supporting the sector in expanding the provision of transnational education – the provision of UK degrees to students who study wholly overseas. We have also recently established UK Education Services (UKES) team to lead and facilitate the development of a wide range of education exports to governments and partners overseas. UKES will identify major opportunities and help broker UK consortia (bringing together the UK education sector and business partners) to maximise education export opportunities for the UK.

Additionally, BIS and UKTI fund the sector-led HEGlobal Integrated Advisory Service, a web portal which coordinates services and support from Government and other partners for HEIs looking to expand abroad.

⁴⁶ BIS Research Paper *Estimating the value of Education Exports to the UK economy*, June 2011, p. 10

6.5. Investment in Growth

We recognise that Government has an important role to play in creating economic growth. We are running two major schemes that are stimulating private sector investment and supporting the development of innovative business development. Both of these schemes offer opportunities for the further development of business-university collaboration.

• The Regional Growth Fund (RGF) is now a £2.4bn fund operating across England from 2011 to 2015. It supports projects and programmes that lever private sector investment to create economic growth and sustainable employment. It aims particularly to help those areas and communities which were dependent on the public sector to make the transition to sustainable private sector-led growth and prosperity. The first two rounds have been very successful - conditional allocations were made to 176 bidders which will leverage over £7.5bn of private sector leverage and deliver around 330,000 jobs.

University of Sheffield, Advanced Manufacturing Training Institute (AMI)

The University of Sheffield Advanced Manufacturing Research Centre with Boeing has received a conditional award of £9.2 million of RGF funding for a 5,000m2 purpose-built training centre. The centre will provide training for companies along the supply chain in high-value manufacturing sectors, developing academic and practical skills at levels ranging from apprentice to post-graduate.

The centre will cater to the training needs of companies from sectors such as aerospace, energy and Formula One, from apprenticeship through to Doctorate and MBA level. It will take up to 250 apprentices a year on behalf of local businesses and is projected to create and protect almost 1,800 jobs directly and through the supply chain.

• The Growth and Innovation Fund (GIF) for skills was launched to work in partnership with employers to boost skills where business needs it most to achieve growth. The purpose of the GIF investment fund is to support innovative, bottom-up, skills ideas to contribute to enterprise, productivity and growth. GIF backs collective projects brought forward by employers through sector, employer, and local bodies. Universities can take a strong partnership role in developing successful GIF projects.

Jaguar Land Rover (JLR)

JLR, working with their local universities, LEPs, sector businesses and Semta, have won GIF funding to develop a flexible programme of Master's degree level training in new technologies for the UK advanced manufacturing and engineering supply chain. This winning proposal builds on the in-house expertise of JLR and the traditional manufacturing sector strengths of the West Midlands. Collaborative cross-LEP working is the key to success, and LEPs can ensure that skills interventions are connected with the needs of their local businesses. University and LEP partners across England are already engaged in supporting development of the Master's programme and will roll it out across England.

7. Conclusion

Professor Wilson's Review is only the starting point for work to improve business-university collaboration to ensure graduates are enterprising and prepared for the world of work, to ensure that research and innovation opportunities are fully exploited for UK plc, and to maximise the contribution of universities to local economic growth. And we know that there is a wealth of good practice and innovative approaches already being undertaken to build upon.

BIS is working with partners to identify areas for support and collaboration in addition to the range of policy actions set out above. But this is only the start. We – all of us – businesses, universities, sector organisations and Government – need to work together to drive forward Wilson recommendations and widen engagement on the Wilson agenda over the coming months.

The Government will continue to support partners to drive forward Professor Wilson's recommendations in the range ways set out above. We will also support partners in maintaining momentum and in reviewing progress by holding a series of Ministerial seminars covering key Wilson themes over the next year or so.

© Crown copyright 2012

You may re-use this information (not including logos) free of charge in any format or medium, under the terms of the Open Government Licence. Visit www.nationalarchives.gov.uk/doc/open-government-licence, write to the Information Policy Team, The National Archives, Kew, London TW9 4DU, or email: psi@nationalarchives.gov.uk.

This publication is also available on our website at www.bis.gov.uk

Any enquiries regarding this publication should be sent to:

Department for Business, Innovation and Skills 1 Victoria Street London SW1H 0ET

Tel: 020 7215 5000

If you require this publication in an alternative format, email enquiries@bis.gsi.gov.uk, or call 020 7215 5000.

URN 12/903