

**Yorkshire Universities Technical Assistance Project
Graduate Entrepreneurship Scoping Study (July 2014)
Executive Summary**

The Graduate Entrepreneurship Project:

- i. A collaboration of all Yorkshire and the Humber HEI's, attracting RDA Single Pot and ERDF funding from 2007-2014, the Graduate Entrepreneurship Project has contributed significant numbers of new businesses and jobs to the regional economy (*Paragraphs 55-69*).
- ii. The close collaboration between partner institutions proved critical in promoting a culture of enterprise, and ensuring student and graduate entrepreneurs received the best possible business start-up support (*68*).
- iii. ERDF-funded delivery completed in March 2014 and activity at the levels facilitated by the funds is now at risk. Evidence suggests that graduate start-up across the region fell in the funding gap between in 2010 between RDA Single Pot and ERDF phases of the Project (*66 and Table 3*)
- iv. ***The primary recommendation of this report is to seek ESIF funding to continue the Graduate Entrepreneurship Project in its current form, looking to add in additional funded activity linked to HEI specialisms and expertise.***
- v. Other potential sources of funding have been explored for activity such as higher skills development, social enterprise support, postgraduate research student-specific initiatives, ideation schemes, and young entrepreneur exchanges. Some have currently been ruled out for lack of fit (*77-97*), but others are promising providing a solid delivery base is secured.

Overlap with LEPs' economic strategies:

- vi. All three LEPs in scope have highlighted priorities and activities that are explicitly related to graduate entrepreneurship activity (*7-31*). Specific thematic objectives are T01, T03, T08, T09, and, for the Humber LEP T09 (*Table 1*)
- vii. The Project partners are growing an expertise in social enterprise which has been identified by all three LEPs as a priority area (*13, 25, 31, 69, 72, 94-97, 101*).
- viii. University-based entrepreneurship support may aid graduate retention and inward migration (*12, 40*); this could be further exploited by expanding the Project to enable support graduates of institutions outside Yorkshire and the Humber (*12, 21, 30, 31, 99*).
- ix. There is potential to develop industry-specific (e.g. digital entrepreneurship) responses to student and graduate start-up (*15, 24, 104-106*)
- x. Engagement with entrepreneurship as a student enhances employability outcomes and helps develop business-ready graduates (*17, 18, 25, 26, 103*)

Overlaps with National and EU Policy:

- xi. Student and graduate entrepreneurship is highlighted in a draft version of the 2014-2020 ERDF Optional Programme (72) and is regularly mentioned in national and EU policy as important for economic growth (32-33). It has also featured strongly in four key recent UK policy documents (34-49)

Research into graduate entrepreneurship:

- xii. Entrepreneurial intent decreases when students reach higher education; graduates are also more likely to close businesses to return to paid employment before their businesses become fully established. (50)
- xiii. Importantly, where graduates do look to start up, they are more likely to be involved with early-stage entrepreneurial activity than non-graduates and to be owners or founders of high growth companies. (50)
- xiv. Engagement with entrepreneurship at University has been shown to increase entrepreneurial intent, and increase the levels of actual business start-up (50-52).
- xv. University-based enterprise education and start-up support programmes are required to overcome negative attitudes towards an entrepreneurial career and loss of potential entrepreneurs to the job market (52)

The report was commissioned to:

- xvi. Review the YNYER, Humber and LCR LEPs Strategic Economic Plans (SEPs) for their European Structural & Investment Funds (ESIFs) and identify opportunities for Yorkshire Universities' (YU) partners to contribute to the enterprise and business creation themes (7-31 and Table 1).
- xvii. Identify and map the current activity/capacity in relation to enterprise and business creation across YU partners including identifying the impact and value added from previous work through the Graduate Entrepreneurship Project (55-69).
- xviii. Review sources of national (e.g. HEFCE, TSB, RCUK) and European funding opportunities relevant to enterprise and business creation (70-97), paying particular attention to ERDF/ESF match funding requirements (see 107-114) and including a prioritisation of the identified opportunities (98-106).

In addition to the commissioned elements above, the report:

- xix. Reviews national and EU policy for university-led student and graduate enterprise and entrepreneurship (32-49)
- xx. Reviews research into the impact of enterprise education and graduate entrepreneurship (50-54)
- xxi. Highlights issues and concerns relating to ESIF funding and ability to match, impact of the current funding gap, and LEP buy-in (107-114)

Yorkshire Universities Technical Assistance Project Graduate Entrepreneurship Scoping Study (July 2014)

Background

1. Dr Kelly Smith (Head of Enterprise and Principle Enterprise Fellow) at the University of Huddersfield was engaged by the Yorkshire Universities Technical Assistance (YUTA) project to carry out the following tasks:
 - To review the YNYER, Humber and LCR LEPs Strategic Economic Plans (SEPs) for their European Structural & Investment Funds (ESIFs) and identify the opportunities for Yorkshire Universities' (YU) partners to contribute to the enterprise and business creation themes.
 - To identify and map the current activity/capacity in relation to enterprise and business creation across YU partners including identifying the impact and value added from previous work through the Graduate Entrepreneurship Project.
 - To review sources of national (e.g. HEFCE, TSB, RCUK) and European funding opportunities relevant to enterprise and business creation, paying particular attention to ERDF/ESF match funding requirements and including a prioritisation of the identified opportunities.

Introduction

2. The following aspects of Graduate Entrepreneurship are explored in this study:
 - Start-up businesses through university-delivered support of students and graduate pre-start support and training
 - Setting the basis for growth through early-stage start-up and follow-on support
 - Support for student and graduate social enterprise
 - Support for business and entrepreneurship-related higher skills development (through reference to the YUTA scoping study for higher skills).
3. The study is principally about areas of activity which both support the LEP priorities and are potentially fundable through European Structural and Investment Funds (ESIF) specifically the ESF element of that. Other potential funding sources are also explored.
4. The following definitions have been used (see QAA 2012¹):
 - *Enterprise Education* aims to produce graduates with the mindset and skills to come up with original ideas in response to identified needs and shortfalls, and the ability to act on them.

¹ <http://www.qaa.ac.uk/en/Publications/Documents/enterprise-entrepreneurship-guidance.pdf>

- *Entrepreneurship education* focuses on the development and application of an enterprising mind-set and skills in the specific contexts of setting up a new venture, developing and growing an existing business, or designing an entrepreneurial organisation.
- *Entrepreneurship* is defined as the application of enterprise skills specifically to creating and growing organisations in order to identify and build on opportunities.
- *Social enterprises* can be defined as organisations, bodies or individuals driven by social or cultural values as opposed to financial gain or profit. Typically, a social enterprise will seek to become financially sustainable in order to respond to the social needs of its target audience(s), but does not consider financial gain to be its primary goal.

Methodology

5. This report has been informed through:

- Discussions with Graduate Entrepreneurship Project practitioners who provide student and graduate business start-up support in Yorkshire Universities member organisations.
- Discussions with Graduate Entrepreneurship Project steering group members including University representatives from South Yorkshire, West Yorkshire, North Yorkshire, and Humberside. The steering group also contains members chosen for their expertise in this area including from the FE sector.
- Discussions with national enterprise- and entrepreneurship-related organisations (e.g. National Centre for Entrepreneurship in Education – NCEE; Enterprise Educators UK – EEUK; and the Institute for Small Business and Entrepreneurship – ISBE).
- Desk research.
- Evaluation of the current regional ERDF-funded Graduate Entrepreneurship Project
- Discussion with Martin Green from the LCR LEP

6. Next steps:

- Discuss with Yorkshire Universities KT directors
- Discussions with LEP secretariat representatives via YUTA team

LEP ESIF Strategies and Project Match

7. The following documents were used to inform this report:

- Leeds City Region LEP
 - Skills Plan for the Leeds City Region 2013-2015²
 - Strategic Economic Plan 2014 – Part A: Growth Plan March 2014³

² <http://business.leedscityregion.gov.uk/external-links/lcr-skills-plan-2013-2015.pdf?ext=.pdf>

