

PLACE, LEARNING AND ENTREPRENEURIALISM

The impact of entrepreneurial education on regional economies

About Localis

Who we are

We are an independent, cross-party, leading not-for-profit think tank that was established in 2001. Our work promotes neo-localist ideas through research, events and commentary, covering a range of local and national domestic policy issues.

Neo-localism

Our research and policy programme is guided by the concept of neo-localism. Neo-localism is about giving places and people more control over the effects of globalisation. It is positive about promoting economic prosperity, but also enhancing other aspects of people's lives such as family and culture. It is not antiglobalisation, but wants to bend the mainstream of social and economic policy so that place is put at the centre of political thinking.

In particular our work is focused on four areas:

- **Reshaping our economy.** How places can take control of their economies and drive local growth.
- Culture, tradition and beauty. Crafting policy to help our heritage, physical environment and cultural life continue to enrich our lives.
- **Reforming public services.** Ideas to help save the public services and institutions upon which many in society depend.
- Improving family life. Fresh thinking to ensure the UK remains one of the most family-friendly places in the world.

What we do

We publish research throughout the year, from extensive reports to shorter pamphlets, on a diverse range of policy areas. We run a broad events programme, including roundtable discussions, panel events and an extensive party conference programme. We also run a membership network of local authorities and corporate fellows.

Acknowledgements

We would like to thank all those who have contributed to our research including enterprise and entrepreneurship specialists and colleagues at universities including Huddersfield, UCL, York, Sheffield, Sheffield Hallam, Leeds, East London, London South Bank, Hertfordshire, Oxford, Bath, Birmingham, St Mary's, Middlesex, LSE, Warwick, Durham, Kent and the Set Squared Partnership (the enterprise collaboration between the universities of Bath, Bristol, Exeter, Southampton and Surrey), Enterprise Educators UK (EEUK), University Alliance, LEP Network, Worcestershire LEP, ScaleUp Institute, Seven Hills, Parkwalk and others including Kent County Council and senior politicans and entrepreneurs. We are also very grateful to the Department of Business, Energy & Industrial Strategy (BEIS) and the Ministry for Housing, Communities & Local Government for their interest and insight throughout. Any errors remain our own.

About the University of Huddersfield

The University of Huddersfield has a strong and clear commitment to Enterprise in its widest sense, demonstrated not only through its commitment to student and graduate business start-up support, but also across the institution, from teaching, through to external business engagement and development.

The current 2013-18 Strategy Map has a vision to be 'An inspiring, innovative University of international renown', and includes clear teaching and learning aims and objectives to inspire employable and enterprising graduates; suitably equipped for excellent career opportunities as a result of their time spent at the institution. The university has been widely recognised for this approach through awards such as THE Entrepreneurial University of the Year (2012), THE University of the Year (2013) and a Queen's Award for Enterprise (2013).

The 3M Buckley Innovation Centre, named after businessman Sir George Buckley, a graduate of the University of Huddersfield and former CEO of the multi-national 3M corporation, is a further testament to the innovative and enterprising culture and mind-set of the institution. This purpose-built facility adjacent to the university campus, facilitates business growth, encourages business to academia collaboration and actively promotes innovation. The 3M BIC is also the location for The Duke of York Young Entrepreneur Centre; home to the Enterprise Team and offering incubation facilities and in-house business advice to inspire current student and recent graduate start-ups.

The Enterprise Team is committed to the continued development and delivery of innovative programmes of support, both outside of the curriculum and integrated into undergraduate degree programmes via its Enterprise Placement Year, to assist in local and regional economic impact.



About UCL

UCL, as a world-leading, research-intensive, large and comprehensive university with a tradition of radical thought and action, can complement its outstanding research and teaching reputation and impact with delivering an equivalent depth and breadth of societal and economic benefit. We are natural drivers of this in how we work with our staff, our students and alumni, our research capabilities and outputs, our partnerships and across our estate.

The UCL Innovation and Enterprise strategy 2016-2021 seeks to capture our opportunities together to bring such benefit, making us more than the sum of our parts. Our 5 key strategic priorities include 'contribute to the employability of all students, staff and the wider community'.

Set amidst a dynamic changing employment landscape, entrepreneurship education features highly to equip our students with an entrepreneurial mindset to add value to the economy in which they will contribute. Through efficient and effective entrepreneurial education we will improve the productivity of our country thereby fulfilling our responsibilities as a university and contributing to our global development goals of 2034.

Through an extensive programme of extra-curricular activity, students are inspired encouraged and supported through an entrepreneurial journey where they can receive free specialist business advice and guidance to create a start-up and access to the BaseKX Incubation hub with its early stage growth workshops and pre-accelerator training. UCL has a team of dedicated entrepreneurial specialists, which reflects the strategic commitment to enterprise and entrepreneurship education across the UCL community.



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Foreword— There is a huge opportunity here The Lord Bilimoria CBE DL

I would like to congratulate Localis on the production of their report 'Place, Learning and Entrepreneurialism'.

When I came to the UK as a 19 year old student from India in the 1980s entrepreneurship was looked down upon. At the University of Cambridge there was no business school, let alone any enterprise or entrepreneurship education.

Thankfully this country has changed, where today Britain is seen as one of the most entrepreneurial countries in the world and entrepreneurship is encouraged and celebrated throughout the country.

Business schools have sprung up and flourished in the UK. The Cambridge Judge Business School, of which I am proud to be Chairman of the Advisory Board, has now been in existence for over a quarter of a century. It is already ranked as one of the leading Business Schools in the world and provides enterprise and entrepreneurship education, not just to the students of the University of Cambridge, but to the whole Cambridge ecosystem. There are programmes like Enterprise Tuesday which are attended by over 300 people every week that teach the attendees the tools of starting-up a business.

The Localis 'Place, Learning and Entrepreneurialism' report is music to my ears as an entrepreneur who has started a global beer brand from scratch from an idea while I was a student at the University of Cambridge. The report highlights, through practical case studies of real examples of universities throughout the UK, the importance of enterprise and entrepreneurship education and the local economic impact of this activity. It highlights the number of start-ups that have emanated from university, one in every hundred new business births in the UK occur in universities and these businesses produce a combined £2.5 billion turnover.

The report recommends that universities should be incentivised to produce impactful start-ups and that this should be measured with a long-term view. The report also importantly recommends that enterprise and entrepreneurship should be a strategic priority for every university in the UK. It states that 35% of universities in the UK did not contribute to the production of a single graduate start-up last year. There is a huge opportunity here and where there is good practice too little is known of its true impact.

I hope the recommendations in this important report are followed up on as this will result in an enhancement of the already existing pockets of excellence in enterprise and entrepreneurship education within British Universities.

Foreword — Speak up and smell the coffee Professor Andy Penaluna

I have recently become aware of something that was effectively under my nose, but that I had somehow put to the back of my mind. When Universities strive for excellence they think international, and neglect the very communities that they serve. They equate success with proving their global provess as opposed to supplying talent down the road, and therein we find a problem.

I brought this up at the recent launch of the new QAA Guidance for Enterprise and Entrepreneurship. This was because for many of us it is not the large multinationals that we seek to engage, but the new start-ups and micro businesses. We have to engage with them, simply because not only are these businesses the lifeblood of our economy, they are also the ones who have most insight into what's needed to help the majority of our students. Big stable employment opportunities are in the main gone, and replaced with uncertain environments where agility is the key construct. When the world changes, we have to change with it. Moreover, as change is happening at an ever-increasing pace, I feel that Universities are struggling to keep up.

Over the years I have met with many educators and seen many excellent people come and go. Often this is because of short-term contracts or funded projects that do not make it into the mainstream activity of the University. When they go, their knowledge and expertise goes with them. In my view the people who suffer most are the students, because too many academics the words enterprise and entrepreneurship equate to money grabbing and greed, whereas those who are more informed discuss, creativity, innovation and learners' opportunities for future success. It isn't only the educators who say this either, as when working for Government on a report initiated by micro businesses, the competencies they desired matched these understandings almost seamlessly.

I also have the good fortune to have worked extensively for bodies such as the United Nations, OECD and European Commission, and guess what, we all see the same problems and the same potential solutions. That is why I commend this report to you, because it is time to wake up, speak up and smell the coffee.

Executive Summary

With the concept of 'place' taking ever increasing economic importance within national Industrial Strategy, this report explores the role universities have in supporting enterprise and entrepreneurship and the impact this activity has. It assesses enterprise and entrepreneurship (or entrepreneurial) education as distinct from university research and spin-out activity and considers how best it can be supported to grow. Central to the report is a comparison of enterprise and entrepreneurship education in London and Yorkshire.

Universities are 'local economic anchors' contributing to one in every hundred new business births in the UK¹. Across the country, there are pockets of excellence in supporting enterprise and entrepreneurship and there is an escalator of business support. But too many universities are doing too little. According to national research², 35% of universities did not contribute to the production of a single graduate start-up last year. Where there is good practice, too little is known of its true impact.

Important issues need addressing:

- Without the buy-in of senior university executives, enterprise and entrepreneurship education struggles to establish itself as a core part of the university offer/experience;
- While support for start-ups is broad, that for latter stage companies and scale-ups appears less comprehensive;
- Public investment for enterprise through European Union (ERDF) and Local Growth funds is ending³;
- Capital markets skew investment to London and may miss local opportunities;
- National data collection must be robust, while impact measurement needs to improve and should reward success.

¹ Comparison of ONS national start-up rates (total: 414,000 in 2016) with HESA data (total: 4,224 in 2015/16) i) ONS Statistical bulletin: Business demography, UK: 2016 - The number of UK business births between 2015 and 2016 was 414,000, an increase from 383,000 in 2015 and ii) Higher Education Statistics Authority (2017) - Business and Community Interaction Survey 2015/16 Table 4(b) - Intellectual Property (IP) - Spin off activities by HE provider (HEP) 2015/16 — Total is number of: Spin-offs with some HEP ownership (150); Formal spin-offs, not HEP owned (18); Staff start-ups (60); Graduate start-ups (3,890); and Social enterprises (106).

² Higher Education Statistics Authority (2017) - Business and Community Interaction Survey 2015/16

 $^{3\,}$ The Government's Local Growth Fund is now fully allocated and being invested and EU programmes will draw to a close in $2020\,$

For universities to fulfill their role as local economic anchor institutions, we recommend:

Make enterprise and entrepreneurship a strategic priority: Drawing on best practice, universities should provide every student the opportunity to develop enterprise skills, identifying and nurturing entrepreneurship across all disciplines and enabling access to support as businesses grow. Enterprise and entrepreneurship should have a mandate within the university.

Influence the local economy: New financial support and incentives are needed to replace European Union and UK Local Growth funding; equally, independent investment in start-ups outside of London needs to increase, incentivising greater regional and scale-up funding and increased alumni investment. Universities should provide a "swing door" to the local economy aligning services to provide access to seamless business support. Through the Government's proposed Common Framework for Devolution, its Review of LEPs and through local industrial strategy, university enterprise and entrepreneurship should be recognised and promoted.

Measure and reward impact: Local economic impact should be assessed and rewarded in the allocation of Higher Education Innovation Fund (HEIF) and related Government growth funding, with specific impact metrics agreed and introduced over time. 'Impact start-ups', new businesses with the potential both for corporate growth and greatest impact on the local and regional economy, should be incentivized.

As the Government's national and local industrial strategy is implemented, this report presents a shared agenda for enterprise and entrepreneurship education, building on the comparison between London and Yorkshire universities to reinforce the role of universities as local economic anchors.

Recommendations: A shared agenda for enterprise and entrepreneurship education

A series of recommendations are helpful but are of limited use alone. To have life they must gain traction with the enterprise and entrepreneurship sector, with local economic stakeholders and, ultimately, with Government.

Universities have a number of distinct membership and representative bodies actively making the case for enterprise education and start-up activity including Enterprise Educators UK (EEUK). The report aims to elevate their case and the profile of university enterprise and entrepreneurship education across the country.

To support universities in fulfilling their role as local economic anchor institutions we make the following recommendations.

Make enterprise and entrepreneurship a strategic priority

- 1. Every student should have the opportunity to develop enterprise and entrepreneurship skills and learning, both within the university curriculum and outside it. Universities must find ways to identify and nurture entrepreneurs across all disciplines and at all stages.
- 2. Enterprise and entrepreneurship must have a mandate. Through strong corporate leadership within universities, the university offer to student and graduate entrepreneurs must be strategic and co-ordinated.
- 3. Universities should review their 'cut off points' for enterprise and entrepreneurship support in order to play a more active role in scaling up of businesses not just the pre start-up and start-up phase.
- 4. Incubation units and workspace should be opened up to local entrepreneurs. This will support local SMEs, potentially increase revenue for enterprise units, encourage throughput and provide student entrepreneurs with an immediate and potentially valuable peer network.

Influence the local economy

- 5. Universities' position as anchors in their local economies should be explicitly recognised in the Government's Common Framework for devolution and a clear link made to university enterprise and entrepreneurship in the Government's Review of LEPs⁴. It should be promoted in local economic strategies.
- 6. Universities should provide a "swing door into the local economy" with clear account management of services across the university and alignment with external enterprise and entrepreneurship support through their local Growth Hubs.
- 7. Government should create conditions that diversify the current capital model to increase independent investment outside of London, retaining existing tax reliefs but incentivising regional and scale-up investment and promoting alumni funding. Vice Chancellors should work with their LEPs, City and County Councils and Mayors to package regional opportunities to pitch to investors.
- 8. New financial support and incentives should be developed to replace funding for enterprise and entrepreneurship currently available through Local Growth Fund and European funding streams.

⁴ BEIS (November, 2017) - Industrial Strategy, Building a Britain fit for the future (p223) — "We are reviewing the roles and responsibilities of Local Enterprise Partnerships and will bring forward reforms to leadership, governance, accountability, financial reporting and geographical boundaries. We will work with Local Enterprise Partnerships to set out a more clearly defined set of activities and objectives in early 2018."

Measure and reward impact

- 9. Local economic impact should be assessed and rewarded through the new Knowledge Exchange Framework and in the allocation of HEIF or related Government growth funding. Universities should first be required to provide commentary illustrating programme impact, with specific impact metrics agreed and introduced to an agreed timetable. National data should be robust and consistent.
- 10. Universities should be incentivised to produce "impact start-ups" and entrepreneurs, demonstrating they are growing local and national economies, with funding increasingly reflecting their success in delivering local economic growth. New longitudinal measures should be developed to measure longer-term impact and encourage the retention of links with student and graduate start-ups to support their ongoing development.

