



University of HUDDERSFIELD

University of Huddersfield Repository

Smith, Kelly and Beasley, Martin

Graduate Entrepreneurs: Intentions, Barriers & Solutions

Original Citation

Smith, Kelly and Beasley, Martin (2011) Graduate Entrepreneurs: Intentions, Barriers & Solutions. *Education + Training*, 53 (8/9). pp. 722-740. ISSN 0040-0912

This version is available at <http://eprints.hud.ac.uk/id/eprint/11737/>

The University Repository is a digital collection of the research output of the University, available on Open Access. Copyright and Moral Rights for the items on this site are retained by the individual author and/or other copyright owners. Users may access full items free of charge; copies of full text items generally can be reproduced, displayed or performed and given to third parties in any format or medium for personal research or study, educational or not-for-profit purposes without prior permission or charge, provided:

- The authors, title and full bibliographic details is credited in any copy;
- A hyperlink and/or URL is included for the original metadata page; and
- The content is not changed in any way.

For more information, including our policy and submission procedure, please contact the Repository Team at: E.mailbox@hud.ac.uk.

<http://eprints.hud.ac.uk/>

Graduate Entrepreneurs: Intentions, Barriers & Solutions

Kelly Smith

Research and Enterprise, University of Huddersfield, UK

Martin Beasley

Barnsley Development Agency, Barnsley, UK

Structured Abstract

Purpose

This paper investigates the factors that influenced seven graduates in the creative and digital industries to start their own businesses in Barnsley, South Yorkshire, UK - an area with lack of employing establishments and locally registered businesses.

Design/methodology/approach

Questionnaires and semi-structured interviews identified the constraining and enabling factors graduates may encounter when attempting to start a business, and explored the impact of support provided.

Findings

Perceived constraining factors were: lack of general business knowledge, contradictory advisory support from external agencies, lack of sector-specific mentors, lack of finance, and experience of familial entrepreneurship. Perceived enabling factors were: co-mentoring from business partners, course content, financial gain, creativity and innovative ideas, control and risk taking, and the overarching package of support. Linkages between internal and external support could be improved.

Research limitations/implications

The study provided insights into constraints and enablers to self-employment for a small cohort of recent graduates looking to start-up in the creative and digital industries. Further studies are required to explore the suggested effect of the 'creative identity', and of sector-specific family entrepreneurial background.

Practical implications

The support provided by universities can facilitate the transition from early stage ideas to actual graduate business start-up. Issues such as provision of specialist advice and links with external parallel and follow-on support need to be considered.

Originality/Value

University start-up units provide an important contribution to the development of graduate entrepreneurs and their role in the growth of national and global economy. Suggestions for improvements in performance, such as closer links with external business development agencies and support providers, are discussed.

Keywords Student and graduate business start-up, Regeneration, Entrepreneurship education

Paper type Research Paper

Introduction

Graduate entrepreneurship in the UK and Europe has been seen as a vital source of competitiveness and a possible stimulus for economic growth and development of a future knowledge-based economy (BIS, 2010; BERR 2008; European Commission, 2006, 2008). It is particularly important to towns and cities such as Barnsley in South Yorkshire of the UK whose economy is largely dependent on public sector employment and is lacking the critical mass of new start up and VAT registered businesses. Barnsley has itself identified the need to increase the number of graduate businesses as described in more detail below.

Although graduates are more likely to be involved with early-stage entrepreneurial activity than non-graduates (Kwong et al., 2007) and to be owners or founders of high growth companies (NCGE, 2008), they are also more likely to close businesses to return to paid employment before their businesses become fully established (Kwong et al., 2007). There are further issues with attracting larger numbers of Higher Education students into an entrepreneurial career in the first place (Weaver et al., 2006; Dubit, 2009), and converting intent whilst a

student into actual business start-up after graduation (Robinson and Collins, 2003). It is therefore important to understand what drives students and graduates to explore self-employment and business start-up, what constraints and enablers are likely to be encountered during the early stages of graduate business start-up, and what support systems can be put place to increase the likelihood of conversion into an established business with growth potential.