- Leeds City Region LEP European Structural and Investment Fund Strategy 2014-2020⁴
 - Proposal: A Leeds City Region Deal July 2012⁵
 - Humber
 - Humber Growth Deal Summary Document⁶
 - Strategy Economic Plan 2014-2020⁷
 - European Structural and Investment Fund Strategy for the Humber Final Strategy – January 2014⁸
 - Investment and Delivery Plan 2014-2020, First Edition March 2014⁹
 - Hull and Humber City Deal¹⁰
 - York/North Yorkshire/East Riding
 - Strategic Economic Plan ESIF Submission January 2014¹¹
 - Strategic Economic Plan March 2014^{12 and 13}
 - EUSIF Implementation Plan January 2014¹⁴
 - Local Growth Deal Implementation Plan March 2014¹⁵
8. Note that LCR LEP's ESIF documentation excludes Barnsley. Barnsley is in an area covered by two overlapping LEPs – LCR and Sheffield City Region. It has been included in the SCR LEP documentation for ESIF activity and is therefore outside the scope of this study along with the work of the University of Sheffield and Sheffield Hallam University. York is in two overlapping LEPs but has been included in both LCR and YNYER LEP ESIF planning documents. Hull also falls under the YNYER and the Humber LEPs.
9. **All three LEPs in scope have highlighted priorities and activities that could be explicitly related to graduate entrepreneurship activity as currently supported by ERDF through the Graduate Entrepreneurship Project.** These are summarised in

³ <http://business.leedscityregion.gov.uk/LCR-Portal/media/Portal-images/pdf%20downloads/Leeds-City-Region-SEP-Part-A-Growth-Plan.pdf?ext=.pdf>

⁴ <http://www.leedscityregion.gov.uk/LCR-Corporate/media/Media/Research%20and%20publications/Leeds-City-Region-ESIF-FINAL-31-Jan-2014-v2.pdf?ext=.pdf>

⁵ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/221012/Leeds-City-Region-Deal-Documents-Final.pdf

⁶ <http://www.humberlep.org/assets/uploads/user/strategies/GrowthDealSummaryDocument.pdf>

⁷ <http://www.humberlep.org/assets/uploads/user/strategies/StrategicEconomicPlan.pdf>

⁸ <http://www.humberlep.org/strategies/european-structural-and-investment-fund-strategy>

⁹ <http://www.humberlep.org/assets/uploads/user/strategies/InvestmentPlan.pdf>

¹⁰ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/265969/Hull___Humber_City_Deal_document.pdf

¹¹ <http://www.businessinspiredgrowth.com/media/150875/EUSIF-Strategic-Economic-Plan.pdf>

¹² <http://www.businessinspiredgrowth.com/media/167750/strategic-economic-plan-sections-1-2.pdf>

¹³ <http://www.businessinspiredgrowth.com/media/167749/strategic-economic-plan-sections-3-7-plusannex.pdf>

¹⁴ <http://www.businessinspiredgrowth.com/media/150871/EUSIF-Implementation-Plan.pdf>

¹⁵ <http://www.businessinspiredgrowth.com/media/167751/local-growth-deal-implementation-plan.pdf>

Table 1 and discussed in more detail in the following sections looking at each LEP's proposals in turn. Further options for activity are also explored.

Leeds City Region

10. The LCR Higher Education (HE) sector represents one of the largest concentrations of institutions and students anywhere in Europe – there are eight HE Institutions (HEIs) with around 120,000 students, producing 35,000 graduates each year. More than a third of the research in the LCR universities is world-class with a further 10% classed as world-leading. LCR universities are at the top of the research rankings in six of the government's eight great technologies. HEIs therefore offer a large pool of potential graduate entrepreneurs as will be argued further below.
11. LCR has 106,000 businesses of which 85,000 are VAT registered businesses. The vast majority are small or micro businesses, although there are proportionately more medium and large businesses than in England. Business start rates are about 80% of national average, although closure rates are lower too. Self-employment is around average overall but much higher in rural areas; male self-employment is typically two to three times higher than female.
12. LCR has a much lower level of entrepreneurial activity (people who are in the course of starting or have just recently started their own business) than the UK as a whole. People who are male, are graduates or who are migrants into LCR (from other parts of the UK as well as from overseas) are more likely to be entrepreneurial. The positive mention of graduates in this context might be in some part due to the success of the Graduate Entrepreneurship Project and ***the influx of graduate-level entrepreneurial migrants might be a good opportunity for expansion as discussed below.***
13. Social enterprises are far more likely to be led by women than mainstream businesses, while 15% of social enterprise leaders are from Black, Asian and Minority Ethnic (BAME) communities. Social enterprise could therefore provide significant opportunities to capitalise on a wider range of role models, peers and mentors across different cohorts of people to encourage enterprise activity, especially in groups of people that are currently or are at risk of economic exclusion. Several of the City Region's HEIs have recently engaged with HEFCE UnLtd programmes to promote and support student and graduate social enterprise activity. ***Expertise in this area could add value to future graduate entrepreneurship support by adding in a new and explicit social enterprise dimension.***

Table 1: Priorities, Thematic Objectives, and identified activity or programmes explicitly related to graduate entrepreneurship activity

LEP	Priority/Strategic Programmes	Thematic Objectives	Identified Activity/Programme
LCR	1. Unlocking the growth potential of businesses in key economic sectors	TO1. TO3.	Business Innovation Programme Business Growth and Enterprise Hub Programme
	2. Making the most of a skilled and flexible workforce	TO8. TO10.	Promoting Enterprise & Innovation in Young People
Humber	1. The SME Growth and Innovation Programme	TO1. TO3.	Fostering a more entrepreneurial culture
	2. The Skills Programme	TO8. TO10.	Access to employment
YNYER	1. Profitable and ambitious small and micro businesses	TO1. TO3. TO8. TO10.	1.a. Innovative, growing small businesses <ul style="list-style-type: none"> • Tailored business support to meet specific needs • Access to finance • Business improvement programme 1.b) More entrepreneurs who start and grow a business <ul style="list-style-type: none"> • Inspire and support new business starts • Business start-up support • Enterprise education and culture
	3. Inspired people	TO8. TO9. TO10.	3.a) A productive workforce for growing businesses: <ul style="list-style-type: none"> • Research and communicate sector needs • Develop specific training packages that meet local priority sector and investor needs • Build competitive advantage through higher level skills • Graduate and postgraduate retention 3.b) Inspired people making the right job choices: <ul style="list-style-type: none"> • Build self-employment and enterprise skills 3.c) Empowered communities delivering support and inclusion: <ul style="list-style-type: none"> • Develop the capacity of the community and social enterprise sectors to meet local needs • Build competitive advantage through higher level skills

Key: TO1. Strengthening Research, Technological Development & Innovation; TO3. Competitiveness of SMEs;
TO8. Promoting Employment and Supporting Labour Mobility TO9. Social inclusion & combating poverty
TO10. Investing in Education, Skills and Lifelong Learning

14. LCR Identified priority sectors are:

- Financial and professional services;
- Advanced manufacturing (including innovative manufacturing);
- Health and life sciences;
- Low carbon and environmental industries;
- Digital and creative industries; and
- Food and drink

15. LCR's digital and creative sector is the largest in the UK outside of London. It is spread across the west of the City Region, with hubs of digital expertise and enterprise in Leeds, Huddersfield, York and Airedale. The sector has consistently outperformed the rest of the economy in recent years. ***This is an identified area for exploitation which links to HEI expertise and the potential for graduate entrepreneurship.***

16. LCR programme activity relevant to graduate entrepreneurship includes the Enterprise Programme which will offer targeted start-up assistance and investment to those fledgling businesses (up to three years old) with the ambition and ability to grow and/or provide good social return. Targeted support will be provided to new growth-oriented businesses, particularly those in areas of low entrepreneurial culture, to stimulate business formation and improve survival rates. This will be underpinned by the leadership and management programme outlined above and the full range of other business and skills interventions available across the City region.

17. A second explicitly related LCR programme is Promoting Enterprise and Innovation in Young People. LCR have a cross-LEP Task Group led by an entrepreneur Amjad Pervez championing actions to promote an enterprising culture, especially amongst young people, and ***to address the significant longer term cultural challenges in order to shift LCR levels of entrepreneurship, innovation and educational aspiration beyond the national average.*** The group will link to work on promoting better business engagement in schools, better informed choices and the strategic framework innovation theme. The Graduate Entrepreneurship Project has presented to the group and the author of this report is a representative on the group for HE. The LCR ESIF plan states that projects within this Programme will be part funded by LGF if the bid is successful.

18. A separate Skills Plan for the LCR highlights ***the need for more of an enterprise and innovation culture in education*** under a skills theme called Building Skills in Education. The Skills Plan states that a wide range of enterprise activity is taking place in schools, FE colleges, work based learning providers and HEIs, although relatively little is currently known about the drivers and transferability of successful practice. It proposes the Task Group (see above) which has now been instantiated. Other proposed activity includes the need to forge closer links between the LCR Employment and Skills Board and the Business Innovation and Growth Board to access employers' views on, and support for, enterprise education activities (for young people and new entrepreneurs). It also proposes the potential for a project to involve businesses more closely in the design of degree level entrepreneurship modules and initiatives, involving 'Dragon's Den' style approaches and business skills such as accountancy and marketing which it suggests possible for HEIs/Business Schools to share or run jointly. The University of Huddersfield current offers one of only three undergraduate-level 'new venture creation degrees' in

the UK so there is expertise present in the region that might be utilised to help drive this forward.