Introduction: Do universities have a regional impact?

Commissioned by the University of Huddersfield and UCL, our research has focussed on Yorkshire and London but is the result of contact with universities and those with a specialist interest in entrepreneurialism and business growth across the country. It considers what universities are doing to support entrepreneurial students and graduates, the importance of both local policy conditions and funding and the need to measure and reward local impact.

Context

Universities are local economic anchor institutions. They are not just connected to place, they often embody a place itself. Take Cambridge, Lancaster or Oxford universities for example - they are employers, land owners, and educators. In recent decades they have also assumed a new role, that of business creators. One in every one hundred new business births in the UK occurs in a university⁵. In 2015-2016, through new spin-off and start-up companies, universities contributed to the creation of 4,224 businesses⁶, employing 44,335 people⁷, producing a £2.5 billion turnover⁸.

Through coaching and mentoring support, specialist business incubation units and in some cases degree courses which afford a 'year in enterprise', evidence suggests that when university enterprise and entrepreneurship support works, the outcomes are felt by the local economy.

Health warning: In the course of the research, repeated concerns were raised about the robustness and consistency of self-reported figures in national data. For this reason, we believe the national data should only be considered indictative. For example the University of Huddersfield only reports start-ups when the Enterprise Team intervention preceeds the start-up registration and the client can clearly attribute Enterprise Team support to the progress of their idea to business. Others may vary. This supports the case made strongly in this report for consistent data capture and improved impact assessment and metrics.

⁵ Comparison of ONS national start-up rates (total: 414,000 in 2016) with Higher Education Statistics Agency (HESA) data (total: 4,224 in 2015/16) i) ONS Statistical bulletin: Business demography, UK: 2016 - The number of UK business births between 2015 and 2016 was 414,000, an increase from 383,000 in 2015 and ii) Higher Education Statistics Authority (2017) - Business and Community Interaction Survey 2015/16 Table 4(b) - Intellectual Property (IP) - Spin off activities by HE provider (HEP) 2015/16 – Total is number of: Spin-offs with some HEP ownership (150); Formal spin-offs, not HEP owned (18); Staff start-ups (60); Graduate start-ups (3,890); and Social enterprises (106).

⁶ Higher Education Statistics Authority (2017) - Business and Community Interaction Survey 2015/16 Table 4(b) - Intellectual Property (IP) - Spin off activities by HE provider (HEP) 2015/16 – Total number of businesses: Spin-offs with some HEP ownership (150); Formal spin-offs, not HEP owned (18); Staff start-ups (60); Graduate start-ups (3,890); and Social enterprises (106).

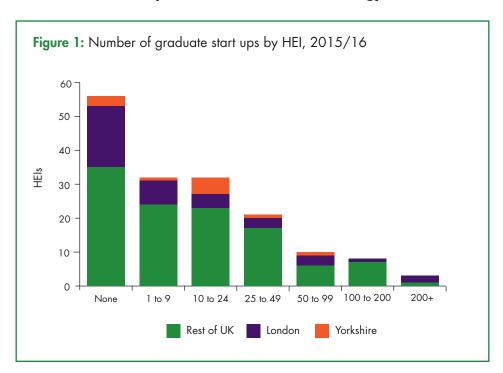
⁷ Higher Education Statistics Authority [2017] - Business and Community Interaction Survey 2015/16 Table 4[b] - Intellectual Property [IP] - Spin off activities by HE provider (HEP) 2015/16 – Estimated current employment in all active firms: Spin-offs with some HEP ownership [13,397]; Formal spin-offs, not HEP owned (4,782); Staff start-ups [2,279]; Graduate start-ups (22,592); and Social enterprises (1,285).

⁸ Higher Education Statistics Authority (2017) - Business and Community Interaction Survey 2015/16 Table 4(b) - Intellectual Property (IP) - Spin off activities by HE provider (HEP) 2015/16 – Estimated current turnover of all active firms (£000s): Spin-offs with some HEP ownership (1,262,711); Formal spin-offs, not HEP owned (413,020); Staff start-ups (156,211); Graduate start-ups (626,790); and Social enterprises (52,335).

Take the example of Kingston University in London. Published data indicates that 20% of business births in the Royal Borough of Kingston-upon-Thames local authority area were linked to Kingston University. These 289 new graduate startups a year have a highly localised impact.

Despite such successes however, the lessons of the best are not always applied by the rest. According to the latest available Higher Education Statistics Authority data¹⁰, in 2015/16 over a third of Higher Education Institutions did not contribute to the creation of a single graduate start-up.

The unfortunate truth is that too many UK universities simply do not appear to act in this space. This needs to change. With the risks, challenges and opportunities that Brexit presents, promoting enterprise and entrepreneurship in our universities should be an important part of the government's national policy agenda and central to the development of local industrial strategy.



Source: Higher Education Statistics Authority (2017) - Business and Community Interaction Survey 2015/16¹¹

Make enterprise and entrepreneurship a strategic priority

Policy interest in university enterprise and entrepreneurship has been strong in recent years. The 2013 review of universities and growth by Sir Andrew Witty¹² was followed by Lord Young's 2014 'Enterprise For All' report¹³. The case for enterprise within education and the role universities play in supporting growth is well established. So why are so many still not maximising their enterprise and entrepreneurship potential? The answer takes a different shape depending on the individual university, but our research suggests certain issues are universal and do have a significant influence.

⁹ Comparison of ONS national start-up rates for the Royal Borough of Kingston upon Thames (1,410) with HESA data for Kingston University (289) i) ONS Dataset: Business demography, Table 1.1b – Count of births of new enterprises for 2015 to 2016, Districts, Counties and Unitary Authorities within Region and Country by year - the number of births of new enterprises in the Royal Borough of Kingston upon Thames was 1,410 and ii) Higher Education Statistics Authority (2017) - Business and Community Interaction Survey 2015/16 Table 4(b) Intellectual Property (IP) - Spin off activities by HE provider (HEP) 2015/16 – For Kingston University, total is number of: Spin-offs with some HEP ownership (0); Formal spin-offs, not HEP owned (0); Staff start-ups (0); Graduate start-ups (289); and Social enterprises (0).

¹⁰ Higher Education Statistics Authority (2017) - Business and Community Interaction Survey 2015/16

¹¹ HE providers reporting 200+ graduate start-ups in 2015/16 were: Falmouth University (202), Kingston University (289) and the Royal College of Art (300). Together they represent 20% of all reported graduate start-ups

¹² HMG (2013) - Encouraging a British Invention Revolution: Sir Andrew Witty's Review of Universities and Growth

¹³ HMG (2014) - Enterprise for All: The relevance of Enterprise in Education, Lord Young

Firstly, the way a university funds its enterprise support shapes how strategic it can be. Many universities do not offer core funding to enterprise units, instead preferring to support access to funding through the Higher Education Innovation Fund (HEIF), or via other dedicated growth schemes, for example the government's Local Growth Fund (LGF). Secondly, the emphasis a university's senior management places on enterprise and entrepreneurship has a significant impact on the role it plays in wider university education. Interviews conducted for this report all stated that "mainstreaming" enterprise and entrepreneurship into the university's broader strategic priorities is critical to achieving higher levels of impact.

Unsurprisingly funding and emphasis are linked. The more central enterprise is to a university's strategic priorities, the more likely it will be core funded. And our research suggests that core funded units, like that of Leeds University, may tend to outperform their regional neighbours in graduate and student business creation rates.

Influence the local economy

Local economic conditions matter. There is a large regional discrepancy in the amount of independent investment into university incubated start-ups. On average, graduate start-ups in London institutions receive eight times the external investment of their Yorkshire counterparts. Conversely Yorkshire receives a much larger share of public and European funding than London. This dynamic is replicated across the country, with London dwarfing other regions in independent investment.

Given the uncertainty over Brexit and the continued access to EU funds, and the general position of the UK's public finances, we need to find ways of encouraging more independent finance for graduate start-ups. In short, we need more diverse capital models outside of London. Some universities with a pedigree in enterprise and entrepreneurship are taking it on themselves to curate these new networks but such work is in its infancy. There is clearly a role here for government. It already incentivises investment by offering rate relief through specialist schemes such the Enterprise Investment Scheme (EIS) or the Seed Enterprise Investment Scheme (SEIS), but it can, and should, go further.

This local dynamic extends beyond sources of capital to general viability. The vast majority of businesses we interviewed during the research process had based themselves around their university town or city. According to the enterprise units we visited this was a fairly standard pattern. Therefore a local economy must be able to support the businesses its universities create. This means the enterprise unit having good knowledge of the local economy and the strategic economic agents, such as the LEP, combined authority or strategic authority (eg City, County Council) also being aware of the work being done by enterprise units. When one in every one hundred new businesses created in the UK every year can trace its roots back to university enterprise support, the case for interest is self-evident.

Measure and reward impact

The metrics employed by many enterprise units are not fit for purpose. The number of start-ups created, for instance, is helpful but limited; it doesn't tell us if these businesses are trading, or if they employ people, or how long that business survives and whether it has the potential to scale-up. Nor does it capture the effect of that business on the local economy. One Director of Enterprise argued enterprise units trade in these "vanity statistics" because there is no quantifiable alternative. More fundamentally, wider concerns were raised about how national start-up statistics were collected and verified.

Undoubtedly recording data is expensive and time-consuming. The University of Sheffield spent two years conducting an enterprise audit of every academic's

teaching methods to ascertain how embedded or not enterprise was in a student's learning experience. Whilst the exercise was useful to get a "snapshot of where they were", the time it took to complete meant that no sooner had you finished one audit than you would need to begin the next as it would be out-of-date.

Positively there are already changes being made in how data is recorded in order to provide more insight on the impact of enterprise units. For example, the Destination of Leavers from Higher Education Survey (DLHE) has expanded its data gathering on self-employed graduates¹⁴. Critically, a Knowledge Exchange Framework is also now being developed (see chapter 3). Nonetheless, a radical overhaul of how we report, measure and assess the impact of enterprise units is needed. Particularly if they are to assume greater strategic importance within individual universities.

Fulfilling their economic anchor potential

In summary, graduate business creation is a critical part of how a university fulfils its role as a local economic anchor institution. A small number of high performing universities are leading the way and creating what can be most accurately described as 'emerging best practice' and this is actively promoted by a number of professional bodies. Yet, as we have established, too many universities are not maximising their potential. To address this we need a coordinated effort from government, higher education institutions and local economic partners.

In chapter one we explain why enterprise and entrepreneurship should become a strategic priority of universities and what measures are necessary to support this.

In chapter two we highlight the necessary local economic and policy conditions needed to support student and graduate business creation, viability and scaling up.

In chapter three we lay out a new approach to measurement and metrics for university enterprise and entrepreneurship within a new Knowledge Exchange Framework.

A note on the research scope, methodology and terminology

Our quantitative data analysis involved a comparison of the HESA Higher Education Business Community Interaction survey with ONS Business Demography data sets, the two primary sources of national data. Whereas the HESA data has been collected over 2015-2016, the ONS is collected each calendar year, making exact cross referencing difficult. We have therefore chosen to allocate data collected over two calendar years, but still 12 months in cycle, to a single year. As such, while derived from national sources and our analysis is robust, this means that our results should be treated as indicative.

Within national data collection and analysis of the UK's economy and higher education institutions as a whole through HESA and ONS statistics, our research focussed on a comparative analysis of London and Yorkshire using these statistics as primary sources. We have used these two regions to extrapolate best practice and focussed our interviews with university enterprise staff and students and graduate businesses with people from these regions. These have been supplemented by a wide-ranging literature search and a targeted series of national stakeholder interviews¹⁵ with universities across the country and specialist interested parties promoting enterprise and entrepreneurship including within Government to provide national context and learning.

More generally, the quality of data available on the performance of enterprise units is weak. A combination of self-reporting and basic measures means that we have treated much of the publicly available data as a proxy for performance as

¹⁴ Stakeholder interview

¹⁵ See acknowledgements

opposed to reflecting actual performance. This should be noted particularly in relation to reported start-up figures where several concerns around the national data set were raised during the course of the research and reinforces the case made strongly in the report for consistent data capture and improved impact measurement and metrics.

Enterprise or Entrepreneurship?

On 18th January 2018, the Quality Assurance Agency (QAA) launched is revised Guidelines for Enterprise and Entrepreneurship Education in Higher Education ¹⁶. A much anticipated and welcomed update to the already positively received 2012 edition, the Guidelines provide clear and carefully crafted definitions of the terms Enterprise Education and Entrepreneurship Education as below:

Enterprise Education

Enterprise Education is defined as the process of developing students in a manner that provides them with an enhanced capacity to generate ideas, and the behaviours, attributes, and competencies to make them happen. It extends beyond knowledge acquisition to a wide range of emotional, intellectual, social, cultural and practical behaviours, attributes and competences, and is appropriate to all students. These are all underlying factors that can enhance employability prospects as well as be taken further through Entrepreneurship Education.

The aim of Enterprise Education is to produce graduates with an awareness, mindset and capability to generate original ideas in response to identified needs, opportunities and shortfalls, and the ability to act on them, even if circumstances are changing and ambiguous; in short, having an idea and making it happen.

Enterprise behaviours include: taking the initiative, making things happen, reflecting, communicating, pivoting and adapting, storytelling, taking responsibility, networking, personal effectiveness and managed risk taking. Enterprise attributes can include: open mindedness, proactivity, curiosity, self-efficacy, flexibility, adaptability, determination and resilience.

Enterprise competencies include: intuitive decision making, identifying opportunities, creative problem solving, innovating, strategic thinking, design thinking, negotiation, communicating, influencing, leadership and financial, business and digital literacy.

Entrepreneurship Education

Entrepreneurship Education aims to build upon the enterprising competencies of students who are capable of identifying opportunities and developing ventures, through becoming self-employed, setting up new businesses or developing and growing part of an existing venture. It focuses on the application of enterprising competencies and extends the learning environment into realistic risk environments that may include legal issues, funding issues, start-up and growth strategies.

Students with both Enterprise and Entrepreneurship competencies may apply their abilities in a range of different contexts, including new or existing businesses, charities, non-governmental organisations, the public sector and social enterprises. Entrepreneurship Education is the realisation of ideas, through an enhanced understanding and application of business processes within the legal and ethical constraints that are found in the context of their chosen venture.

¹⁶ QAA (2018) - Enterprise and Entrepreneurship Education: Guidance for UK Higher Education Providers

Entrepreneurial Education

Recognising these definitions, this report is clearly focused on entrepreneurship by considering the provision of business start-up support offered by universities in two distinct places (London and Yorkshire). However, we acknowledge that effective entrepreneurship education is built upon a strong foundation of enterprise education and so, in combining the two, the report will use the catch-all term "Entrepreneurial Education". This is both for the sake of clarity and to acknowledge the combination of both enterprise and entrepreneurship education, as described in the QAA Guidelines, as well as recognition that many new international schooling and similar initiatives being developed also use this term.

Chapter 1: Make enterprise and entrepreneurship a strategic priority

The Wilson¹⁷, Witty¹⁸ and Young¹⁹ reviews agreed universities should be enhancers of economic growth in the UK. More specifically they agreed that the role of a higher education institution anchored in a local economy was more than just as an employer and buyer. British universities don't just turn out world class graduates every year, they also turn out thousands of new businesses. Supporting this new business creation are dedicated enterprise and entrepreneurship units offering advice and investment and, in some cases, delivering elements of degree courses. However, published data indicates that over a third of universities remain inactive in this space. As such, they are failing to maximise their potential as local economic anchors.

In this chapter we examine why this is the case and recommend how enterprise and entrepreneurship might gain strategic importance in a university, recognising that each institution must form its own enterprise strategy according to its own resources and specialities. Barriers to enterprise and entrepreneurship activity loosely fit into two categories: internal support and funding. The two are linked, with enterprise and entrepreneurship often receiving internal management support if it is well-funded. Equally, if it becomes well-funded it receives internal management support! This chapter assumes that in order to be funded adequately enterprise and entrepreneurship must have gained internal support in the university hierarchy.

1.1 Gaining internal support for enterprise and entrepreneurship

Much of our qualitative research was informed by interviewing individuals who worked in higher education institutions. Some were academics who taught enterprise and entrepreneurship skills, others were managers and advisers working in enterprise and innovation units. A number of these interviews exposed the institutional resistance to enterprise that exists in some universities. The reported opposition was not loud and obstructive, but could instead often take the form of a deliberate ignorance, where, at best, senior management questioned the need and the purpose of university enterprise and entrepreneurship support and, at worst, was entirely unaware of its existence. As one national stakeholder indicated, entrepreneurship will "never be taken seriously while enterprise is seen as a glorified hobby"²⁰.

Barriers to support

Our research suggests there are two primary reasons for this resistance. The first is a pure and over-riding academic focus; a belief that business creation is not the traditional role of the research or teaching institution. Universities are

¹⁷ HMG (2012) – A review of business-university collaboration: The Wilson Review

¹⁸ HMG (2013) - Encouraging a British Invention Revolution: Sir Andrew Witty's Review of Universities and Growth

¹⁹ HMG (2014) - Enterprise for All: The relevance of Enterprise in Education, Lord Young

²⁰ Research interview

concerned with ideas and should not be forced to act as an economic arm of the state

The second is financial; investing in business creation is no guarantee of increased funding or successful returns. Higher Education Funding Council for England (HEFCE) 'Knowledge Exchange' funding is marginal relative to that for research and teaching – and some universities receive none. Equally, start-ups often die and rarely scale-up: the UK 5-year survival rate for businesses born in 2011 and still active in 2016 was 44.1%²¹. These odds can certainly be improved, but some business failure is inevitable. Why should the university either invest valuable resources in a programme with little guarantee that success will be recognised in future funding or invest its own money or facilitate investment in a business project which from the outset has only a 56%²² chance of lasting 5 years? This is especially the case when there are other alternatives such as investing in research, infrastructure or widening access all of which are assured to create an impact for the university. As one stakeholder concluded, "major funding for the Russell Group in particular is in teaching and research – there is no overriding need to support enterprise"²³.

Guide to funding 2017-18 How HEFCE allocates its funds						
Teaching	Research	Capital	Knowledge exchange	National facilities & initiative		
£1,320m	£1,595m	£353m	£160m	£107m		

Source: HEFCE - Guide to funding 2017-18

But whatever their stance, universities are already unquestionably part of the economic supply chain and make a great contribution to national prosperity. Increasingly universities need to demonstrate economic impact in order to acquire research funding. At the same time, just because investing resource in enterprise and business creation is not safe or guarantee a return does not mean it is not worthwhile. Such an argument ignores the social value of enterprise and the potential upside of investment.

University leadership

University senior managers should recognise their institution's role as an economic agent locally and see enterprise and entrepreneurship support as adding value to the university experience.

Without this senior management buy-in, entrepreneurial education struggles to establish itself as a core part of the university experience. Our research suggests the most successful enterprise units have spent significant time in building internal relationships at the university, from the Vice Chancellor down to individual academics. Simply put, enterprise and entrepreneurship must have a mandate within the university.

²¹ ONS (2017)- Statistical bulletin: Business Demography, UK: 2016

²² Ibid

²³ Stakeholder interview

Good practice: Transforming enterprise at UCL

Praised by one stakeholder as "enterprise integrated into the leadership of an institution", UCL's enterprise strategy leads with a commitment from Dr Celia Caulcott, Vice-Provost (Enterprise and London): "We will create a real spirit of enterprise at UCL over the next five years (2016-21), growing our student entrepreneurship programme and providing opportunities to develop entrepreneurial skills, attitudes and mindsets in our staff and researchers with an ambition of becoming the leading UK university supporting university entrepreneurs".

Good practice: Embedding an entrepreneurial culture

Many interviewees spoke of the need to build a culture of enterprise within universities. The University of Hertfordshire was cited as aiming to create an "entrepreneurial ecosystem" to support business start-ups, while Durham University was "embedding enterprise and entrepreneurship in the curriculum" and the UCL strategy (as above) was "integrated into the institution's leadership". Building on its call for enterprise education to be mandatory in the curriculum for 4 to 18 year olds, the All-Party Group for Micro Businesses recommends all students are able to learn about business startup, with minimum provision of an introductory module on entrepreneurship, with all HEIs encouraged and supported to embed enterprise education with "students encouraged to consider themselves as enterprising individuals who both benefit from, and contribute to, their HEI's commitment to support economic growth".²⁴

Good practice: Promoting social enterprise

Recognising the potential of social enterprise and within a clear social enterprise strategy, the University of Northampton has appointed Wray Irwin as its Social Entrepreneur in Residence becoming the first university in the country to host such a position. The aim of the role is to deliver radical change and improvement in service development and employment opportunities across the county and to make a significant contribution to its economic and social prosperity drawing on the expertise and commitment of the Young Foundation²⁵ to invest in new social ventures to achieve this.

1.2 Providing entrepreneurial education and support

Universities can support start-up creation through entrepreneurial education and practical business support. Education takes the form of degrees, lecture series and workshops. Business support can range from informal advice to consultancy and incubation space. Traditionally, the approach has been that the student transitions from receiving education to practical business support, but this so-called 'journey of an entrepreneur' is not always linear – an entrepreneur may move in and out of contact. As such, it is important to focus instead on how enterpreneurial education fits in to the university offer in order to improve access for students and graduates.

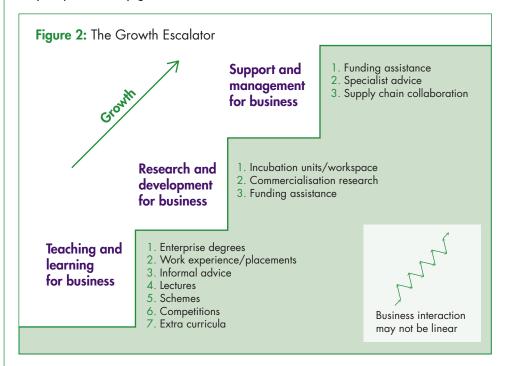
 $^{24\ \ \}text{All Party Parliamentary Group for Micro Businesses}\ (2014)\ -\ \text{An Education System fit for an Entrepreneur}$

²⁵ The Young Foundation aims to create changes that will lead to more equal and resilient communities. It finds ways of tackling social problems by working alongside communities, using the tools of research and social innovation.

The Growth Escalator

University support for enterprise and entrepreneurship ranges from informal to intensive. The range and quality in the typology of support is impressive. However, the comprehensiveness of the offer will vary amongst institutions, in large part reflecting the priority they place on enterprise.

Our "Growth Escalator" divides enterprise and entrepreneurship support into 3 categories: teaching and learning; research and development; and support and management. The categorization reflects the increasingly specialist support firms may require as they grow.



Teaching and learning: The earliest stage in the formation of ideas or business development. The variety of opportunities provided is important in giving a student's first exposure to enterprise or greater experience of what a career in enterprise may mean and the skills required. It can offer formal study and qualification or, for the budding graduate entrepreneur, direct support in establishing their business.

Research and development: The critical stage for a business in honing their product or shaping market opportunities as their business develops. The student or graduate enterprise may still be fragile at this stage, with their individual commitment, drive and enthusiasm still to yield financial results. Formal support can be vital, perhaps though incubator units or affordable accommodation. More informal contact with other entrepreneurs is also valued as networks are established.

Support and management: As the student or graduate business grows the level of specialist support a university can provide may vary. Access to finance will be critical and advice likely to be more targeted or specific, perhaps linked to supply chain development or collaboration. At this stage, the link to the university may increase in intensity or may be lost as the business develops within the local or wider economy.

Support for start-ups will also exist outside of the universities through local business organizations and other local agencies. University businesses may access this support in addition to university provision; equally local businesses may wish to access university services to support their own growth, at the same time offering the university the potential of a commercial return.

Opportunity for all

For many students their university enterprise and entreneurship offer can be piecemeal and self-selecting. Enterpreneurial education or support tends to exist as an extra-curricular activity. Recognising this, enterprise units are pushing to embed entrepreneurial education into the curriculum with some going further and introducing 'venture creation'26 type degrees. Over the course of our research we were introduced to a variety of successful enterprise initiatives including Enterprise Placement Years²⁷, Enterprise Scholarships²⁸ to competitions and Boot Camps²⁹. Our research confirms Lord Young's³⁰ recommendations that best practice can be found when enterpreneurial support is delivered from an independent unit, not necessarily confined to a business school. This will serve to increase access. When communicating with other departments, enterprise and entreprenurship needs to be marketed appropriately. A common refrain from those we interviewed was 'how do we reach out to arts students?' Access should be promoted to all, acknowledging entrepreneurs may be across many disciplines and have many different motivations. As one stakeholder captured it, they can be "business anarchists...living in the future... they have different perspectives"31.

²⁶ Research Interview

²⁷ Offered by the University of Huddersfield

²⁸ Offered by the University of Leeds

²⁹ Offered by University of East London and others

³⁰ HMG (2014) - Enterprise for All: The relevance of Enterprise in Education, Lord Young

³¹ Stakeholder interview

Case Study: University of Huddersfield's Enterprise Placement Year (EPY)

UoH entrepreneur: "We wouldn't be where we are now without their support."

For students looking for an alternative to conventional work placements or internships, the University of Huddersfield's Enterprise Placement Year provides an opportunity to explore, research and start a business or try self-employment. Based in The Duke of York Young Entrepreneur Centre (DOYYEC), students have the support of the University's Enterprise Team and are required to attend the weekly Enterprise Workshops and submit monthly reflections on their progress. They develop their enterprising skills and attributes and may be eligible to apply for a Proof of Concept grant of up to £500 to help prove their business idea is a winner, as well as benefiting from the hot desk office facilities and in-house Business Advisors. The generic Enterprise Placement Year (EPY) Programme has run for 10 years with a sector-specific variant being introduced in 2014/15 (Computer Gaming) and in 2016/17, a further innovation (Music and Sound) via a HEFCE Catalyst project.

Having completed the Sector Specific EPY in May 2017, video gaming entrepreneur Helen has moved into the wider 3M Buckley Innovation Centre (3MBIC) (the home of the Enterprise Team and DOYYEC) to develop a concept game to take to market. Highlighting the invaluable assistance provided to establish her team's business including company registration, tax and payroll and noting the challenge of early stage operation, the easily accessible advice and support provided by the Enterprise Team was considered invaluable. On the unpaid placement year, while citing the primary challenge of funding and establishing a business structure, Helen commented she "wouldn't have it any other way" seeing the commitment required as keeping her and her team motivated as they juggled part-time jobs. While linked to the local gaming networks, Helen felt the 3MBIC could now provide helpful access to other opportunities locally, identifying both investment and financial management of the business as the support now needed to help the business grow.

Further information on the EPY programme can be found in the 2017 publication: http://www.emeraldinsight.com/doi/book/10.1108/S2040-724620177

Case Study: University of East London - The "E Factor"

UEL entrepreneur: "I would love to have had the opportunity to study entrepreneurship"

The E-Factor is the University of East London's business ideas competition for students and recent graduates. Successful applicants get the chance to join UEL's intensive development and mentoring programme before going head-to head in a grand final. Through a structured development programme the students refine their ideas and business potential through a 3 day boot-camp and 1-2-1 mentoring from industry experts. At the end of the programme, 5 finalists pitch live to an audience of industry professionals. All finalists are given a business base in UEL's Knowledge Dock Business and Innovation Centre, the winner receiving £6,000 cash funding to help kick-start their idea.

Alex Wilding, a UEL psychology graduate, and business partner Paul Hulligan won the 2017 E Factor with their vidiCREW business which allows newly married couples to enjoy a unique wedding video by creatively combining the mobile phone recordings of wedding guests. Identifying that, for the growth of their business, "the biggest barrier at the beginning is accommodation" they now have workspace provided by the UEL and will have increasing support and networking opportunities as more businesses locate in the Knowledge Dock. Keen to encourage opportunities for starting a business to become more widely known to counter negative messages of business failure, the videCREW entrepreneurs also considered the potential for greater tax freedom important at the earlier stages of business development when growth is beginning but income is limited.

Alan Gibb in his paper Enterprise in Education³² observes that in order for entrepreneurship to be "really embedded in the educational system" it must be "reflected in the culture of the educational institution itself". In other words an entrepreneurial climate should be established on campus which promotes innovation, strategic thinking and creative problem solving. The 'add-on' approach to enterpreneurial study is far from ideal and yet unfortunately, is the dominant form of provision. The interviews we conducted suggested that once this more holistic approach is adopted, where enterpreneurial education becomes part of the fabric of the university experience, the focus on supporting business creation expands from merely start-ups to a more active consideration of supporting business growth and scale up. A very positive example of this was found in the University of Leeds where the university became more intellectually invested in the businesses, taking an institutional stake in their success; in return it has created greater economic value for themselves and the local community.