The Humber

19. In 2011, there were approximately 32,500 businesses in the Humber. In business density terms (the number of businesses divided by the number of working age residents), the area is below average with 47.6 businesses per 1,000 working age residents. The business base of the area is characterised by small companies with just over 80% having fewer than 10 employees; the vast majority of which have fewer than 5. This is similar to the profile across England as a whole.
20. **Although there is only one University present in the Humber LEP - the University of Hull - its presence and commitment has been highlighted as a particular strength.** A further relevant strength identified by Humber is growing interest amongst young people in self-employment as a result of Business Week and Global Entrepreneurship Week.
21. Although business start-up rates are reasonably good, survival has been identified as a weakness. Supporting new entrepreneurs and then helping businesses to survive and flourish is therefore a priority for the Humber. Other weaknesses are the higher level skills gap, and graduate attraction and retention. Identified threats include a lack of capacity to enable mentors to drive, support and guide the next generation of entrepreneurs, and difficulties in accessing finance for start-ups and early growth companies in particular. Youth unemployment is a known persistent issue, with 18-24 year olds accounting for around a third of all unemployment in the area and numbers having more than doubled over the past 10 years. **As the majority of graduates fall in the age range of 21-24, a graduate entrepreneurship programme, potentially including graduates from other universities wishing to return or move into the Humber, could help address graduate unemployment.**
22. Humber identified priority sectors are
- Ports and logistics
 - Chemicals
 - Engineering and manufacturing
 - Creative and digital
 - Food
 - Visitor economy
23. The Humber again highlights the digital and creative industries as a key sector. It intends to create skills development programmes in this area, explicitly mentioning start-up and enterprise support and higher level skills. Comprehensive business support offer will also be developed, covering collaboration and incubation space, support for digital entrepreneurs, mentoring and access to finance including venture capital. It will work with schools across the LEP area to encourage learners to engage in computer science, digital creativity, online security and entrepreneurialism.
24. The Humber also aims to establish a significant hub of gaming and content creation industries, building on the existing support ecosystem for embryonic indie games studios

and the University of Hull's nationally recognised computer games degrees at undergraduate and postgraduate level. **Other HEIs in the area also have strong games programmes and there may be potential for a cross LEP initiative around digital and games industry-specific student and graduate entrepreneurship.**

25. The Humber's strategic economic plan includes an objective for supporting businesses to succeed, and in particular to ensure that businesses in the Humber LEP area have access to the expert support and appropriate finance they need to grow, create jobs, and take advantage of new investment opportunities. This includes the need to support an entrepreneurial culture across the Humber, reduce barriers to entrepreneurship and support new entrepreneurs. Nurturing entrepreneurial aspiration is also important and supporting this from an early age is recognised as essential. **Graduate entrepreneurship is specifically included within a key activity in the ESIF plan to promote and support entrepreneurship and self-employment under SME Growth and Innovation Programme and Fostering a More Entrepreneurial Culture.** Skills Programme activities include entrepreneurial and social enterprise support for out-of-work residents of the Humber looking to set up their own business, **again highlighting the need for social enterprise support** (see above under LCR).
26. The Humber ESIF plan **specifically highlights graduate and professional support as an additionality gap as well as enterprise and self-employment support.** A follow-on to the Graduate Entrepreneurship Project could help address both issues.

York, North Yorkshire and East Riding

27. The YNYER business base is disproportionately dominated by small and micro businesses with 20% fewer medium and 50% fewer large companies than the UK average); the small business base, however, is deemed resilient. YNYER estimate that around 25% of the business community, equating to around 14,000 VAT registered businesses and up to 7,000 businesses below the VAT threshold, have growth aspirations that are not currently being effectively supported and realised. Business start-up rates are 20% below national average; which on top of smaller than average businesses, makes high total output growth harder to achieve.
28. YNYER highlight the following as priority areas:
- World class innovation in agri-tech and biorenewables
 - Agriculture and food business connected to new opportunities
 - Low carbon businesses
29. Relevant strategic priorities are 1. Profitable and Ambitious Small and Micro-Businesses, and 3. Inspired People. Priority 1 includes the core activities around inspiring and supporting new business starts through business-start-up support and enterprise education and culture. Activities will also look to increase innovation in small businesses and improve business competitiveness through co-ordinated business support.
30. The ESIF plan specifically highlights the following needs for start-up support for new businesses: provision of start-up finance, early stage equity, venture capital and proof of concept funding, provide support to start a business, and schemes to promote and support entrepreneurship and self-employment, in particular amongst groups which may

not see enterprise as for them. **Support for 25+ returnees to the area is specifically mentioned, many of which may be graduate returnees. YNYER has stated they will ensure such returnees with a desire to establish their own business are effectively supported.**

31. **Graduate and postgraduate retention and increasing opportunities for graduates is also highlighted under Priority 3 around Inspired People.** This priority also includes actions around developing better links between business and educators to equip students with the skills to start and grow a business, and support for activities to start and grow a business from promoting entrepreneurship and self-employment. Further mention is made of using self-employment as a route out of worklessness, and the need to providing additional or more intensive work for people to move towards work, enter work, and to progress in work which should include self-employment. **Social enterprise is again mentioned under initiatives that support enterprise and social enterprise as a route to economic activity and inclusion** (see LCR and the Humber above).

National and EU Policy

32. For several decades, **policymakers have highlighted university-provided enterprise education and graduate entrepreneurship as potential drivers to economic growth.** In the UK in 1997, the National Committee of Inquiry into Higher Education lead by Dearing¹⁶, recommended that universities consider the scope for encouraging entrepreneurship through innovative approaches to programme design. By 2000, business and entrepreneurial development had been listed as one of four strategic goals for British universities by Universities UK¹⁷, with the UK Government introducing a significant third funding stream to higher education institutions with the aim of stimulating universities to reach out to business and the community called the Higher Education Innovation Fund (HEIF). The broad aim of this initiative was to add value to society and the economy through the transfer of knowledge and presented an opportunity for HEIs to contribute to the development of entrepreneurial and enterprising staff, students, and graduates¹⁸.
33. University graduate entrepreneurship in the UK and Europe has since been seen as a vital source of competitiveness and a possible stimulus for economic growth and development of a future knowledge-based economy and is frequently featured in reviews by Government departments such as BIS^{19,20} and BERR²¹, and the European Commission^{22,23,24}.

¹⁶ Dearing, R. (1997). Higher Education in the Learning Society, The National Committee of Enquiry into Higher Education

¹⁷ Universities UK (2000). A Forward Look: Highlights of our Corporate Plan 2001-2004., Universities UK

¹⁸ Davis, J., M. Hides and J. Powell (2002). "Defining the development needs of entrepreneurs in SMEs." Education + Training 44(8/9): 406-412

¹⁹ BIS (2013). Enterprise education impact in higher education and further education. Department for Business, Innovation & Skills

²⁰ BIS (2010). A strategy for sustainable growth. Department for Business, Innovation & Skills.

²¹ BERR (2008). Enterprise: unlocking the UK's talent. London: HM Treasury.

²² European Commission (2012). Entrepreneurship 2020 Action Plan - Reigniting the entrepreneurial spirit in Europe. European Commission.

34. Four recent UK policy papers are particularly relevant here:
- 2012 Wilson Review of University-Business Collaboration²⁵
 - 2013 Witty Review of Universities and Growth²⁶
 - 2014 All Party Parliamentary Group for Microbusiness on an Education System Fit for an Entrepreneur²⁷
 - 2014 Lord Young report on Enterprise for All: The Relevance of Enterprise in Education²⁸

The Wilson Review of University-Business Collaboration

35. The Wilson Review recommended that strategies to ensure the development and recording of students' employability, enterprise and entrepreneurial skills should be implemented by universities in the context of the university's mission and promoted through its public literature to inform student choice. Universities have an important role in helping students understand the opportunities that are available in the SME sector or in self-employment.
36. Wilson states that Universities have a key role to play in LEPs and can benefit from the business connectivity that such partnerships provide. ***Working with LEPs will provide opportunities for universities, individually and as consortia, to support their local economy through proactive engagement, both through increased collaboration with SMEs and through partnerships with major corporates.***
37. Wilson specifically recommends that all full-time PhD students should be encouraged to attend a short intensive enterprise skills programme alongside research students from other departments of the university, and that Universities should increase support for postgraduate students seeking to set up their own businesses.
38. The Wilson Review highlights the work of a body called Enterprise Educators UK (EEUK) - a network of university staff that promotes and supports enterprise education whose members undertake a range of activity from embedding enterprise skills in the curriculum through to running dedicated units to support, advice and mentor student and graduate business start-up. Staff from Yorkshire and Humber HEIs are well connected with the EEUK with members sitting on the current EEUK board and providing national leadership. The EEUK Chair for 2014-2015 is responsible for student and graduate business start-up at Sheffield Hallam University.

The Witty Review of Universities and Growth

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- ²³ European Commission (2008). Entrepreneurship in Higher Education, Especially in Non-Business Studies: Report of the Expert Group. Brussels, European Commission.
- ²⁴ European Commission (2006). Implementing the Community Lisbon Programme: Fostering Entrepreneurial Mindsets Through Education and Learning. Brussels, European Commission.
- ²⁵ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/32383/12-610-wilson-review-business-university-collaboration.pdf
- ²⁶ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/249720/bis-13-1241-encouraging-a-british-invention-revolution-andrew-witty-review-R1.pdf
- ²⁷ http://www.enterprise.ac.uk/index.php/news/item/download/70_599689e8c8b72ac1b5ca70b860b70edd
- ²⁸ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/338749/EnterpriseforAll-lowres-200614.pdf
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39. The Witty Review starts with the proposal that Universities have extraordinary potential to enhance economic growth. He states that Universities should assume an explicit responsibility for facilitating economic growth, and all universities should have stronger incentives to embrace this “enhanced Third Mission”. The University of Huddersfield, however, feature as a case study in the review and its work with student and graduate start-up companies is highlighted.
40. **Witty finds that firms started by graduates are often located either in or close to the university from which they have emerged, boosting the local economy by using local supply chains and offering local jobs.** Statistics from the Higher Education Business and Community Interaction (HE-BCI) are mentioned relating to graduate start-up. A summary of Yorkshire and the Humber data is provided below.

APPG for Microbusiness report - An Education System Fit for an Entrepreneur

41. The APPG for Microbusiness report explored enterprise education and business start-up support from primary to tertiary and beyond. Chapter 6 looked at the role of Universities and Colleges and provided past and current examples of practice. (Note that one of the co-authors of the report is the author of this scoping study.)
42. The Chair of the APPG for Microbusiness, Anne Marie Morris MP, highlights in her foreword that **all University students should be encouraged to consider themselves as enterprising individuals with the capacity for business start-up if they choose to do so.** However, evidence would suggest that entrepreneurs do not for the most part come from Business schools, but from a variety of disciplines. This needs to be further researched and understood but is indeed the experience of the current Graduate Entrepreneurship Project.
43. Key finding related to HE enterprise education and student and graduate business start-up were:
- **Large scale funding initiatives have the potential to change culture and make systemic changes.**
 - **Longer-term funding needs to be put in place to prevent roll back and loss of knowledge.**
 - Pockets of excellent practice exist but need to be disseminated and expanded so there is breadth in provision in addition to depth.
 - Enterprise and entrepreneurship education needs to be embedded in all subject areas if it is to make an wider impact.
 - This will require training of educators to 1) understand what is meant by enterprise and entrepreneurship education in their subject-specific context, 2) aid the development of embedded and inspiring learning activities.
 - Funding of longitudinal or retrospective research to look at long-term impact is required.

The Lord Young Report on Enterprise for All

44. The Lord Young report looked at fostering an enterprising attitude in both formal and informal education, including the desire to become an entrepreneur, and encouraging more to enter self-employment or start their own company.
45. Two of the five HE case studies included in the report were from Yorkshire and the Humber (Leeds and Huddersfield) highlighting our regional strength in this area.
46. The report made four specific recommendations for HE:
- Universities to have an elective enterprise module available to all students
 - An active and supported enterprise society in every university
 - A 'start-up programme' in all universities that have Business Schools holding Small Business Charter status including specific provision for starting and funding social entrepreneurship
 - Create an incentive and reward structure for enterprise activity at universities by developing an enterprise "E-Star" award, under the patronage of the Duke of York, to distinguish the universities that are delivering the strongest enterprise ethos and outcomes for their students
47. An additional key recommendation is for Government to publish both employment rates and earnings for the decade after leaving education for every further and higher education course. The working name for this is the Future Earnings and Employment Record (FEER). Lord Young states that the FEER will provide an incentive for institutions to improve the quality and diversity of the courses they offer through increased competition, and will enable national government and local and sectoral stakeholders to draw comparisons between institutions. The report suggests that the FEER could include business start-up activity to help understand the entrepreneurial credentials of institutions. It is not clear how information will be collected or how business start-up activity can or will be included.
48. The recommendation that Business Schools holding Small Business Charter status should provide a start-up programme is an interesting one. Twenty Business Schools nationally have been awarded SBC status with one sited in Yorkshire and the Humber: the University of Leeds. 10 out of the 30 charter mark dimensions were related to student and graduate enterprise education and entrepreneurship support with 2 specifically looking at the presence of a start-up programme and incubator space which suggests that Business Schools holding the charter mark should already provide this service, be working towards it, or already be partnering with institution-wide provided support. Also, as discussed above, initial research and the experience of the Graduate Entrepreneurship Programme suggests that student and graduate entrepreneurs tend to come from subject areas outside the Business School. **All HEIs in Yorkshire and the Humber already provide start-up support but none of the units are based in their HEI's Business School.** As a result of this recommendation, it would appear that the Association of Business Schools has partnered with the National Association of College and University Entrepreneurs (NACUE) - who are currently funded by BIS to provide support to student enterprise societies – to provide university start-up programme advisors.
49. **The benefit to HEIs in the three LEP areas under scope of this report is unclear as we already have substantial expertise in this area.** A concern is that national and

local government and LEPs consider that a NACUE-provided start-up programme support is sufficient to meet student and graduate entrepreneurship requirements and that further funding is not required. In the opinion of the Graduate Entrepreneurship Programme practitioners and steering group, such a scheme could not replace the substantial expertise and local entrepreneurial network systems that have been built up by the region's dedicated student and graduate start-up units.

Research into the Impact of Enterprise Education and Graduate Entrepreneurship

50. **Research has shown that graduates are more likely to be involved with early-stage entrepreneurial activity than non-graduates²⁹ and to be owners or founders of high growth companies³⁰, however graduate entrepreneurs are also more likely to close businesses to return to paid employment before their businesses become fully established³¹.** There are further issues with attracting HE students into an entrepreneurial career in the first place as **entrepreneurial intent decreases at the highest levels of education and the pipeline of potential graduate entrepreneurs is therefore smaller than might be expected³².** A 2009 study of young people at a regional level in Yorkshire and the Humber³³ echoed the US research showing that there is a drop-off in business aspiration for students in HE.
51. A look at UK General Entrepreneurship Monitor (GEM) data in more depth found that graduates had a lower opinion of entrepreneurship as a good career choice and possessed more negative attitudes towards the status of entrepreneurship in society²⁹. However, **enterprise training at university was found to mitigate graduates' negative attitudes towards entrepreneurship and increase their likelihood to participate measured by nascent, baby business, and total early-stage entrepreneurship participation indexes.** Engagement in entrepreneurial learning at university has been shown to **influence entrepreneurial intent³⁴, and actual business start-up³¹** in other research papers.
52. A 2013 BIS¹⁹ impact report on enterprise and entrepreneurship education concluded that participating students acquire relevant business related knowledge, skills and competences, and are more likely to change attitudes (such as risk taking) and intentions (such as around being self-employed or being entrepreneurial). Although the BIS report suggested that evidence around the impact of enterprise and entrepreneurship education on actual business start-up is currently inconclusive, it **adds support to the proposal**

²⁹ Kwong, C., D. Brooksbank and D. Jones-Evans (2007). The State of Graduate Entrepreneurship in the UK: Preliminary Policy Paper Based on GEM 2005 Data. Birmingham, National Council of Graduate Entrepreneurship.

³⁰ NCGE (2008). Developing Entrepreneurial Graduates: Putting Entrepreneurship at the Centre of Higher Education. Birmingham, A joint report by CIHE, NCGE, and NESTA.

³¹ Blackford, B., T. Sebor and T. Whitehill (2009). "The Effects of Collegiate Entrepreneurship Education on Post-Graduation Startup of New Ventures: A First Look." International Review of Entrepreneurship 7(3): 1-26.

³² Weaver, M., P. Dickson and G. Solomon (2006). Entrepreneurship and Education: What is Known and Not Known about the Links Between Education and Entrepreneurial Activity. The Small Business Economy for Data Year 2005: A Report to the President. Washington, US., United States Government Printing Office.