Entrepreneurial education should be longitudinal

University support should not be withdrawn at the point of business creation. If businesses are to survive and grow they need continued innovation support after the point of start-up, whether this be in the form of specialised mentoring or financial assistance. Previous government policy recognised the start-up challenge³³, but scale-up has yet to be addressed and remains one of the biggest challenges to business growth in the UK economy³⁴. Longitudinal, structured university support can prevent business failure and support the process of scaling

³² A A Gibb (2007) – Enterprise in Education, Educating Tomorrow's Entrepreneurs, https://www.researchgate.net/publication/270820337_Enterprise_in_Education_Educating_Tomorrow's_Entrepreneurs

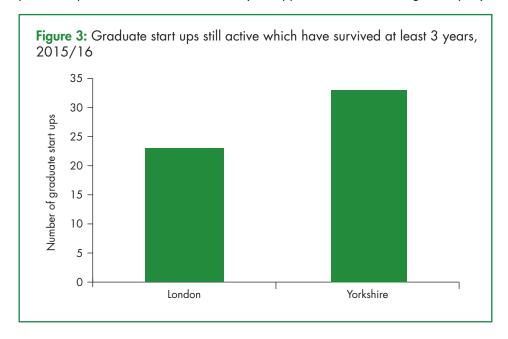
³³ BEIS (2017) – Building our Industrial Strategy p61: "The UK is a success story on business start-ups, ranking 3rd according to OECD research"

³⁴ The Scale-Up Report on UK Economic Growth (2014)

up. However, our research suggests the majority of enterprise units do not offer adequate support to ventures in the later stages of their development.

When asked 'What do you need to grow?' the start-ups we interviewed cited "bigger networks of mentors with direct experience in industry". They described 'gaps in support' in linking them up to SME's and the potential for help with 'talent management'. This advice is not relevant for business creation, but becomes very important later on in a business's growth. A "circular economy" approach was described through such business contact, enabling opportunities to gain experience or employment, and, following business creation, the potential to offer such opportunities or experience to the next generation of businesses.

In our comparison of the London and Yorkshire HEIs, we were curious to find that businesses created with the assistance of universities in Yorkshire were more likely to survive than their London counterparts. Whilst institutions in London produce far more start-ups, when averaged out Yorkshire institutions produce more businesses that survive over three years. In itself, this tells us nothing about the quality of business, their productivity or future potential, but it does suggest that the role of the university (or access to wider support) may be highly relevant. In particular, the potential for placements into a start-up environment or growth business was seen to provide very positive experience that could immediately be applied when establishing a company.



Source: Graph formed by data from the HE Business and Community Interaction Survey 2015/16³⁶

³⁵ Stakeholder interview

³⁶ HE-BCI Total Graduate Start-ups which are still active and have survived at least 3 years in London and Yorkshire averaged by number of HE institutions

Case study: University of Sheffield

Universities should tailor their support to the progression of the entrepreneur, from the initial idea to the creation, management and scale-up of the business. The University of Sheffield offers a three component model: 'Learn, Create, and Evolve'. 'Learn' provides opportunities for students to develop enterprise competencies and attributes, acting as an inspirational programme. 'Create' is for students who are interested in enterprise and have exhibited entrepreneurial qualities, but do not as yet have an idea. It serves as a bridge between inspiration and action, delivering workshops focussed on design and problem solving. The final element of the model is 'Evolve', this support is restricted to those who have the knowledge, the impetus and the idea and are serious about creating a business. 'Evolve' is not for the development of skills but the development of a business. The support does not end here, for businesses which are judged as scalable will receive additional support.

The value of entrepreneurial skills and learning

While the ultimate goal of entrepreneurial education is that recipients go on to create their own successful businesses, wider positive outcomes should also be taken into account. Every enterprise unit we interviewed emphasised that enterprise education is not just about creating a business, but also about an individual flourishing – with skills and entrepreneurial thinking being developed which could be equally valuable in employment (in private or public sectors) as in establishing a business.

As the number of individuals choosing self-employment increases in the UK³⁷, supporting and growing these skills will become increasingly important. Enterprise units provided us with countless examples of students who had engaged in enterprise, gained entrepreneurial experience and gone on to be successfully employed. As one of our stakeholders described it, enterprise must be seen as "part of the toolkit of a future student's life"³⁸. 87% of scale-ups said that they would be able to grow faster if university graduates had the skills needed to meet customer demand³⁹.

A stronger link between enterprise and university careers services appears vital and it was excellent to see the launch of GradVenture, the University of London's entrepreneur pitch competition, spearheaded by the University of London Careers Service.

1.3 Funding enterprise support

The way in which an enterprise unit is funded shapes its behaviour. On published figures, it is perhaps no coincidence that Leeds University which is core funded is producing almost as many graduate start-ups (88 in 2015/16) as the other 10 universities in Yorkshire combined. Leeds's Spark Centre for Enterprise can afford to be strategic in how they support start-ups.

Core funding or HEIF?

Unlike Leeds, a large proportion of enterprise units are completely funded by HEIF⁴⁰.

³⁷ The level of self-employment in the UK increased from 3.8 million in 2008 to 4.6 million in 2015. ONS (2016) Trends in self-employment in the UK 2001 to 2015

³⁸ Stakeholder interview

³⁹ The Scale-Up Report on UK Economic Growth (2014)

⁴⁰ Higher Education Innovation Funding is nominally performance based. Based on the qualifying income tables for 2016/2017 on average universities receive approximately $\mathfrak{L}1.15$ million from HEIF. 20% receive the maximum $\mathfrak{L}2.85$ million and 25% receive nothing. Institutions are eligible to receive an allocation if they exceed a $\mathfrak{L}250,000$ allocation threshold related to their external income earnings and performance of the sector overall.

Whilst HEIF funding does have some benefits, the connection to the academic priorities of the university and the collaboration with research colleagues being one, there is the problem that this funding is not guaranteed. From a review of a range of enterprise units we have concluded that the optimal funding settlement is a core funded enterprise unit with a high level of external investment.

Units which are not core-funded have found inventive ways in which to raise funds for themselves, however. This can also be positive with one of our stakeholders commenting in that the enterprise unit itself must "run like a business" in order to achieve best results. One of the most successful ways of doing this is the opening up of university facilities to small businesses which had no prior connection to the university other than vicinity. In the case of the SETsquared initiative 40% of the running costs come from paying companies. However, many enterprise units do not do this. They limit access or place restrictions, only allowing students who have studied at the university to receive support or only providing support for graduates for 7 years after they leave university.

Instead, universities should provide space for private local start-ups drawn from outside of their graduate population. This would aid collaboration and create a more diverse environment for student and graduates creating businesses, as well as creating an immediate peer network, albeit we recognise there will inevitably be constraints of space and resource dependent on the scale of the host university.

Case study: London South Bank University

London South Bank University is an excellent example of the mutual benefit of opening facilities to local business. The Research, Enterprise and Innovation team brings together students with new business ideas, graduate entrepreneurs who are launching or have launched businesses, and established businesses not originally connected with the university to use their facilities. In supporting enterprise and entrepreneurship initiatives for staff, students and alumni, the established businesses (as part of their lease agreement) offer advice, skills and services to up-and-coming entrepreneurs both within and outside of the curriculum. The presence of already successful entrepreneurs working in the incubation space creates a professional environment and can inspire staff and students.

Case Study: Accelerator Space for Innovation and Responsible Enterprise (ASPIRE) and Business Start-Up Journey

The Kent Business School at the University of Kent supports students exploring entrepreneurial learning and starting their own business through the ASPIRE and Business Start-Up Journey. The space and programme has been enabled through philanthropic donation, as well as in-kind input from businesses and mentors. Google, Santander and the Kent Investors Network have all supported ASPIRE in the past year. The ASPIRE lab space and executive teaching suite are located in the state-of-the-art Sibson building and has a team of dedicated staff, including two Entrepreneurs in Residence. ASPIRE also supports academic research into innovation and responsible enterprise which will inform and enrich the start-up work as it develops.

⁴¹ Research interview

⁴² The enterprise collaboration between the universities of Bath, Bristol, Exeter, Southampton and Surrey

⁴³ Research interview

⁴⁴ Research interview

Case study: The 3M Buckley Innovation Centre, University of Huddersfield

A further example of creating a diverse environment for start-up incubation, and important access to a pipeline of support beyond the start-up phase, can be found at the University of Huddersfield in its 3M Buckley Innovation Centre.

Named after businessman Sir George Buckley, an alumnus of the University of Huddersfield and former CEO of the multi-national 3M corporation, the purpose-built 3M Buckley Innovation Centre (3M BIC) in Huddersfield, facilitates business growth, encourages business to academia collaboration and actively promotes innovation. Catering for all business needs, from start-ups, SMEs to large corporates, the 3M BIC facilitates access to traditional and alternative funding support, national and international markets, skills partners, and access to technology, through a range of commercial, technical and support services.

- Facilities include hot desks and individual office spaces to rent in a variety of sizes, flexible workshops and state-of-the-art laboratories, as well as meeting and conference spaces kitted out with the latest audio-visual technology. Non-tenant businesses can become part of a thriving community and access benefits by joining the 3M BIC Network Membership, which provides opportunities for collaboration, to promote their business and expand their network of contacts.
- Located adjacent to the University of Huddersfield, the facility also acts as a gateway to its research centres, specifically supporting business to academia collaborations, as well as providing access to the latest technology situated on Innovation Avenue. This runs through the heart of the Centre, housing a range of high-tech specialist equipment and resources, which are available to businesses, internally and externally, with designated technical support on hand.

The 3M BIC is also home to The Duke of York Young Entrepreneur Centre (DOYYEC) and the University of Huddersfield's Enterprise Team. Providing pre-start and start-up support to current students and graduates of up to 5 years, the incubation facility provides in-house Business Advisors, and specific programmes of support to encourage and facilitate business start-up. Importantly, being situated within the 3M BIC locates student and graduate start-ups in a business environment, facilitates networking with more established businesses, and ensures a pipeline of support and facilities beyond start-up alone. Plans to add a new Maker Space facility to the DOYYEC in 2018 are now confirmed which will enable the incubator to better accommodate and support the diverse range of start-ups emerging from the different university disciplinary areas.

It should be noted that HEIF is a fund available to English universities only, with devolved funding arrangements in place in Scotland, Wales and Northern Ireland. While this paper concentrates on the English/HEFCE approach, the "huge strides" made by the devolved administrations in supporting entrepreneurship are recognised, including to address gaps in entrepreneurial education, to work with all levels of education and to acknowledge entrepreneurial education as a basic requirement to supplement formal qualifications 46.

⁴⁵ Research interview

⁴⁶ QAA (2018) - Enterprise and Entrepreneurship Education: Guidance for UK Higher Education Providers

1.4 Recommendations

- Every student should have the opportunity to develop enterprise and entrepreneurship skills and learning, both within the university curriculum and outside it. Universities must find ways to identify and nurture entrepreneurs across all disciplines and at all stages.
- Enterprise and entrepreneurship must have a mandate. Through strong corporate leadership within universities, the university offer to student and graduate entrepreneurs must be strategic and coordinated.
- Universities should review their 'cut off points' for enterprise and entrepreneurship support in order to play a more active role in scaling up of businesses not just the pre start-up and start-up phase.
- Incubation units and workspace should be opened up to local entrepreneurs. This will support local SMEs, potentially increase revenue for enterprise units, encourage throughput and provide student entrepreneurs with an immediate and potentially valuable peer network.

Chapter 2: Influence the local economy

The local economy matters to student and graduate start-up businesses. Their early growth may benefit from accessing local public or private funding and their long-term sustainability will be influenced strongly by the prevailing local economic conditions with many locating themselves close to their university town or city.

Local business support has also been changing. Local Enterprise Partnerships, complemented by Mayors and Combined Authorities in some areas, and by stronger strategic county or local council partnerships in others, offer multiple levels of strategic economic leadership. Growth funding has also been localised reflecting a growing emphasis on "place". The competitive Heseltine-inspired Local Growth Fund (LGF) and the European Structural & Investment Funds (ESIF) have both been routed through the LEPs and allocations prioritised according to individual local plans. Universities have already benefited significantly from their collaboration, while broader devolution deals now offer further potential for local growth.

However, the £12 billion Local Growth Fund is now fully allocated and being invested and ESIF funding and wider EU programmes will draw to a close in 2020. London's global city status continues to act as a magnet for private and foreign investment, but regional disparities in accessing enterprise capital persist for much of the rest of the UK meaning a greater reliance on public funding.

This chapter considers these changes and the need for universities – and their enterprise teams – to be actively engaged in shaping new policy and funding sources to create the local conditions for business creation, viability and scale-up.

2.1 Recognising the importance of place in the new local economy

"Any successful industrial strategy has to be local.... Governments are fond of quoting national figures – of economic growth, of productivity, of employment. But the truth is economic growth does not exist in the abstract. It happens in particular places..."⁴⁷

Rt Hon Greg Clark MP, The Importance of Industrial Strategy

The role of "place" in national Industrial Strategy is beyond doubt. The Industrial Strategy Green Paper⁴⁸ included chapters devoted both to 'driving growth across the whole country' and 'creating the right institutions to bring together sectors and places' while further affirmation was provided by Industry Secretary Greg Clark at the Local Government Association who confirmed local leadership

⁴⁷ Speech by Rt Hon Greg Clark, Secretary of State (2016) to the Institute of Directors

⁴⁸ Department for Business, Energy & Industrial Strategy (2017) - Building our industrial strategy

"should have a particular prominence" ⁴⁹. Publication of the Industrial Strategy in November 2017 cements this.

The changing local landscape

At the same time, local economic governance is continuing to develop but is not always easy to access. Six new regional mayors were elected in May 2017, joining the Mayor of London and between them including coverage of some of our major cities. Working with the Mayors, Combined Authorities exist in these and other areas bringing local council leaders together across a region with a focus on transport and growth. Thirty-eight private sector-led Local Enterprise Partnerships cover the country. Strategic City and County councils are becoming more assertive.

Overlay this with Devolution Deals - primarily with Mayors - and access to new funding. Add Growth Deals with LEPs and their role in investing both Local Growth Fund and ERDF. Then include Enterprise Zones with business incentives and local councils' own strong leadership in economic development and regeneration activity (together with the potential for Business Rate retention), and both the complexity and the range of local opportunities becomes very clear.

Encouragingly, engagement by universities within their local economies already appears positive. Asked in the HE Business & Community Interaction Survey 2015/16 to rank their partnerships with local and regional bodies, with 1 being no engagement with community regeneration schemes, apart from individual efforts, and 5 being active and creative engagement with community programmes with the university taking a leadership position and applying a wide variety of resources, universities averaged at 4. However, there was a regional difference in the results. In particular, in our comparison of London and Yorkshire, London averaged at 2.8 and Yorkshire at 4.6 – some 60% difference.