³³ Dubit (2009). Capturing the Enterprise Potential of Young People Across the Yorkshire and Humber Regions. Yorkshire & Humber, Business Link.

³⁴ Greene, F. J. and G. Saridakis (2007). Understanding the Factors Influencing Graduate Entrepreneurship. Birmingham, National Council of Graduate Entrepreneurship.

that university-based enterprise education and start-up support programmes are required to overcome negative attitudes towards an entrepreneurial career and loss of potential entrepreneurs to the job market. Note that the report primarily concentrated on study-related educational initiatives and did not explore the work of university-provided business start-up support for students and graduates.

53. The lack of evidence of a direct relationship between tertiary level curriculum-based enterprise or entrepreneurship education and actual business start-up is not necessarily unexpected. Consider that successful start-up is likely to be contingent on (a) knowledge (through education and professional experience); (b) financial resources (personal savings, bank loans, venture capital and different forms of public support); and (c) relations (family, personal, professional, institutional relations, etc.)³⁵. Higher education can develop knowledge through both enterprise/entrepreneurship education and subject-specific study but professional experience, financial resources, and relationships will necessarily take time to develop – young graduates around the age 21 are therefore likely to need additional years of employment before they are ready to forge out on their own. The role of Universities should therefore be to help develop graduates with an entrepreneurial mindset who are knowledgeable, curious, open to and able to seek out opportunities, and who have the confidence to explore business start-up when the time is right to do so. For some this could be immediately on graduation, but for others there could be a gap of several years. This has been recognised in schemes such as the Graduate Entrepreneurship Project that supports current students who are business-ready alongside graduates up to five years from graduation.
54. Another potential growth area for university-based enterprise and entrepreneurship is through **postgraduate research students** who are arguably best placed to create and drive forward high-tech, high-growth business ideas³⁶. Vitae, an organization supporting research staff and postgraduate researchers, have developed an 'Enterprise Lens' on the nationally recognised Researcher Development Framework (RDF)³⁷. The lens looks at the general skills expected of researchers listed in the RDF, highlighting where enterprise can sit and giving examples of enterprising behaviours and attitudes appropriate to a research career.

The Yorkshire and Humber Graduate Entrepreneurship Project and Related Activity

55. The Graduate Entrepreneurship Project grew out of a collaboration of six of Yorkshire and the Humber's HEI's careers services developing materials to support self-employment.
56. The Project officially started in 2007, part-funded by Yorkshire Forward Single Pot and managed by Yorkshire Universities. In 2009, the project management moved to the

³⁵ Uzunidis, D., S. Boutilier and B. Laperche (2014). "The entrepreneur's 'resource potential' and the organic square of entrepreneurship: definition and application to the French case." *Journal of Innovation and Entrepreneurship* 3(1).

³⁶ Smith, K., W. D. N. Yasin and I. Pitchford (2013). Enterprise skills and training needs of postgraduate research students. *Proceedings of the 2013 ISBE National Conference, Cardiff*.

³⁷ <https://www.vitae.ac.uk/researchers-professional-development/about-the-vitae-researcher-development-framework/lenses-on-the-vitae-researcher-development-framework>

University of Huddersfield who subsequently lead on a bid for ERDF funds to continue activity to 2014 (Total Project Cost for Phase 2 = £2.6million).

57. The Project aims to provide the best enterprise and business start-up support possible to students and graduates of the higher education institutions in Yorkshire and the Humber. It has the following objectives:

- Promote entrepreneurship and business start-up to the HE student and graduate population
- Combine resources and best practice to support entrepreneurs
- Manage a broad framework of support activity which is delivered locally by individual HEIs, and regionally, to engage students and recent graduates and support business start-up and growth

58. **Phase 1 of the Graduate Entrepreneurship Project (2007-2010) resulted in the following outputs under Single Pot definitions and evidence requirements:**

- 274 jobs created
- 269 businesses created
- 110 businesses created surviving 12 months (note this was correct at the end of the contract period; as several businesses were still to reach the 12 month survival period when the contract ended it is highly likely that this figure would have increased)
- 218 businesses assisted (receiving 12 hours of start-up support)
- 2554 blocks of six hours of start-up skills training received
- Estimate of £7.9million GVA

59. The delivery of Phase 2 (2011-2014) completed in March 2014. Delivery partners were:

- University of Bradford (delivery closed early due to institutional strategic redeployment of HEIF funds) (LCR)
- University of Huddersfield (LCR)
- University of Hull (Humber)
- Leeds College of Music (2011 only due to move to FE status) (LCR)
- Leeds Metropolitan University (LCR)
- Leeds Trinity University (LCR)
- Sheffield Hallam University (SCR)
- University of York (LCR and YNYER)
- York St John University (YNYER)

60. Two HEIs were included in the collaboration as strategic partners. The University of Leeds (LCR) and the University of Sheffield (SCR) joined delivery partners for sharing of best practice and promoted regional start-up activity such as the Entrepreneurs Boot Camp but did not draw down ERDF funds and had no contracted outputs. Funds for student and graduate business start-up support were provided through internal funds and/or alumni donations rather than ERDF.

61. Delivery partners could choose from a suite of activity, adapting processes to their local context where appropriate and within agreed parameters. ERDF-related restrictions applied so partners generally supplemented activity using internal funds to ensure all

students and graduates were supported regardless of sector and customer base where ERDF funds could not be used. The suite of delivery activity included:

- 1-2-1 business start-up advice sessions or mentoring
- Networking events
- Proof-of-concept funding up to £1000 (pre-trading)
- Start-up grants up to £2500 (post-trading)
- Regionally delivered four-day residential Entrepreneurs Boot Camp

62. Note that skills training was no longer permissible activity under ERDF although networking events and the region-wide Entrepreneurs Boot Camp could still be provided. Other changes from Phase 1 were that although the Project offered pre-start support, business assists could only be counted once trading had commenced, and evidence requirements were also experienced. These changes resulted in lower formal output figures than in Phase 1 but, as will be shown below, were underpinned by extensive underlying and start-up results not captured by ERDF requirements.

63. Formal outputs (O) and results (R) under ERDF requirements for Phase 2 to date are provided in Table 2. **The project has exceeded all contracted targets to date with more job and business creates expected by the end of the December 2014 as more businesses reach their first anniversary.** Note that GVA was not a contracted result as it was originally agreed that GVA was not a good measure of pre-start and early-stage start-up programmes. A requirement that GVA be calculated was added into the contracted requirements at a mid-project re-profile, but with no target figure attached. **An estimate of gross GVA after 3 years using a methodology agreed with DCLG is currently showing at £4.8 million.** The total Graduate Entrepreneurship Project cost is £2.6million (£1.3million of ERDF). Looking at business creates alone, the project cost of a single business create is currently £50,000 – well below the £74,000 cost per business figure used in the YNYER ESIF plan. The project cost per business figure will continue to fall as more businesses reach 12 month survival.

Table 2: Graduate Entrepreneurship Project performance against contracted results (R) and outputs (O) (figures in brackets exclude SCR HEIs)

	Actual at July 2014	Estimated Final at Dec 2014	Contracted	Overachievement at July 201
Jobs Created (R)	70.4 (50.4)	72 (52)	30	40.4
Businesses Created (R)	52 (38)	65 (51)	50	2
Businesses Assisted (O)	92 (81)	92 (81)	20	61

64. The Graduate Entrepreneurship Project practitioners were keen to track underlying activity once delivery commenced in order to track performance and inform planning. Delivery activity from September 2011 to March 2014 is given in Table 3. Headline statistics include:

- held 326 events attended by over 8800 budding entrepreneurs
- received in excess of 6000 enquiries from potential entrepreneurs

- carried out over 4500 one-to-one appointments with budding entrepreneurs
- received applications for start-up support from over 2600 students and graduates
- allocated over £182,000 in 99 start-up grants
- allocated over £45,000 in 95 proof of concept awards

65. Separate in-depth research is being carried out by the Graduate Entrepreneurship Project to assess the impact of the annual Entrepreneurs Boot Camp events. This is still at an early stage, but initial results suggests that the three region-wide Boot Camps lead by the Project have created **an additional 50 new jobs and a further 25 new businesses**, not captured in the statistics presented in Table 2 above.

66. Table 3 shows the HE-BCI data returns for Yorkshire and Humber HEIs for four of the six measures collected over the past five years for which data is available. Figures for Investment and Turnover are not included as data collection for these are problematic on a national level and HEI returns are often incomplete and/or erratic. It can be seen that under Graduate Entrepreneurship Phase 1, **over 130 new student and graduate businesses were created each year. There was a gap in funded activity in between the end of Phase 1 in 2010 and the start of Phase 2 in 2011 that might explain the regional reduction in 2010/2011.** The figures are lower under the ERDF funded Phase 2 compared with the Single Pot Phase 1. This could be because of ERDF-related restrictions in the types of businesses supported or, perhaps more likely, 2011/2012 changes in HE-BCI data collection requirements which required evidence of self-employment or limited company registration before a start-up business could be counted. Figures were also lower in 2012/2013 than might be expected due to a much reduced return by Bradford University following the closure of their Think Business student and graduate business start-up unit following a strategic redeployment of HEIF funding. Note that HE-BCI statistics are an underestimate of actual start-up activity of students and graduates for a variety of reasons. First, not all HEIs make a return as this element of the HE-BCI survey is not included in the HEIF funding formula. Secondly, HEIs generally only return businesses that are known to have received dedicated support through student and graduate business start-up units; those who have started-up as a result of curriculum-based enterprise education, or attendance at networking events may not be counted. HE-BCI data also only takes into account graduates up to two years after graduation whereas the regions HEIs provide support up to five years.

Table 3: Total HE-BCI data returns for 4 of the 6 measures collected for graduate start-up for Yorkshire and Humber HEIs (figures in brackets exclude SCR HEIs)

	2008/09	2009/10	2010/11	2011/12	2012/13
Number established	130 (120)	142 (127)	89 (78)	101 (86)	133 (105)
Number active after 3 years	122 (110)	175 (143)	204 (180)	207 (176)	264 (226)
Total number of active firms	336 (298)	407 (344)	444 (380)	422 (354)	470 (382)
Employment in active firms	462 (421)	528 (481)	489 (451)	528 (482)	734 (668)

67. A better measure of wider institutional culture effects, at least partially influenced by projects such as the Graduate Entrepreneurship Project, might be the Destinations of Leavers of Higher Education (DLHE) survey. For example, the University of Huddersfield's 2012/2013 survey found that 179 graduates - 6 months after graduation - self-report that they are self-employed with a further 35 exploring business start-up; 40.4% of 3500 respondents reported that the University prepared them well or very well for self-employment/freelancing. The DLHE data shows that the vast majority of self-employed graduates from the University of Huddersfield remain in the North 6 months after graduation with 66% based in Yorkshire and the Humber and the majority of these remaining in West Yorkshire in which Huddersfield is based (49% of all self-employed individuals). 14% set up in Greater Manchester and are included in the 20% based in the North West as a whole. Only 3% are based in Greater London. DLHE statistics are only available to the author for the University of Huddersfield at the time of writing, but ***if replicated across the three LEPs, suggest that enterprise education initiatives, and business start-up support such as that provided by the Graduate Entrepreneurship Project can aid graduate retention and graduate-level actual business start-up.***
68. An external evaluation of the Graduate Entrepreneurship Project is currently being carried out with a report due at the end of August. This will include telephone interviews with beneficiaries. A facilitated evaluation day looking at the experience of practitioners and steering group members was carried out in July. An initial analysis of the evaluation day discussions suggests that ***close collaboration between partner institutions proved critical in promoting a culture of enterprise and ensuring student and graduate entrepreneurs received the best possible business start-up support.*** Regular communication and the sharing of best practice and expertise were cited as key to the project's region-wide impact. ***As a collaborative group, the partners committed to maintaining links as long as practically possible under the Graduate Entrepreneurship Project brand and are fully prepared to act on future enterprise education funding bids with the proviso that actual ability to participate will depend on the requirements of the funding regime.***
69. As described above, the three region's HEIs generally provided parallel support to business that fell outside the ERDF priority sectors and conditions of support. This was generally achieved using HEIF funds, supplemented by alumni donations in a minority of HEIs where the HEI had a strong alumni function and alumni of sufficient wealth. ***Dedicated social enterprise support, through grants to beneficiaries, was funded in four Yorkshire and the Humber HEIs*** (Huddersfield, Sheffield, Sheffield Hallam, and York) through HEFCE UnLtd HE Support programme in 2012-2013. ***Five HEIs are currently able to provide grants under a new See Change programme*** (Hull, Leeds, Leeds Met, Sheffield, and York). ***Substantial expertise in student and graduate social enterprise has been built up as a direct result and could assist with LEP activity in this area.***

Funding Opportunities

ERDF

70. The Graduate Entrepreneurship Project has successfully completed delivery on an ERDF part-funded project. It has built up significant experience and expertise, however,

ERDF has not proved an easy fit. Activity has had to be restricted by priority sector (e.g. the project has not been able to support retail businesses), and by type (e.g. the project has not been able to deliver skills training).

71. Two HEIs chose not to draw down ERDF funds in Phase 2 of the project; initial indications suggest that others may find a further round of ERDF in its current form an unattractive proposition and may decline to participate as deliverers.
72. Participation may depend on the fine detail of ERDF funding in the next round which has not yet been agreed. A draft version of the 2014-2020 ERDF Optional Programme is available via DCLG³⁸. The draft will not be used to send to the European Commission and has not been consulted on, but interestingly contains an action - IA 1(a) - **to promote entrepreneurship and business creation among students/graduates** through a combination of training and business experience, start-ups; this could include graduate schemes and support for HEI spin-outs delivering **innovation including social enterprises**. A second suggested action - IA 3(d) – again **promotes entrepreneurship and business creation among students and graduates**.
73. Interestingly, another current ERDF-funded student and graduate entrepreneurship support project – North West Enterprise Champions – was contracted to only provide skills training (including curriculum-based activity) – and was unable to provide post-trading support. This highlights a particular issue with ERDF (and potentially with ESF) in that details of implementation are interpreted at a regional/local level. Not only will ability to engage depend on EU-wide detail, but on the local interpretations of the participating LEPs and interactions between them.

ESF

74. **The potential for ESF funding to support graduate entrepreneurship has been discussed at length in the YUTA scoping study for Higher Skills.** Appendix 2 of the YUTA Higher Skills scoping study listed activity that ESF could potentially support. Engagement with enterprise education and entrepreneurship whilst at university can enable graduates to explicitly demonstrate and articulate business-related skills to potential employers. With respect to actual business start-up, two items of potentially eligible activity for Support Employability and Transition into Employment are particularly relevant:
- ESF could fund the costs of specific modules (additional to the core credit-bearing element of HE programmes) designed to better prepare under graduates/graduates for employment or self-employment or to increase the effectiveness of those recently securing employment in SMEs;
 - ESF could be used to support activity to develop self-employment or entrepreneurial skills to start and grow a business or social enterprise.
75. The items listed above suggest that skills training – akin to that delivered in Phase 1 of the Graduate Entrepreneurship Project – could be eligible activity under ESF and increase the offer that was able to be delivered under the current ERDF regime.

³⁸ <https://www.gov.uk/government/publications/european-regional-development-fund-england-operational-programme-2014-to-2020-draft>

76. A further item of note under Develop Skills to Meet Future Needs suggests the development of skills for innovation in companies, aligning with ERDF supported activities and in line with LEP growth priorities. ***This might allow the creation of specific schemes aimed particularly at graduates, and potentially of students of postgraduate programmes, for intensive interventions providing training or start-up support in specialist areas and/or those requiring new technology, construction or production methods.*** Suggestions for programmes are given below. This would also link to the call for LEPs to consider thinking about activity relating to postgraduate skills that could contribute to wider government ambitions for postgraduate education.
77. Relating further to postgraduate education, an example provided was the BIS and HEFCE supported Postgraduate Support Scheme (PSS) to pilot projects with HEIs to test options for finance and activity aimed at stimulating progression into taught postgraduate education, particularly from less-advantaged backgrounds and in areas that support the Government's ambitions for economic growth. The University of Huddersfield put forward an application to explore a taught 'new venture creation' Master's degree in innovation under the 2013-2014 PSS call where funding was waived in return for an equity stake in the start-ups created. The application was not successful but was kept back before a final decision was made in case further funds were forthcoming. ***This type of programme could be revisited for future PSS rounds, linked to ESF funds if this is confirmed as eligible activity.***

Technology Strategy Board (TSB)