Evidence can be seen in local partnerships already developed. In a collaborative partnership with Durham University and New College Durham, Durham County Council invested £3.4m into a cutting-edge business incubator and office space to support new entrepreneurial businesses who wish to locate in Durham City. The scheme is managed by Business Durham, the authority's business gateway and income is expected to see it becoming self-financing from its fourth year of operation.

A place-based role

For the big London research universities, 'local' may well be 'global' in terms of relationships – with a focus towards international partners. However, there is a danger that other universities, including the post-1992 cohort, may miss the opportunity to shape local economic policy and champion local enterprise and entrepreneurship despite business engagement in many cases being "a founding priority of their institution" 50. In Yorkshire "local" appeared much more "place-based", one interviewee commenting: "Huddersfield as a town has a lot of heritage with many of the sectors that we operate in, manufacturing, engineering, technical engineering" 51.

In considering industrial strategy more widely, stakeholders recognised the university's central role. One saw their institution as a significant regional anchor, with "huge potential as a co-ordinating mechanism deploying scale and social capital" and seeing a regional role in "harnessing universities as gateways and partnership enablers" 52. Another acknowledged the importance of partnership commenting, "We can't do it in isolation – we need help in establishing an

⁴⁹ Reported speech (2017) to Local Government Association Councillors Forum

⁵⁰ Research interview

⁵¹ Research interview

⁵² Stakeholder interview

entrepreneurship ecosystem"53.

While noting the strength of enterprise culture in London, a further interview identified the huge potential outside the capital: "Outside of London, the lack of space constraints has led to a track record of more interesting investments such as 3M (at the University of Huddersfield) and the AMRC (University of Sheffield Advanced Manufacturing Centre) in Sheffield at the old Orgreave Colliery site bringing leading companies together with researchers in one space and letting them go.⁵⁴"

Access to support services and integration

Public sector support and access to business support within the local economy – including that for start-ups and SMEs – has also changed.

With the demise of the Business Link service, Growth Hubs have been established by LEPs to provide on-line access to business support and advice. Locally managed but carrying national business support information, their aim is to provide a shop-window for all support services to ensure businesses are able to access the right support at the right time and in the right way and also to respond at times of economic shock or crisis.

Growth Hubs

Completed in 2016, the Government's Growth Hub network across England aims to make it easier for businesses to access the help and advice they need to thrive and grow. Growth Hubs are public and private sector partnerships led and governed by Local Enterprise Partnerships (LEPs) and working closely with the Department for Business, Energy and Industrial Strategy. The 38 Growth Hubs include local and national sector partners such as Chambers of Commerce, Federation of Small Business, Universities, Enterprise Zones and banks - co-ordinating local business support and connecting businesses to the right help for their needs. Accessed by phone, on-line or face-to-face, they are locally driven, locally owned and at the heart of Government policy to ensure business support is simpler, more joined up and easier to access.

The Government's Industrial Strategy⁵⁵ confirmed further development of Growth Hubs to ensure all businesses have access: "Over the last three years, we have established and tested Growth Hubs in every Local Enterprise Partnership area in England. We will build on this programme, providing continued funding to enable Growth Hubs to bring public and private sector partners together, such as UK Research and Innovation, the British Business Bank, Tech Nation, investors and universities. We want Growth Hubs to carry on building their reach, developing peer-to-peer networks, connecting businesses to the best support available from the private and public sectors. We will also work with Local Enterprise Partnerships, Growth Hubs, universities and the private sector to support high potential businesses to scale up."

A specific example of joint working would be Gloucestershire LEP and Growth Hub (delivered in-house) who are already co-located at Gloucester University Campus and who will be taking over two floors in Gloucester's new Business School when it is opens later this year.

Awareness of Growth Hubs amongst student and graduate start-ups in our interviews was limited and, by European standards, the service itself is still developing. However, the need for information and support as student and

⁵³ Stakeholder interview

⁵⁴ Stakeholder interview

graduate businesses grew was identified and access remains important.

From interviews, a strong case was made to align university enterprise and education services with Growth Hubs to ensure seamless access to advice at all stages of business development whether support is provided in the university or outside. In accessing university resources externally, the need for a single point of contact or an account manager within the university was also strongly encouraged⁵⁵.

Devolution, enterprise and industrial strategy

The replacement of LGF and European funding streams – and the importance of this public funding outside of London in terms of support for enterprise and entrepreneurship activity – provides an incentive to engage with Government and local institutions in shaping proposals for how successor funding may work. The potential for longer-term influence and support of enterprise through early and successful engagement is perhaps equally important.

Devolution Framework: A new "common framework" for devolution was promised in the 2017 Conservative General Election manifesto and reflects calls from local authorities and agencies for clarity and consolidation of the devolution process, particularly with the Mayors not now required in rural areas. Within this, the universities' position as anchors in their local economies should be recognised and could offer new opportunities for local flexibility in support for enterprise.

Good practice: Establishing a local business investment fund

Financed by the Government's Regional Growth Fund, Kent County Council's business investment programme has committed £56m primarily through interest free loans to more than 240 new and expanding companies in the county struggling to access cash after the financial crisis. Investment returned from these revolving funds is now being reinvested in start-up and growth business across the county. University links are particularly around life sciences and include a knowledge transfer hub and internships.

Review of LEPs: While universities already have a seat or representation on LEP Boards as a result of the Witty Review⁵⁶, it was clear from interviews that dialogue did not always extend beyond the boardroom table to those universities without a seat. Within the current review of LEPs, a clear link to university enterprise and entrepreneurship in all universities should be established. This should reflect Communities Secretary Sajid Javid's challenge to LEPs that, "there are opportunities for you to create a better environment for entrepreneurs" ⁵⁷.

Local Industrial Strategy: In drawing together all local growth agencies, the development of Local Industrial Strategies, provides a major opportunity. In prioritising enterprise and entrepreneurship and creating the environment for new business growth the potential for co-ordination of strategic and local councils, LEPs and other agencies will be significant. This may include jointly promoting an area for inward investment, a programme of business incentives and opportunities to encourage businesses to locate or grow, or the provision of wider business support services and skills delivery. For areas outside of London where access to private capital for start-up or scale up enterprise is limited, the potential to establish a pooled venture capital fund should also be considered.

⁵⁵ Stakeholder interview

⁵⁶ HMG (2013) - Encouraging a British Invention Revolution: Sir Andrew Witty's Review of Universities and Growth

⁵⁷ Rt Hon Sajid Javid MP, Secretary of State (2017) - Speech to LEP Network Conference

Place, universities and industrial strategy

In his introduction to the Industrial Strategy Green Paper⁵⁹, the Secretary of State noted that "Britain is one of the most centralized countries in the world, but this has not led to places being uniformly prosperous. For all the global excellence of the UK's best companies, industries and places we have too many who lie far behind the leaders". Four pillars of the Industrial Strategy are of immediate relevance to this report:

- Investing in Science, research and innovation
- Supporting businesses to start and grow
- Driving growth across the whole country
- Creating the right institutions to bring together sectors and places

The Industrial Strategy White Paper has now confirmed the development, content and aims of Local Industrial Strategies:

"Local Industrial Strategies will be long-term, based on clear evidence, and aligned to the national Industrial Strategy. They will identify local strengths and challenges, future opportunities and the action needed to boost productivity, earning power and competitiveness. This might include addressing skills issues, improving infrastructure, harnessing the potential of world-class science and innovation, supporting new high-value businesses, or identifying leading sectors to inform the development of deals. These strategies will establish new ways of working between national and local leaders in both the public and private sectors. Universities, colleges and other local institutions will be key, as will an approach that is responsive to both local and global market conditions to provide greater long-term certainty. We will agree the first Local Industrial Strategies by March 2019."

2.2 Broadening access to capital

The Local Growth Fund is ending

The Government's £12 billion Local Growth Fund presented a new opportunity for private and public sector to work together to create local jobs and growth. Building on the Government's Local Growth White Paper⁵⁹, Lord Heseltine's *No stone unturned* review⁶⁰ published two years later laid the foundations for local Growth Deals and access to a new, single pot Local Growth Fund, a process in which universities were to be important players.

The distribution of the Local Growth Fund has reflected the Government's aim of investing across the country:

- Funding to Yorkshire (including East Riding but excluding Humber) through its LEPs is in excess of £1.2 billion against London's allocation of £435m⁶¹;
- Per capita, the distribution is further pronounced with London at around half that of Leeds and Sheffield City Regions⁶²;
- The largest Growth Deal awarded to a single LEP is that of £694.9 million

⁵⁸ BEIS (2017) - Building our Industrial Strategy

⁵⁹ Department for Business, Innovation & Skills (2010) - Local Growth: Realising every place's potential

⁶⁰ Department for Business, Innovation & Skills (2012) - No stone unturned: in pursuit of growth

⁶¹ House of Commons Library Briefing Paper (2017) – Local Growth Deals, Growth Deal Awards by LEP (2014-2016)

⁶² NAO (2016) – Local Enterprise Partnerships

awarded to Leeds City Region⁶³; and

 Local allocations have included the £2.9m secured by the University of Huddersfield to exploit 3M BIC activities through the Huddersfield Incubation and Innovation Programme.

With the Round 3 Growth Deal allocations in 2016/17, the Local Growth Fund programme draws to a close but strong university involvement remains vital in securing and shaping any successor funding.

UK Shared Prosperity Fund

The Government's Industrial Strategy confirmed the development of a new regional investment fund: "We will ensure that local areas continue to receive flexible funding for their local needs. Following the UK's departure from the European Union, we will launch the UK Shared Prosperity Fund. We intend to consult next year on the precise design and priorities for the fund."65

External funding for enterprise is overwhelmingly attracted to London

In contrast to public funding for growth through LGF, it is perhaps unsurprising that London as the pre-eminent financial centre attracts the lion's share of external enterprise investment. However, the scale of the disparity is considerable.

Nationally, the "provision of private capital to growing firms has increased strongly since 2011" as evidenced by the Government's Patient Capital Review consultation⁶⁵. The consultation paper also clearly demonstrated that this increased supply of enterprise capital had primarily benefited London. For example:

- London accounted for nearly 50% of total investment (£854m) support in 2014/15 through the Government's EIS tax relief scheme⁶⁶;
- A significantly higher proportion of high-growth firms in London received external equity investment compared to the rest of the country⁶⁷;
- Strong investment in London, the South East, South West and East can be seen in university spin-outs, while those in other parts of the country appear to have found it much more difficult⁶⁸;
- While establishing its most significant market presence outside of London, still
 only around one third of investments by the Business Growth Fund in firms
 requiring between £2m to £10m are outside of London⁶⁹; and
- New types of investment such as crowdfunding seem highly concentrated in London and the South East and are spreading only slowly to other areas ⁷⁰.

Our comparison between universities in London and Yorkshire reinforces this disparity in external investment, with start-ups at London institutions attracting £35.5m in 2015/16 against just £1.3m for start-ups at Yorkshire universities, or a factor of almost 8 times as much on average per institution.

⁶³ House of Commons Library Briefing Paper (2017) – Local Growth Deals, Growth Deal Awards by LEP (2014-2016)

 $^{64\,}$ BEIS (2017): Industrial Strategy: Building a Britain fit for the future

⁶⁵ HM Treasury (August, 2017) - Financing growth in innovative firms: consultation, p17

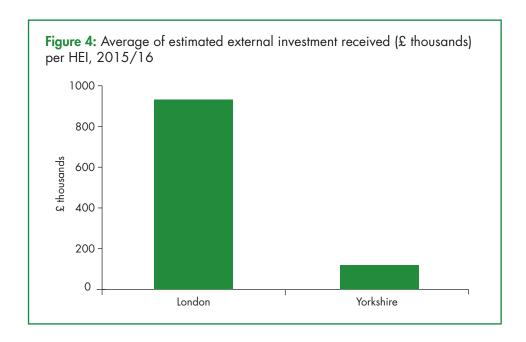
⁶⁶ Ibid

⁶⁷ Ibid

⁶⁸ Ibid

⁶⁹ Ibid

⁷⁰ Department for Business, Energy & Industrial Strategy (2017) - Building our Industrial Strategy



Source: Higher Education Statistics Authority (2017) - Business and Community Interaction Survey 2015/1610⁷²

The much greater reliance outside of the capital on public funds is perhaps most starkly illustrated in the North East where public funding currently participates in 78% of investments below £1 m⁷².

While capital markets may always favour London, in addressing this disparity, both investment supply and project pipeline constraints on demand must be considered in ensuring that local enterprise opportunities developed through our regional universities can be supported.

⁷¹ HE-BCI Total Estimated external investment received by Graduate Start-ups in London and Yorkshire averaged by number of HE institutions

⁷² HM Treasury (August, 2017) - Financing growth in innovative firms: consultation

The Patient Capital Review: Financing growth in innovative firms

Announced by the Prime Minister in 2016, the Government's Patient Capital Review aimed to identify barriers to accessing long-term finance for growing firms. Led by the Treasury, the review considered all aspects of the financial system affecting the provision of such finance and was supported by a panel of industry experts convened by Sir Damon Buffini.

The final stage of the Review, the consultation paper "Financing growth in innovative firms", was published by the Treasury in August 2017. Defining "patient capital" as "long term investment in innovative firms led by ambitious entrepreneurs who want to build large-scale businesses", the consultation considered the appropriate level of supply of capital, its effective deployment to firms of the highest potential and the demand for this capital.

Responding to the Review in the Budget⁷⁴, the Chancellor launched a number of measures:

"Today we're publishing our 'Action Plan', to unlock over £20 billion of new investment in UK scale-up businesses. Including through a new fund in the British Business Bank, seeded with £2.5 billion of public money. By facilitating pension fund access to long term investments. And by doubling EIS investment limits for knowledge intensive companies, while ensuring that EIS is not used as a shelter for low-risk capital preservation schemes. And we stand ready to step in to replace European Investment Fund lending if needed." These measures have subsequently been captured in the Government's Industrial Strategy⁷⁵.