78. The TSB aims to accelerate economic growth by stimulating and supporting business-led innovation in the UK from concept to commercialisation^{39,40}. It does this through a series of different programmes of support including catalyst and catapult centres in priority sectors, knowledge transfer partnerships, innovation vouchers, and smart award grants. Although start-ups are mentioned, the bulk of support is for established SMEs. Where pre-start support is offered, it is aimed at a small number of identified sectors and at ambitious companies and/or ideas with explicit and obvious high-tech, high-growth potential. Smart grant awards for proof of market are for a maximum of £25k, for proof of concept at £100k, and for development of prototypes at £250k; feasibility study funding is available under competition for four highlighted sectors up to a maximum grant of £2million. These levels of awards may be appropriate for a small minority of student and recent graduate ideas, but more work would need to be done to help stimulate and increase the number of such ideas in the first place. ***There are no apparent routes for HEIs to bid for TSB funds to stimulate and look to increase the numbers of innovative businesses out of the student and graduate body.***

Research Councils UK (RCUK)

³⁹ <https://www.innovateuk.org/documents/1524978/2138994/Concept+to+Commercialisation+-+A+Strategy+for+Business+Innovation+2011-2015/f9debf80-dd43-4284-be56-a11a3dda25a8>

⁴⁰ <https://www.innovateuk.org/documents/1524978/2138994/Delivery%20Plan%202014-15>

79. RCUK itself makes little mention of enterprise and entrepreneurship skills development or entrepreneurship support for postgraduate research students and graduates in its headline activity.
80. The topic is however highlighted in the work of the RCUK part-funded organisation – Vitae – including dissemination and support of the RDF as mentioned previously. Vitae have produced a booklet on the Enterprising Research, and an ‘enterprise lens’ on the RDF. The booklet was launched this year with input and support from EEUK including comments from staff at Yorkshire and the Humber HEIs, and with the author of this report as a keynote speaker at an Impact Day, and as a panel member on a Google Hangout event. Vitae do not provide funding opportunities.
81. RCUK links to TSB-supported activity for commercialisation of research output (see above).
82. ***There are no apparent routes for HEIs to bid from RCUK directly for funds to provide enterprise or entrepreneurship-related skills training, or for start-up support for students and graduate research programmes.*** There may, however, be potential routes via the individual research councils sitting within RCUK. This might include embedding skills training with Doctoral Training Centre activity, and/or through bids for collaborative skills development via the organisation-led strand. The 2013 AHRC collaborative skills development call, for example, had Entrepreneurship and the Creative Economy as one of three areas under which bids could be made. Here, applications for up to £60k were invited to deliver activities and strategies that enabled postgraduate students to develop their research in an entrepreneurial context, including enterprise learning. Although there could be potential for funding here, there were no open calls available for viewing at the time of writing.
83. It may be possible to apply for funds to undertake research into the impact of student and graduate entrepreneurship support alongside delivery activity funded through other sources.

HEFCE Catalyst

84. The HEFCE Catalyst fund has two goals, both focused on delivering the public and collective student interests in HE⁴¹:
1. To support objectives - to promote and enhance activities that address key policy priorities where an innovation could lead to a step-change in achievement and efficiency widely across HE.
 2. To manage transition - this strand is used in exceptional circumstances to protect students and sustain important activities, minimising any unintended consequences of the change in finance arrangements in HE.
85. In terms of 1. HEFCE may feel that the Graduate Entrepreneurship Project is not eligible as it has a long history of success and therefore may not meet the criteria for innovation leading to step-change. If the student and graduate entrepreneurship function can be

⁴¹ <http://www.hefce.ac.uk/whatwedo/invest/funds/catalyst/>

preserved with institutional or other funding, however, Catalyst could be a source of funds and/or potential match for innovative new activity.

86. Alternatively, it may be possible to argue that HEFCE Catalyst funds would support the Graduate Entrepreneurship Project as important activity at risk whilst ESIF processes are being put in place, hence helping the management of transition. **A conversation with one or more HEFCE institutional teams would need to take place to discuss.**
87. **Relevant Catalyst themes include an explicit mention of student entrepreneurship** under a knowledge exchange theme alongside a call for proposals which develop clustering and collaboration to enhance impact and support economic growth. It is not clear if graduates could be supported.
88. The fund is particularly interested in cross cutting proposals where these support economic growth and is therefore likely to align well with ERDF/ERF priorities. However, it is not clear how often themes and principles change and if this will still be the case at the time ESIF bids are confirmed.

Horizon 2020

89. Horizon 2020 is the financial instrument implementing the Innovation Union, a Europe 2020 flagship initiative aimed at securing Europe's global competitiveness and a means to drive economic growth and create jobs⁴² by coupling research and innovation.
90. **Horizon 2020 includes a programme section on Innovation in SMEs but no apparent support for enterprise education or student and graduate business start-up support.** Mention is made of an SME Instrument, but this is aimed at high-potential SMEs in a similar way to TSB (see above).

ERASMUS for Young Entrepreneurs

91. ERASMUS for Young Entrepreneurs is cross-border exchange programme which gives new or aspiring entrepreneurs the chance to learn from experienced entrepreneurs running small businesses in other participating countries⁴³.
92. Consortiums of European HEIs can apply to regular calls to become an Intermediary Organisation (IO), helping to identify and match young entrepreneurs with host entrepreneurial SMEs, and to support the young entrepreneur during their visit.
93. Regular calls for IOs are made with the last call closing mid-August 2014. **This scheme would not fund or replace student and graduate entrepreneurship support, but might be a useful supplement.**

HEFCE UnLtd

94. HEFCE UnLtd funds support the development of student, staff, and recent graduate social entrepreneurship in HE. Individual Yorkshire and the Humber HEIs have

⁴² <http://ec.europa.eu/programmes/horizon2020/en/what-horizon-2020>

⁴³ <http://www.erasmus-entrepreneurs.eu/>

successfully bid for HEFCE UnLtd funds and helped seed new social enterprises as a result.

95. Each round of HEFCE UnLtd funding has supported a different suite of eligible activity. The current round carried over funding for directly awarded grants to support a range of social enterprise exploration from proof of concept to full start-up; several HEIs in the three LEP regions (listed above) are currently in receipt of grant funds.
96. Two other strands of funding included Thematic or Geographic Partnerships and Innovative Partnerships. The Graduate Entrepreneurship Project looked to bid for partnership funds but the amounts available (around £30k) and chances of success were low due to being an existing partnership with social enterprise expertise.
97. ***Future funding opportunities are not known, but should be monitored.***

Recommendations for Student and Graduate Entrepreneurship Activity

Continuation of Funding for the Graduate Entrepreneurship Project

98. The Graduate Entrepreneurship Project is an award-winning and long-standing collaboration of Yorkshire and the Humber's HEIs. It has successfully supported students and graduates in self-employment and business start-up over an extended period of years. There is evidence to suggest that the number of student and graduate businesses assisted by their university to start-up dropped in the gap between RDA Single Pot and ERDF funding phases (see above). ***The primary recommendation would be to continue to fund the Graduate Entrepreneurship Project, bringing back in the ability to provide support to all types of businesses, and to include skills training activity if the funding regime(s) allow.*** Although SCR and the Sheffield HEIs are not included in this scoping study, they are important contributors to the Project and to regional activity; ***their inclusion in future funding discussions is recommended.***

Extension of the Graduate Entrepreneurship Project into new areas of activity

99. The majority of Yorkshire and the Humber HEI-provided business start-up units funded through ERDF under the Graduate Entrepreneurship Project were only able to support their own students and graduates (the exceptions were Bradford University whilst they had a delivery contract and the University of Hull). ***There may be potential to extend support to graduates from non-Yorkshire and the Humber universities returning to the locality to enhance graduate retention and inward movement of new graduate-led businesses, particularly where these graduates are unemployed and in the 16-24 age range leading to a NEET label.*** However, this is likely to be contingent on the availability of match from sources other or additional to HEIs own funds.
100. Phase 2 of the Graduate Entrepreneurship Project was originally intended to extend support to postgraduate research students (PGRs) and graduates, based around PGR-specific communication and support needs which differ from that of undergraduates. However, due to transfer of ERDF-management from RDAs to DCLG

and loss of RDA-provided match, this element of activity was not included in the final agreed contract. ***There may be an opportunity to readdress this gap in provision.***

101. As discussed above, several Graduate Entrepreneurship Project HEIs (including the Sheffield universities which are out of the scope of this study) have built up extensive social enterprise support knowledge and expertise. ***This could be included as an area of future-funded activity with direct links to LEP identified needs.***