Drawing on our research, we believe major considerations flowing from the Government's Patient-Capital review to increase the impact of enterprise and entrepreneurship education, should include:

- **Support of university spin-outs** <u>and</u> **start-ups:** Greater consideration should be given to graduate start up needs.
- Retention of tax reliefs: It is vital that tax incentives including the Government's Enterprise Investment Scheme (EIS) and Seed Enterprise Investment Scheme (SEIS) are retained and reformed to support and stimulate regional demand. The British Business Bank should continue to monitor and seek to balance local disparities, working with universities on both investment supply and programme demand issues.
- Support of business sustainability: Existing limits to both SEIS and EIS investment should be reviewed to ensure access to follow-on finance to support continued ownership (rather than sale) and sustainability. The transition from SEIS to EIS funding for a growing business could, it was felt by some stakeholders, to be complex and could deter investment. We welcome the increase to EIS investment limits in the Budget.
- Replacement of LGF/EU funding: The ending of Local Growth Fund (LGF) and EU growth funding through the ERDF programme leaves a major gap in public funding streams for growth. New financial support and incentives should be developed to replace the funding for university enterprise and entrepreneurship currently available.

⁷³ HM Treasury (2017): Chancellor's Budget speech

⁷⁴ BEIS (2017): Industrial Strategy: Building a Britain fit for the future

- Government venture capital: When current European Investment Fund (EIF) investment programmes end, domestic investment capacity should be increased to replace it through both the British Business Bank and private investment managers and through the potential to support existing local investment funds some of which will have been established with ERDF, LGF or Regional Growth funding and pioneered by local councils.
- **Linking finance to support:** Existing conditions around funding to access support (eg mentoring) should be reviewed to encourage access to high quality, wrap-around assistance for growing enterprises. In signalling such support for risk management, this may encourage new geographical or latter stage investment. As ScaleUp Institute Chief Executive Irene Graham commented in their SME Finance Monitor (2017), "Scale-ups are not just looking for cash they want smart money which brings knowledge and support with it" This was endorsed in further stakeholder interviews.
- **University and alumni funds:** The operation of tax reliefs and incentives both for university and alumni funds to invest in spin-outs or start-ups (through a university or regional fund in partnership with a fund manager) should be reviewed and opportunities extensively promoted. University and alumni funds should play an increasing role in the diversification of local capital markets.
- **Institutional investment:** The potential of institutional investment and how projects need to be packaged and presented to attract and release it should be further explored. Again, we welcome moves in Budget 2017 to encourage this.

Linking enterprise with capital

Demand issues were also raised in stakeholder interviews with a concern there was a "huge amount of capital, but it can't find the ideas to invest in". In particular, through local industrial strategy, there was seen to be a major opportunity to bring "good ideas together with London investment".

The need to package ideas and bring them to investors, as Manchester had successfully done in the past⁷⁶, was recognised.

⁷⁵ SME Finance Monitor (2017)

⁷⁶ Stakeholder interview.

Good Practice: Navigating around London's entrepreneurship ecosystem

In London, Capital Enterprise's prime mission is to support its members individually and collectively to support London's entrepreneurs and to make London the best place in Europe to start and scale a business. Members include incubators, accelerators, co working spaces, universities, colleges, local authorities and enterprise agencies.

Capital Enterprise has a close working relationship with London's most innovative and entrepreneurial universities, It brokers relationships between spin outs, entrepreneurs and the investment community thereby supporting students, staff and alumni from its university members to grow sustainable, scalable companies.

Capital Enterprise also manages IDEALondon, a post-accelerator base, on behalf of its partners UCL CISCO, and EDF. IDEALondon is home to a wide range of IoT start-ups, many of which originate from London's leading universities: What does all mean?

- Marcell Tessenyi of Blue Skies Space Ltd, is enabling cost-effective, quickly-delivered space-based scientific instruments for users worldwide, is one of these start ups. Having engaged directly with UCL by providing market surveys for an academic course, Blue Skies Space experienced a "pivotal moment" when they met John Spindler, CEO of Capital Enterprise, through a course at IDEALondon. "The combination of internal resources from UCL and access and exposure to external providers that help startups through IDEALondon and Capital Enterprise greatly helped us". Marcell says that they plan to keep their academic footprint, as without these strong links to the university they wouldn't be able to operate.
- Harry Keen of Anon AI, which use AI for data privacy and anonymisation, explains how direct links to UCL through the UCL Tech Fund sparked a relationship with the London Co-Investment Fund, co-founded by Capital Enterprise and Funding London, and essentially "unlocked £200k of funding". Anon AI has greatly benefited from the links between UCL and enterprise service providers, and is clear that "having the academic pedigree of being called a UCL spin out" is useful for future investment.

In Yorkshire, steps have been taken to address the preparation of some startups to an 'investment readiness' stage. Acknowledging that each individual Yorkshire university had few businesses in need of such support, the University of Huddersfield partnered with the Institute of Chartered Accountants in England and Wales (ICAEW) to deliver an Investment Readiness Programme, now in its fourth year, accessible by all Yorkshire regional HEIs.

Good practice: Investment Readiness Coaching Programme

The Investment Readiness Coaching Programme (IRCF) is a free programme for students & graduates envisaging the need for capital investment.

How it started: The West Yorkshire Society of Chartered Accountants approached the University of Huddersfield to support student and graduate business start-up. Preparing for investment was an issue not covered under current provision. As an issue which affected few, an event was only likely to be viable when combined with other regional universities.

Objective: To narrow the gap in knowledge and experience between students/graduates and those investors and advisors with whom they engage.

Eligibility: Student or graduate; Seeking external investment; Commit to all 3 stages

Process: Apply to university; University nominates prospects; Nominees invited onto programme

Timetable:

- **Stage 1 late March:** A one-day workshop to include sessions on finances, business plan, intellectual property, plus a panel session from thriving entrepreneurs and investors
- Stage 2 March to May: Each student/graduate will be partnered with a local Chartered Accountant to help them develop their business plan, create financial forecasts and hone their pitch
- **Stage 3 mid June:** Five businesses pitch to a panel of investors; remainder join a development workshop followed by experiencing the final pitches. ICAEW awards two £1,000 prizes.

Seed funding from universities is not universal, alumni funds are in their infancy

As indicated above, bespoke access to early stage funding by student and graduate start-ups through their universities may offer further investment opportunities linked to Government tax incentives⁷⁷. Investment by universities in graduate enterprise is varied across the country, with some major research universities offering seed funding. For example, through Cambridge Enterprise⁷⁸ (and follow-on funding through Cambridge Innovations) and the Oxford Seed Fund respectively – or offering supported access as with Imperial College's Imperial Innovations or UCL's Techology Fund managed by Albion Capital.

Oxford, Cambridge and Bristol have also launched successful EIS enterprise and innovation venture capital funds in partnership with a leading fund management company to support early stage investment. Others though, appear to remain some way behind.

⁷⁷ Important to note that these funds will be available to graduates and post-graduates with implications for the ownership of intellectual property – and potentially university interest – in the business.

⁷⁸ Cambridge Enterprise offers investment of up to £500,000 to start-up companies based directly on university research or people.

Good practice: Collaborative investment - Parkwalk

In conjunction with the Universities of Cambridge, Oxford and Bristol, Parkwalk Advisers manage a series of early-stage Enterprise Investment Scheme (EIS) funds. These allow investors access to some of the world's highest calibre discoveries and Intellectual Property while giving alumni and supporters of the universities unique access to a flow of deals, essential for tax-effective investment.

Interviews indicated a number of factors that currently inhibit the development of bespoke university funds:

- The need for a constant deal flow at least 5 investments per year (minimum to diversify investor risk)
- The development of a successful track record to provide investor confidence
- The need for any local rivalries between institutions to be overcome to bring scale and make joint regional funds possible (see above); and
- The current infancy of alumni support in the UK.

Alumni funding has been long identified as a source of revenue and capital for universities, but alumni investment in university start-ups in the UK remains in its infancy. University alumni networks are currently less mature here than in the US where this form of funding is much more viable. Interviews indicated that while interest may be high initially, alumni investor commitment still tends to be very low by the time a fund is launched.

University and alumni funds should play a major role in the diversification of local capital markets with opportunities promoted and incentivised.

2.3 Replacing EU Growth funds and supporting regional enterprise

EU funding support for universities is much wider than the European Structural and Investment Funds (ESIF) growth programme. In addition to the European Investment Fund (EIF), funding opportunities for universities include both the substantial Horizon 2020 research and innovation programme and Erasmus+for education, training, youth and sport. Nationally, this funding is also considerable, with universities having received 71% of the €6.9 billion funding coming to the UK through the previous Framework 7 (predecessor to Horizon 2020) programme.

UK government assurances around existing European funding and indications in the Patient Capital Review consultation relating to EIF funding are positive. An opportunity to shape any programme supporting enterprise and growth more directly therefore now exists.

ERDF and its impact

For enterprise and entrepreneurship, perhaps of most importance to Universities currently is the European Regional Development Fund (ERDF), part of the wider ESIF growth programme which also includes the European Social fund (ESF). The University Alliance stress the positive impact of ESIF in regions that receive less innovation funding from other sources, helping to build their capacity⁷⁹.

With the establishment of LEPs, the Government's strategic approach to allocating European Structural Funds changed to increase the local focus with notional allocations of "ESIF funding...allocated to LEPs for a full 7 year period

through a new decentralised EU Growth Programme"80.

Through both ERDF and ESF, the University Alliance estimate that around £100 million is distributed to the higher education sector in the UK through EU Structural Funds (ERDF and ESF) for projects that benefit local areas and innovation. In their recent Select Committee evidence, Universities UK emphasized the importance of the Structural Funds in helping universities to support local growth and jobs by "turning ideas and research discoveries into new companies" and "by fostering entrepreneurship and employability". The University Alliance goes on to describe EU structural funding as "critical to disadvantaged areas in the UK"81.

Good practice: Planning ahead - Worcestershire LEP

Through its ERDF proof of concept fund and close working with the Scale-Up Institute and the Goldman Sachs 10,000 Small Businesses programme, Worcestershire LEP has a strong track record of support for start-ups and business growth. Recognising its current reliance on EU funding it is already planning ahead, working with Qinetic, the University of Worcester, Molehill Science Park and others through the Worcestershire Innovation Network to offer full-cost recovery business support programmes. The LEP has also appointed a Director of Enterprise to support the creation of an entrepreneurial culture and ecosystem.

As with LGF, a comparison of ERDF funding for universities in Yorkshire and London illustrates more resource reaches Yorkshire institutions than those in the capital. This again indicates a greater reliance on public funding for start-ups from those universities. The ERDF grants London £1.6 million and Yorkshire £2.9 million. Averaged out each London university receives £41.7k and each Yorkshire £262.8k.

Region	Number of HEIs	Income from regeneration and development programmes by HE provider ERDF (2015/2016)	Average
London	38	£1.585m	£41,700
Yorkshire	11	£2.891m	£262,800

Source: Higher Education Statistics Authority (2017) - Business & Community Interaction Survey

With ERDF, it is also important to consider the effect of greater local decision-making and prioritisation of the London Enterprise Panel (the London LEP). For universities in London, this meant less ERDF funding being made available, with only 25% of London's ESIF funding allocation being for ERDF projects in the current programme, the 75% share was allocated through ESF programmes. The London decision – made according to local priorities - illustrates the need for close engagement by universities with local economic partners⁸².

An opportunity to refine regional funding?

However, while EU funding streams will be missed when they end with Brexit, the administrative burdens around applying and reporting for European funded projects will not. Changes around the current ESIF programme indicated above in

⁸⁰ Parliamentary Written statement (2013): European Regional Development Fund and European Social Fund: allocations 2014 to 2020.

⁸¹ Education Select Committee (2017) - Exiting the EU: challenges and opportunities for higher education

⁸² London Enterprise Panel (2015)- ERDF and ESF 2014-2020 Questions and Answers

terms of local decision-making may have improved the situation, but by no means resolved it.

The increased university interest in ERDF stimulated by the Witty Report has continued to be positive and has hard-wired university involvement. However, the protracted nature of the applications is still a deterrent to anyone not conversant with the process. In turn, this can create a lack of schemes or delay grant giving, a consequence of which is spend can often be back-loaded towards the end of programme spending profiles. Additionally, EU reporting and audit can be lengthy and complex, continuing long beyond project completion with the risk of potential clawback.

In building any effective replacement growth programme that supports local enterprise and entrepreneurship, it is also important to note the positive learning from European funding. This includes:

- 7 year timescales for programmes cut across election cycles and encourage longer term planning (with mid-term assessment to check programme spend, changed social/economic conditions, etc);
- "Horizontal" measures, in the EU case around sustainability and equality, are applicable to all programmes (with the underlying assumption these will be addressed);
- The development of local programmes within an overarching programme framework against which projects are selected minimise the potential for short-term or pet project support; and
- Collaboration between universities (domestically and cross-border) can be both innovative and productive.

In designing new funding streams to replace ERDF and other EU funding, it is vital both to reduce the administrative overload and to capture the positive learning and experience gained from EU growth programmes operated over a number of years.

Case study: The Graduate Entrepreneurship Project (Winner of the National Enterprise Educator Enterprise Champion Award 2011)

The ERDF-funded Graduate Entrepreneurship Project (completed in 2013) was co-ordinated by the University of Huddersfield on behalf of the 11 higher education institutes in the region - Leeds College of Music, Leeds Metropolitan University, Leeds Trinity University College, Sheffield Hallam University, University of Bradford, University of Huddersfield, University of Hull, University of Leeds, University of Sheffield, University of York, York St John University. It was a genuine collaboration between all the partners and helped to create 274 new jobs. The scheme operated in each partner university and offered specialised packages of support tailored to their student populations. It was able to support both existing students and those who graduated from the regions' institutions up to five years previously (since the end of the project some HEIs have extended this). Specific business start up advice was the most popular service that was offered by the project. However businesses could also benefit from proof-of-concept funding of up to £500 and start-up grants worth as much as £2,500. In addition, the project hosted region wide events, such as four-day residential entrepreneur boot camps and annual awards, recognising the region's most promising business start ups.

2.4 Recommendations

Recognising the importance of local economies to university education and entrepreneurship, we recommend:

- Universities' position as anchors in their local economies should be explicitly recognised in the Government's Common Framework for devolution and a clear link made to university enterprise and entrepreneurship in the Government's Review of LEPs⁸³. It should be promoted in local economic strategies.
- Universities should provide a "swing door into the local economy" with clear account management of services across the university and alignment with external enterprise and entrepreneurship support through their local Growth Hubs.
- Government should create conditions that diversify the current capital
 model to increase independent investment outside of London, retaining
 existing tax reliefs but incentivising regional and scale-up investment
 and promoting alumni funding. Vice Chancellors should work with
 their LEPs, City and County Councils and Mayors to package regional
 opportunities to pitch to investors.
- New financial support and incentives should be developed to replace funding for enterprise and entrepreneurship currently available through Local Growth Fund and European funding streams.