Other potential activity

102. The following paragraphs suggest additional activity that might be considered for funding for LEPs to help to meet business start-up, innovation, or higher skills targets. These are not necessarily activity that would be performed by HEI student and graduate business start-up units, but may require a stable and sustainable student and graduate entrepreneurship function within an HEI to support delivery.
103. Mention was made above of the ERDF part-funded North West Enterprise Champions (NWECC) project⁴⁴. NWECC is primarily focused on HEI culture change and allowed in-curriculum work; no post-trading outputs or results were contracted. When developing the Phase 2 Graduate Entrepreneurship Project bid, the advice from Yorkshire Forward RDA, and subsequently the regional DCLG team, was that skills training and curriculum work in particular was not eligible ERDF activity, yet the advice and contract given to NWECC suggests otherwise. If ESIF allows for curriculum development – or other funding can be found – embedding into the curriculum would help market entrepreneurship as an appropriate career choice to a larger audience – many of whom may not self-select to engage with the topic. ***It would provide students with enterprise-related knowledge and skills that could then be taken forward into business start-up with the support of the dedicated HEI-based student and graduate start-up units and/or address employer concerns about the business-readiness of graduate employees.***
104. Schemes have recently been developed to take talented graduates and provide them with space and skills to create potential business ideas. One example is Entrepreneur First that claims to be the only seed investment programme that selects purely on the basis of technical talent, taking the best computer scientists and engineers, usually before they have a team or a start-up idea, and helping them build technology start-ups in London⁴⁵. A second example is run by the Alacrity Foundation based in Newport, Wales. Alacrity provides graduates with practical business training and mentorship, so they can develop as entrepreneurs and launch their own UK based demand-driven technology company. It offers a 12 month program which organises graduates into incubator teams and matches them with demand driven opportunities which are sourced from strategic partners. The intent is for each team to create products and services which address nascent market needs and match significant customer demands⁴⁶. A seed fund is available once a start-up has been incorporated. Alacrity have recently partnered with Falmouth University on a related ERDF-funded

⁴⁴ <http://ncee.org.uk/entrepreneurship-in-education/enterprise-champions/>

⁴⁵ <http://www.joinef.com/>

⁴⁶ <http://alacrityfoundation.co.uk/#about-us>

scheme aimed at forging the growth of digital games in Cornwall⁴⁷. These types of schemes differ from standard student and business start-up support which usually requires a business idea to take forward; here talented graduates from subjects relating to specific identified industries are selected and given the skills to develop ideas first. ***There is still a need to support idea-ready students and graduates, but ideation schemes could add value to the HE offer and be of direct relevance to LEP-identified priority sectors and innovation drives.***

105. The Graduate Entrepreneurship Project supported business ideas in RDA/regional ERDF identified priority sectors with other sectors and retail supported by HEIF funds. This allowed HEIs to provide start-up support to all students and graduates and all business ideas. ***There may be scope to tailor support to one or more single identified sectors according to LEP needs in addition to generic support.*** An example of sector-specific support is Teesside University's ERDF funded DigitalCity Fellowship scheme that helps talented graduates with a business idea to start-up a business in the digital sector⁴⁸. Beneficiaries are provided with a start-up grant (similar but of higher value than provided in Phase 2 of the Graduate Entrepreneurship Project), sector-specific training and mentoring, access to specialist labs, equipment, hardware, and software, and film and sound studios. ***Schemes of this nature are therefore likely to require capital as well as a revenue funding.***
106. Finally, the University of Nottingham has pioneered a series of business competitions for postgraduate research students and early stage researchers, part funded by organisations such as the Digital Economy CDT Network and the BBSRC. Called Young Entrepreneur Schemes (YES), each scheme provides briefing and training leading to a competition stage where groups are required to prepare a business plan and make an oral presentation for a hypothetical company, with each member assuming a different director role within the company. Schemes include Digital Economy YES, Engineering YES, Biotechnology YES, Energy YES, and Environmental YES. ***It may be possible to partner with the University of Nottingham to develop additional PGR-level competitions for LEP identified sectors, and/or for regional HEIs to develop sector-specific competitions using other formats aimed at PRGs, undergraduates or recent graduates.***

Issues and concerns

107. ***The Graduate Entrepreneurship Project practitioners and steering group members have expressed a commitment to continue the collaboration and help seek further funding. The commitment of their institutions will also need to be secured.*** It is recommended that this report is discussed with the YU supported Knowledge Directors group in order to gain their support and discuss next steps at a strategic level. The ability to engage is likely to depend on the chosen suite of activity and details of the funding requirements when these are known.
108. ***There is currently a funding gap that may impact on the ability of HEIs to provide start-up support to their students and graduates.*** There is some evidence of this in

⁴⁷ <http://www.falmouth.ac.uk/alacrity-falmouth>

⁴⁸ <http://digitalcityinnovation.com/about/digitalcity-fellowships-the-engine-for-business-creation/>

the previous funding gap between Phase 1 and Phase 2 where the number of graduate start-ups reported to HE-BCI fell. It is again important for institutions to commit to internal support of start-up units until discussions with LEPs have been held and their support – or not – for bidding under ESIF is confirmed and contracts in place. ***If institutional support is not provided, there is a risk that expertise and built-up momentum will be lost.***

109. ***Match is always likely to be an issue with external funding.*** The Graduate Entrepreneurship Project is no exception. Match funding for Phase 1 included a contribution from Yorkshire Forward RDA; Phase 2 initially planned for an RDA contribution, but this was not forthcoming with RDA abolition and the project had to be scaled back. Phase 2 matched ERDF funds through central project staff overheads at an agreed hourly rate, and primarily through HEIF-funded staff time and overheads. Each delivery partner matched their ERDF draw down with four delivery partners – Sheffield Hallam University, Huddersfield, York, and Leeds School of Music (for a short period of time until their move to FE status) provided over-match in order to top up central team support and regional activity.
110. ***HEIF funds have therefore been vital in providing match for external funds to date.*** HEIF however is subject to institutional strategic demands and one institution – Bradford University – made the strategic decision to divert their HEIF funds when Round 5 reductions in funding were made to other areas of business interaction and to close their student and graduate business start-up unit as a result. This is not an unreasonable decision to make as HE-BCI ***graduate start-up metrics are not included in the HEIF funding formula*** whereas other knowledge transfer activity is; other HEIs outside the region made a similar choice. Bradford University students and graduates can be supported through alternative community support, but numbers doing so are much reduced.
111. ***This demonstrates both the impact of closing dedicated student and graduate start-up units, and the vulnerability of HEIF support for this activity.*** At the time of writing, it is not known if there will be a further round of HEIF and/or what form this might take. Unconfirmed rumours suggest that HEIF may move under TSB control and that future funding priorities will not include support for graduate entrepreneurs. ***If HEIF is not available – either at institutional or national level – institutions will need to decide if and from what source internal match is available;*** an example may be from funds relating to student fees. ***Other external sources of match may be available, e.g. from local government, but will take time and effort to secure.***
112. The section on the Lord Young Review above explained how the Association of Business Schools and NACUE are looking to provide university start-up support to Business Schools who have been awarded the Small Business Charter mark. The form of this support is as yet unknown, but we will have more information soon as the University of Leeds is one of the SBC institutions. ***One risk is that Government see this as adequate provision of support to student and graduate entrepreneurs and reduces other potential sources of funds for this activity*** – such as HEIF – as a result.

113. A suggestion has been made that future funding may be better secured through a wider geographical scope looking to spread projects across the North of England, rather than continue a Yorkshire and Humber focus. ***This approach may be problematic for the following reasons.*** First, the evaluation of the Graduate Entrepreneurship Project found that collaboration and trust were vital contributors to the success of the project. Sharing of good practice and knowledge of each unit's specialisms and beneficiary mix were particularly beneficial. Similar findings have come out of evaluations of other projects including NVEC. Both phases of the Graduate Entrepreneurship Project were also deemed high risk by Yorkshire Forward RDA and by DCGL, simply because of the number of delivery partners. The project also experienced some issues with project management due to a split between South Yorkshire and Rest of Region requirements. Risk and funder relationship management issues are likely to increase with the number of partners and LEPs involved.
114. A final risk is that LEPs not may see this as core to their mission. Or, if it is seen as important it may need to compete for support with other activity. ***It is hoped that this scoping study will provide evidence that student and graduate start-up support meets their stated aims and can help deliver against economic targets such as the number of businesses and jobs created, in addition to the development of higher skills and potential for graduate retention and attraction into the area.***

Next steps

115. It is hoped that this study can be discussed with Yorkshire Universities Directors of Knowledge Transfer at the October 2014 meeting in order to garner support and discuss next steps.
116. The study also needs to be discussed with LEP representatives. The format of consultation will be agreed with the YUTA team. This consultation and the outcomes of discussions with YU Directors of Knowledge Transfer will help formulate a plan of action and prioritise potential bids for funding.
117. Full details of ESIF application procedures, particularly around ERDF eligible activity is not yet known. The study and resultant actions can be reassessed when this information has been released.
118. The final results of the Graduate Entrepreneurship Project evaluation can be added into the study when released at the end of August.