⁸³ BEIS (November, 2017) - Industrial Strategy, Building a Britain fit for the future (p223) – "We are reviewing the roles and responsibilities of Local Enterprise Partnerships and will bring forward reforms to leadership, governance, accountability, financial reporting and geographical boundaries. We will work with Local Enterprise Partnerships to set out a more clearly defined set of activities and objectives in early 2018."

Chapter 3: Measure and reward impact

With London universities delivering 1,105 graduate start-ups across its 38 institutions – one in a hundred of the business created in the capital in 2016 - and Yorkshire 190 from its 11⁸⁴, our comparative study would indicate that universities do indeed have an impact locally – the question is what kind of impact?

Current measurement of university enterprise and entrepreneurship rests largely on simple output measures which fail to give a picture of any wider regional impact. Not only does this hide the success of university programmes (to internal and external audiences), our research interviews suggest an increasing frustration within the sector that little effort is made centrally to capture this data and no real acknowledgement is made of the relative impact of enterprise and entrepreneurship programmes in Government funding allocations through the Higher Education Funding Council for England (HEFCE).

The announcement by the Universities Minister in October 2017⁸⁵ to develop a "new Knowledge Exchange Framework (KEF) that brings together a comprehensive range of measures of impact from collaboration and knowledge exchange" is welcome and a central recommendation of this report. However, concerns are already emerging from the Enterprise Educator community, to draw attention to the vital need to ensure that any new metrics are fit for purpose and encompass all areas.

To reward and build on success – and to ensure the best use of public funding – better measurement is required to provide a clearer picture of a university's contribution to local growth and its wider economic impact.

3.1 Acknowledging the significance of headline figures

Impact is demonstrated through the sheer number of graduate start-ups referenced earlier:

- One in every hundred new business births in the UK occurs in a university⁸⁶;
- In 2015/16, universities contributed to the creation of 4,224 businesses⁸⁷;
 and
- These businesses employ 44,335 people and produce a £2.5 billion

⁸⁴ Higher Education Statistics Authority (2017) - Business and Community Interaction Survey 2015/16

⁸⁵ BEIS (2017) – Speech to HEFCE Conference, "How universities can drive prosperity through deeper engagement"

⁸⁶ Comparison of ONS national start-up rates (total: 414,000 in 2016) with Higher Education Statistics Agency (HESA) data (total: 4,224 in 2015/16) i) ONS Statistical bulletin: Business demography, UK: 2016 - The number of UK business births between 2015 and 2016 was 414,000, an increase from 383,000 in 2015 and ii) Higher Education Statistics Authority (2017) - Business and Community Interaction Survey 2015/16 Table 4(b) - Intellectual Property (IP) - Spin off activities by HE provider (HEP) 2015/16 - Total is number of: Spin-offs with some HEP ownership (150); Formal spin-offs, not HEP owned (18); Staff start-ups (60); Graduate start-ups (3,890); and Social enterprises (106).

turnover88.

A snapshot analysis of graduate start-up activity in London and Yorkshire indicates their impact on the local economy.

Snapshot analysis: London and Yorkshire

At the heart of this report is the contrast between London and Yorkshire for graduate and student entrepreneurs. Headline comparisons are illustrated below indicating higher start-up rates in London per institution and greater external investment, with greater sustainablility and access to public funding in Yorkshire.

Comparison	London	Yorkshire
Context		
Number of Business Births (2016)%	102,140	27,220
Number of Graduate Start-ups 91	1,105	190
Number of Higher Education Institutions (HEIs) 92	38	11
Percentage Contribution to Regional Business Births from the HEIs ⁹³	1.08%	0.7%
Graduate Start-up rates (average per institution)		
Graduate Start-ups per Institution (2015/2016) 94	29.1	17.3
Graduate Start-ups still which have survived at least 3 years (2015-2016) 95	22.9	32.5
All current Graduate Start-ups still active (2015/2016) %	55.4	59.2
Finance (average per institution)		
Estimated current turnover of all active Graduate Start-ups (£ thousands) (2015-2016) 97	2,241.5	1,927.9
Estimated external investment received by Graduate Start-ups (£ thousands) (2015-2016) 98	932.3	119.1
Income from regeneration and development programmes 2015/16 (£ thousands) ERDF (2015/2016) 99	41.7	262.8
Strategic engagement (self assessment)		
Strength of partnership arrangements with local/regional bodies (max 5) 100	2.8	4.6

With more than treble the number of Higher Education Institutions and a regional business birth-rate some 4 times that of Yorkshire, it is perhaps unsurprising that both the average number of graduate start-ups per

⁸⁸ Ibid

⁸⁹ ONS (2017) Dataset: Business demography

⁹⁰ Higher Education Statistics Authority (2017) - Business and Community Interaction Survey 2015/16 (HE-BCI)

⁹¹ Ibid

⁹² ONS Business Demography Data, UK: 2015 total business births in area divided by number of HEIs

⁹³ HE-BCI Graduate Start-ups in area divided by number of HEIs

⁹⁴ HE-BCI Graduate Start-ups in area still active which have survived at least 3 years divided by number of HEIs

⁹⁵ HE-BCI Graduate Startups in area which are active firms (ie number of startups, plus those which have survived at least 3 years, plus those active between 1 and 2 years) divided by number of HEIs

⁹⁶ HE-BCI estimated current turnover of all active Graduate Start-ups in area divided by number of HEIs

⁹⁷ HE-BCI estimated external investment by HEIs in area divided by number of HEIs

⁹⁸ HE-BCI Income (£ thousands) from regeneration and development programmes by HE provider 2015/16 in area from ERDF divided by number of HEIs

⁹⁹ HE-BCI Self identified strength of partnership arrangements with local/regional bodies where 1 is no engagement with community regeneration schemes, apart from individual effort and 5 is Active and creative engagement with community programmes, with the HEI taking a leadership position and applying variety of resources.

institution and their turnover in London is significantly higher. However, further analysis shows that on average more Yorkshire graduate startups per institution are active and almost a third more in the county per institution have survived for more than 3 years.

Start-ups from London institutions enjoy vastly greater access to external investment with on average almost 8 times as much per institution to that of Yorkshire, in large part reflecting London's position as a global financial centre. In contrast, public funding by institution through ERDF (the current European funding to support economic and social cohesion) is significantly higher in Yorkshire.

Engagement with local and regional bodies is also much deeper, with Yorkshire universities estimating the strength of their partnership arrangements some 60% above that of London institutions in terms of leadership in community programmes.

The "third mission"

The Witty Review¹⁰⁰ raised the profile of enterprise and entrepreneurship, but there has been little development subsequently of the process to assess it. The development of the new Knowledge Exchange Framework begins to address this.

By recognising universities potential to enhance economic growth and making it a third mission alongside teaching and research, Witty elevated its status significantly. In recommending an increase to Higher Education Innovation Funding (HEIF) for knowledge exchange to support this – still small in comparison to teaching and research funding, but a significant source of finance for enterprise and entrepreneurship – he also called for the methodology for assessing engagement with SMEs to be sharpened and the impact weighting in the parallel Research Excellence Framework (REF) to be increased (now 25% for REF2021). The more recent Dowling Review¹⁰¹ reinforced this commitment to university-business collaboration and commercialisation.

With Ministerial recognition of the importance of knowledge exchange and the case for measuring impact, there is now a real opportunity to identify what is working in university enterprise and entrepreneurship and to reward those delivering for their local, regional and national economies.

"Given the importance of knowledge exchange to the national mission of universities, I believe there is a strong case for doing more to measure how good a job universities are doing and to link funding more directly to such an assessment."

Minister of State for Universities, Science, Research and Innovation, Speech to HEFCE (2017)

Existing measures are limited

However, existing measures cannot provide a full picture of a university's impact. HEIF activity is measured through the annual Higher Education Business and Commmunity Interaction Survey (HEBCI) by the Higher Education Statistical Agency (HESA). This is broken down into:

- Research related activities
- Business and community services

¹⁰⁰ HMG (2013) – Encouraging a British Invention Revolution: Sir Andrew Witty's Review of Universities and Growth

¹⁰¹ Dowling Review of Business-University Collaborations (2015)

- Regeneration and development programmes
- Intellectual property; and
- Social, community and cultural engagement.

But data collected under these headings is primarily engagement numbers and income. Equally, under spin-out activity, graduate start-ups and social enterprises are included, but the data required (while valuable) is basic: numbers, survival, turnover, employees and leverage. In addition, concerns were raised in the course of the research about the self-reported nature of this data and its consistency.

"I am keen to explore what more we can do to evaluate the extent of knowledge exchange, engagement, collaboration and commercialisation the impact that universities are having on the economy – and to recognise which of our universities are leading the way."

Jo Johnson MP, Minister of State for Universities, Science, Research and Innovation, Speech to HEFCE (2017)

The University Alliance further points out that current external income measures are a poor proxy for economic and social impact and that emphasis to date has been afforded to impact derived from research, rather than enterprise/business engagement. It sees the KEF as an opportunity to recognise and reward a broader range of activities.

National data: consistency and quality

Performance and impact measurement will only ever be as good as the quality of data being compared. The Higher Education Business and Community Interaction Survey is undoubtedly the best indication of university enterprise activity currently available but, as a self-completed questionnaire, data input is always liable to interpretation. If this HESA data is to be the basis of any definitive comparison, the data input first needs to be consistent.

The immense amount of data-collection many universities put in to completion of the HEBCI already is recognised, together with the disparity of reward due to the weighting of some sections. Referring to the collection of data on spin-off activity (table 4 of HEBCI). One practictioner commented: "The guidance is quite specific about what is reported. The resources needed to gather this information, for a smaller university is onerous in relation to the value this information brings to the university, in terms of how that data is use in the allocation formula."

However, confidence in the output must also be built. Few interviewees when questioned about impact referred initially to the survey. Concern about the robustness of the figures was reflected too – in some cases universities expected to achieve a high number of graduate start-ups appeared to have few, while the basis of the figures for high achievers was gently probed.

In some cases, reduced figures can easily be explained. The University of Huddersfield only reports start-ups when the Enterprise Team intervention precedes the start-up registration and the client can clearly attribute Enterprise Team support to the progress of their idea to business. Others may have similar restrictions on their output figures. In addition if an undergraduate start-up did not receive 'formal business/enterprise' help, but created a start-up via, say, a study module, a strict interpretation of the guidelines would be mean that this activity could not be included or may not even be known about by those completing the HEBCI return. Others may simply pay less attention to this section because of its lesser impact on funding.

A well-respected national stakeholder suggested: "Much more is happening in this space, but it is simply unrecorded. Staff don't get recognition for it so why tell the story... and against what metrics or support? Rewarding impact for both

enterprise and entrepreneurship would fit the bill"102.

In referring to the range of metrics, HEFCE explicitly recognise potential variations albeit within the survey's wider utility: "While the methods for gathering these estimates likely differ between HEIs they nonetheless provide useful information that would otherwise be difficult to obtain" 103.

From outputs to impact

What is missed is a wider understanding of impact. How do start-up rates compare with wider local enterprise activity? Has displacement been considered? Have local economic sectors been extended? Have exports been increased? How do successful start-ups align with local economic strategy? Currently, no attempt is made to capture such information in programme returns.

As one stakeholder commented, at present "there are competing programmes and no real way of finding which is best" and that measuring the impact on the local economy with the potential displacement of local firms is "one step more complicated." ¹⁰⁴

Fundamentally, there is no incentive to measure local impact - and critically - no reward for doing so. There is no clear picture of wider success and generally no requirement to provide one. The result is the investment of public funding cannot be guaranteed to be aligned with either national or local economic priorities. Taken to an extreme, while competitiveness should always be encouraged, public funding could be used to support start-ups in unfair competition to similar local businesses.

While Lord Nicholas Stern was called upon recently to review the Research Excellence Framework¹⁰⁵, our interview evidence indicates there is now significant pressure to review how impact is measured for HEIF funding which the Minister has rightly acted upon. With the further announcement in the Industrial Strategy¹⁰⁶, that HEIF is to increase in value, the case for impact measurement becomes overwhelming.¹⁰⁷

HEIF funding increase: The Industrial Strategy signaled a further increase to HEIF funding: "University patents, licence income and industrial collaboration are increasing, and there is scope – and demand from business – to do more. We have announced an increase of £40m a year to HEIF and will now commit to reaching a total of £250m a year by 2020-21, as recommended in the Witty Review. The increased support will align with the needs of the Industrial Strategy and will result in consequential funding for the devolved administrations. We expect universities to continue to use HEIF to help address the needs of local innovative businesses and contribute to regional development, including collaboration with their Local Enterprise Partnership." 109

¹⁰² Research interview

¹⁰³ HEFCE (October, 2017): Higher Education – Business and Community Interaction Survey 2015-16

¹⁰⁴ Stakeholder interview

¹⁰⁵ Lord Nicholas Stern (2016) – Independent report: Research Excellence Framework (FEF) review: Building on success and learning from experience

¹⁰⁶ BEIS (2017): Industrial Strategy: Building a Britain fit for the future

¹⁰⁷ Ibid

¹⁰⁸ HEFCE (2017) - Knowledge Exchange Framework

3.2 Improving metrics to improve support

The Knowledge Exchange Framework: Call for evidence¹¹⁰ In December 2017, to support the development of a Knowledge Exchange Framework, the Higher Education Funding Council for England (HEFCE) published a call for evidence. The stated aim of the KEF was "to increase efficiency and effectiveness in use of public funding for knowledge exchange (KE), to further a culture of continuous improvement in university KE by providing a package of support to keep English university knowledge exchange operating at world class standard".

Knowledge Exchange Framework principles: Professor Trevor McMillan, the Vice-Chancellor of Keele University, acts as the KE framework champion, overseeing the programme of work from the perspective of university leadership. He chairs a steering group which brings together university leadership, academic experts and higher education (HE) expert practitioners and will advise on the value of the KEF metrics exercise for good practice development within universities. As part of good practice resources, a review was also conducted earlier by Prof McMillan on good practice in technology: the processes of exploiting university intellectual property through spinning out companies or licensing¹¹¹.

KEF Metrics: The KEF metrics exercise aims to provide data, updated regularly, that describes and compares institutional level performance in knowledge exchange. Professor Richard Jones, University of Sheffield, will chair a technical group to advise HEFCE/Research England on the development of the KEF metrics approach. The technical group aims to provide advice to HEFCE/Research England to enable consultation on specific proposals (Summer 2018), with a view to the scheme being finalised in autumn 2018. Professor McMillan's steering group will advise on the value of the KEF metrics exercise for good practice development within universities.

Initial call for evidence:

- 1. What approaches and data need to be used to ensure a fair and meaningful comparison between different universities, taking into account factors that might impact individual institution's knowledge exchange performance (such as research income, size or local economic conditions), whilst allowing identification of relative performance? How should benchmarking be used?
- 2. Other than HE-BCI survey data, what other existing sources of data could be used to inform a framework, and how should it be used?
- 3. What new (or not currently collected) data might be useful to such a framework?
- 4. How should KEF metrics be visualised to ensure they are simple, transparent and useful to a non-specialist audience?
- Any other comments?

A culture of impact measurement within institutions should be promoted. Wider

¹⁰⁹ HEFCE (2017) – Knowledge Exchange Framework

¹¹⁰ HEFCE (2016) - University Knowledge Exchange (KE) Framework: good practice in technology transfer - Report to the UK higher education sector and HEFCE by the McMillan group

impact will only be measured if metrics are included in an institution's own performance indicators. Many of those we interviewed in Enterprise units argued the need to capture and understand such information and were taking steps to address it.

Positively there are already changes being made in how data is recorded in order to provide more insight on the impact of enterprise units. For example, the Destination of Leavers from Higher Education Survey (DLHE) has expanded data gathering on self-employed graduates. One Yorkshire based enterprise manager described the investment in staff training around specific impact measurement tools such as Social Return on Investment and Social Audit and Accounting¹¹¹, which had increased awareness of not only positive impact, but also any unintended outcomes of support interventions.

Equally, while access to the benefits of enterprise and entrepreneurship for all is supported as a point of principle, at a time of potentially scarce resources, those students whose businesses may provide the greatest growth should particularly be identified.

Impact start-ups

A university should have the ability to prioritise the support it gives to student and graduate start-ups. Specifically, businesses considered to have the greatest potential for corporate growth and have greatest effect on the local economy and society we define as "impact start-ups" and should particularly be nurtured.

While assessment will ultimately be subjective, research recently undertaken by the ScaleUp Institute gives an indication as to the key traits of businesses most likely to be destined for high growth. These include planning for significant growth, trading internationally, profitability and awareness of financial initiatives and support¹¹².

Wider assessment

It is however accepted that some local impact may be more difficult to detect or be longer-term in nature. The University of East London with 70% of students from their local area with a considerable BAME population¹¹³, many of whom study part-time or are parents, indicates the development of social capital through engagement in enterprise could have significant value. Indirectly, this may support entrepreneurship and extend reach within close-knit ethnic communities.

Neither should the positive effect reported in interviews on graduate employment prospects be overlooked. The case for enterprise skills within the civil service was persuasively made by a senior politician¹¹⁴.

Equally, impact beyond an immediate local area (or nationally) should be captured where programmes or investment have a geographical wider benefit.

3.3 Moving Towards a New Impact Framework

A new approach to measuring the impact of enterprise and entrepreneurship is required and supported. It is accepted that new metrics may need to be introduced over time, but a shift in reporting can be delivered immediately. To achieve this it must also be rewarded.

The Research Excellence Framework already requires commentary on the application of research. While metrics are not defined by the HEFCE, institutions report through case study, and on indicators they identify as most appropriate for the specific research projects. A similar approach could quickly be taken with HEIF to begin this process.

¹¹¹ Social Audit Network for Social Accounting: http://www.socialauditnetwork.org.uk and Social Value UK for SROI: http://www.socialvalueuk.org/

¹¹² SME Finance Monitor (2017): The Scale Up Perspective

¹¹³ Research interview

¹¹⁴ Stakeholder interview

Factors to consider for commentary around HEIF-funded programmes may include alignment with local growth or industrial strategy, support of local supply chain/sector development, increased exports, cross-sector innovation, access to new international markets, increased regional (not intra-regional) competitiveness. Potential metrics could include the relative start-up rate in the context of start-up performance in the wider local economy or increased exports. By doing so, support for "impact start-ups" could be explicitly recognised.

Nor would such reporting exclude the potential community business impacts indicated in East London or the longer gestation of enterprise skills or their application. All could be included within the commentary.

In an interview some months before the Minister's announcement, one enterprise manager presciently likened such a shift to the development of a new "Knowledge Exchange Framework" pointing out that while the quality of research has the Research Excellence Framework and teaching the new Teaching Excellence Framework, a framework for excellence in Enterprise/Entrepreneurship Education linked to HEIF funding was noticeably absent¹¹⁵. His approach is now policy.

The long view

New longitudinal measures should also be developed to encourage longerterm relationships between universities and their graduate start-up businesses, something which many enterprise managers (and businesses) would welcome. By further eliminating the potential cliff edge of support and funding many developing businesses report, this would contribute to our understanding of sustainability and long term impact of measures.

Without improved impact measurement, any understanding of the enterprise and entrepreneurship support a university provides will lack insight. To make the case for its role in the Industrial Strategy, this is essential. By improved targeting of support and greater awareness of "impact start-ups", effectiveness of programmes for students and graduates can be increased and greater local economic growth achieved.

Nor should a new approach to impact measurement add bureaucracy and deflect from the importance of the business establishment and support – a very practical concern voiced by a key stakeholder¹¹⁶. Drawing from the Minister's speech, Enterprise Educators UK recognises that "assurances have been made that (the new framework) will not place additional administrative burdens on universities...(and) this could serve as a key driver in improving the focus and status of enterprise/entrepreneurship within our universities"¹¹⁷.

¹¹⁵ Stakeholder interview

¹¹⁶ Stakeholder interview

¹¹⁷ EEUK Policy Insight (2017) – Knowledge Exchange Framework (KEF)

KEF Positioning statement: Building the Pipeline – Enterprise Educators UK (EEUK)

The 2017 announcement of the new Knowledge Exchange Framework (KEF) signals an important opportunity for enterprise educators working at English HEIs.

Whilst "enterprise" has become the regular shorthand for the wide range of activities that EEUK members undertake, much of the work of EEUK members creates "knowledge exchange"¹¹⁹ as they work in support of University "third mission" through engagement with businesses, public and third sector services and the community.

EEUK welcomes KEF as an opportunity to give the recognition and credibility needed to support the development of sustainable enterprise and entrepreneurship activities, and build the entrepreneurial pipeline that creates them. It is hoped that the addition of KEF to other key institutional metrics (REF¹²⁰ and TEF¹²¹) will give a strong signal to senior management for the need for consistent support and the longer-term planning horizons that are needed to build an effective entrepreneurial eco-system and culture. KEF clearly signals the opportunity to further develop the activities, such as student/graduate incubation services or staff spin-out support programmes, that require continuous institutional commitment.

However, given that income will become associated with KEF, EEUK calls for the creation of credible and verifiable metrics that recognise entrepreneurship support and outcomes, and that are submitted following clear and robust national guidance. Such clarity will ensure KEF becomes nationally recognised across education and business to provide EEUK members with a new way of further engaging externals and stakeholders in this agenda.

3.4 Recommendations

To capture the success of enterprise and entrepreneurship education and to encourage best practice, we recommend:

- Local economic impact should be assessed and rewarded through the new Knowledge Exchange Framework and in the allocation of HEIF or related Government growth funding. Universities should first be required to provide commentary illustrating programme impact, with specific impact metrics agreed and introduced to an agreed timetable. National data should be robust and consistent.
- Universities should be incentivised to produce "impact start-ups" and
 entrepreneurs, demonstrating they are growing local and national
 economies, with funding increasingly reflecting their success in
 delivering local economic growth. New longitudinal measures should
 be developed to measure longer-term impact and encourage the
 retention of links with student and graduate start-ups to support their
 ongoing development.

¹¹⁸ Knowledge exchange: This refers to HEIs' engagement with businesses, public and third sector services, the community and wider public. It includes the transferring or exchanging of knowledge with the aim of delivering external impact, such as improving products, services and profitability. This is linked with research and teaching, and includes consultancy and advisory work, the creation of intellectual property, the development of academic and student entrepreneurship, and a variety of other activities. (HEFCE Glossary)

¹¹⁹ REF: The REF is the system for assessing the quality of research in UK higher education institutions.

¹²⁰ TEF: The Teaching Excellence and Student Outcomes Framework aims to recognise and reward excellence in teaching, learning and outcomes, and to help inform prospective student choice.

Recommendations: A shared agenda for enterprise and entrepreneurship education

A series of recommendations are helpful but are of limited use alone. To have life they must gain traction with the enterprise and entrepreneurship sector, with local economic stakeholders and, ultimately, with Government.

Universities have a number of distinct membership and representative bodies actively making the case for enterprise education and start-up activity including Enterprise Educators UK (EEUK). The report aims to elevate their case and the profile of university enterprise and entrepreneurship education across the country.

To support universities in fulfilling their role as local economic anchor institutions we make the following recommendations.

Make enterprise and entrepreneurship a strategic priority

- Every student should have the opportunity to develop enterprise and entrepreneurship skills and learning, both within the university curriculum and outside it. Universities must find ways to identify and nurture entrepreneurs across all disciplines and at all stages.
- Enterprise and entrepreneurship must have a mandate. Through strong corporate leadership within universities, the university offer to student and graduate entrepreneurs must be strategic and co-ordinated.
- Universities should review their 'cut off points' for enterprise and entrepreneurship support in order to play a more active role in scaling up of businesses not just the pre start-up and start-up phase.
- Incubation units and workspace should be opened up to local entrepreneurs.
 This will support local SMEs, potentially increase revenue for enterprise units,
 encourage throughput and provide student entrepreneurs with an immediate
 and potentially valuable peer network.

Influence the local economy

- Universities' position as anchors in their local economies should be explicitly recognised in the Government's Common Framework for devolution and a clear link made to university enterprise and entrepreneurship in the Government's Review of LEPs¹²¹. It should be promoted in local economic strategies.
- Universities should provide a "swing door into the local economy" with clear account management of services across the university and alignment with

¹²¹ BEIS (November, 2017) - Industrial Strategy, Building a Britain fit for the future (p223) – "We are reviewing the roles and responsibilities of Local Enterprise Partnerships and will bring forward reforms to leadership, governance, accountability, financial reporting and geographical boundaries. We will work with Local Enterprise Partnerships to set out a more clearly defined set of activities and objectives in early 2018."

- external enterprise and entrepreneurship support through their local Growth Hubs.
- Government should create conditions that diversify the current capital model
 to increase independent investment outside of London, retaining existing
 tax reliefs but incentivising regional and scale-up investment and promoting
 alumni funding. Vice Chancellors should work with their LEPs, City and
 County Councils and Mayors to package regional opportunities to pitch to
 investors.
- New financial support and incentives should be developed to replace funding for enterprise and entrepreneurship currently available through Local Growth Fund and European funding streams.

Measure and reward impact

- Local economic impact should be assessed and rewarded in the allocation
 of HEIF or related Government growth funding. Universities should first be
 required to provide commentary illustrating programme impact, with specific
 impact metrics agreed and introduced to an agreed timetable. National data
 should be robust and consistent.
- Universities should be incentivised to produce "impact start-ups" and
 entrepreneurs, demonstrating they are growing local and national economies,
 with funding increasingly reflecting their success in delivering local economic
 growth. New longitudinal measures should be developed to measure longerterm impact and encourage the retention of links with student and graduate
 start-ups to support their ongoing development.

Appendices

1. Glossary of terms:

- Higher Education Business and Community Interaction Survey (HE-BCI): The HE-BCI is the main vehicle for measuring the volume and direction of interactions between UK HE providers and business and the wider community.
- **Graduate start-ups:** Term includes all new businesses started by recent graduates (within 2 years) regardless of where any Intellectual Property resides, but only where there has been formal business/enterprise support from the HE provider.
- Start-up/spin-off activity: Higher Education Statistics Agency (HESA) spin-off (and start-up) activity is further analysed by: the number of new spin-off companies for the reporting period; the number still active which have survived at least 3 years; the number of active firms (the 'number' and 'number still active which have survived at least 3 years' plus those companies which have been active between 1 and 3 years); estimated current employment of all active firms (FTE); estimated current turnover of all active firms (£000s) and estimated external investment received (from external partners but excluding investment from HEFCE/BIS third stream funds).
- **EIF:** The European Investment Fund which supports Europe's SMEs by improving their access to finance through a wide range of selected financial intermediaries.
- Yorkshire: For ONS data, the geographical region is Yorkshire & the Humber
- **SEIS**: The Seed Enterprise Investment Scheme is a generous derivative of the EIS and was introduced in April 2012. Its aim is to encourage seed investment in early-stage companies. Investors, including directors, can receive initial tax relief of 50 per cent on investments up to £100,000 and capital gains tax (CGT) exemption for any gains on the SEIS shares. The maximum amount to be raised for each company is £150,000.
- **EIS:** The Enterprise Investment Scheme is designed to help smaller, higherrisk companies raise finance by offering start-up tax breaks on new shares in those companies that qualify. For the investor, it's a tax efficient way to invest in small companies. It is aimed at wealthier, sophisticated investors. People can invest up to £1m in any tax year and receive 30 per cent tax relief for a minimum of three years. EIS seeks to encourage investment into unlisted companies. Changes signalled in the 2017 Budget will increase EIS investment limits for knowledge intensive companies.

2. Higher Education Institutions in London and Yorkshire

Higher Education Institutions		
(as defined by Higher Education Statistics Agency)		
London	Yorkshire	
Birkbeck College	Leeds College of Art	
Brunel University London	Leeds Trinity University	
City, University of London	York St John University	
Conservatoire for Dance and Drama	The University of Bradford	
Courtauld Institute of Art	Leeds Beckett University	
Goldsmiths College	Sheffield Hallam University	
Guildhall School of Music and Drama	The University of Sheffield	
Heythrop College	The University of Hull	
Imperial College of Science, Technology and Medicine	The University of York	
King's College London	The University of Huddersfield	
Kingston University	The University of Leeds	
London Business School		
London Metropolitan University		
London School of Economics and Political Science		
London School of Hygiene and Tropical Medicine		
London South Bank University		
Middlesex University		
Queen Mary University of London		
Ravensbourne		
Roehampton University		
Rose Bruford College		
Royal Academy of Music		
Royal College of Art		
Royal College of Music		
St George's, University of London		
St Mary's University, Twickenham		
The Institute of Cancer Research		
The Royal Central School of Speech and Drama		
The Royal Veterinary College		
The School of Oriental and African Studies		
The University of East London		
The University of Greenwich		
The University of West London		
The University of Westminster		
Trinity Laban Conservatoire of Music and Dance		
University College London		
University of London (Institutes and activities)		
University of the Arts, London		



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