This paper will explore the career and self-employment intentions of 7 graduates in 5 potential to nascent businesses looking to start-up in the creative and digital industries. Through initial questionnaire and later stage semi-structured interviews, it will probe emerging perceptions of career aspirations; enablers and constraints to self-employment; opinions on the support and development opportunities offered by their graduating university – University Campus Barnsley of the University of Huddersfield - and the wider business support available in Barnsley; and any perceived gaps in provision.

Previous research and policy papers in relation to the drive for graduate entrepreneurs and enterprise education to stimulate economic growth; enablers and constraints to student intent and graduate entrepreneurship; and support for Barnsley's graduate entrepreneurs will be explored in the next section.

The Role of Graduates in Stimulating Enterprise and Economic Growth

In 2002 the Global Entrepreneurship Monitor (GEM) showed the UK's entrepreneurial activity to be in the bottom half of the studied nations (Reynolds et al., 2002). Around the same time, the Small Business Service recognised that enterprise and entrepreneurship were crucial to boosting productivity, increasing competition and innovation, creating employment and prosperity, and revitalising communities. The role of small business was emphasised as a major contributor to the health of the economy and to the diversity of opportunity in society. A policy framework was published for a Government-wide approach to foster enterprise that identified seven strategic themes as key drivers for economic growth, improved productivity and a wider involvement in enterprise for all. These included building an enterprise culture, encouraging a more dynamic start-up market, and building the capability of small business growth (SBS, 2002).

In 2008, the Department of Business, Enterprise and Regulatory Reform reported on the Government's renewed strategy and vision to make the UK the most enterprising economy in the world and the best place to start and grow a business (BERR, 2008). It laid out a new enterprise policy framework around five separate but interlinked themes as key enablers for the country's enterprise performance: culture of enterprise, knowledge and skills, access to finance, regulatory framework, and business innovation. The report highlighted the need for enterprise education from primary to tertiary education, the Government's vision of inspiring an enterprising approach among students and graduates, and the promotion of innovation as a core driver for enterprise. The current Government laid out a similar vision in July of their first year of office (BIS, 2010). Here the need for an enterprising culture in which everyone with talent is inspired to take up the challenge of turning their ideas into successful enterprises, and the need for enterprise education - including within Higher Education - was reiterated. The latter drive for enterprise education within Higher Education was an element of the recent White Paper for HE too (BIS, 2011), and universities' commitment to student entrepreneurship has been praised (HEFCE, 2011). European policy has also stressed the need for entrepreneurship education and university engagement in the drive for economic growth (European Commission, 2006 and 2008).

As described above, graduates are seen as an important resource for regional, national, and European governments with graduate entrepreneurs repeatedly recognised as vital to innovation and economic growth (Matlay, 2011; BIS, 2010; BERR 2008; NCGE, 2008; European Commission, 2006, 2008; Gibb 2005; see also Kuratko, 2005, for a US perspective). In 2005, the rate of early stage entrepreneurship reported to GEM in the UK was higher in graduates than non-graduates for both nascent entrepreneurs (those actively exploring business start-up for more than three months; graduates 4.5% v 2.5% for non-graduates), and baby businesses (wholly or partly owned businesses than have been funding a salary or turning a profit for less than 42 months; 4.2% v 2.5%). Graduates were also more likely to own established businesses (turning a profit for more than 42 months; 5.7% v 4.7%) than non-graduates (Kwong et al., 2007). In addition to having a higher rate of business start-up than non-graduates they are more likely to drive growth: 70% of the fastest growing businesses were founded or managed by graduates with annual average sales growth of 111% (NCGE, 2008). Rae et al. (2010; see also Rae 2008) stated that the need to rebalance the economy and to create new business ventures, sources of wealth creation and employment means that the role of Higher Education in stimulating student and graduate entrepreneurship cannot be overstated - they are the entrepreneurs of the present and the future.

Enterprise and Entrepreneurship in Higher Education

Throughout the 1980's universities were encouraged to participate in programmes that would raise students of enterprise and assist them to start their own business (Kirby, 2006) but during the 1990s this declined somewhat. In 1997 the National Committee of Inquiry into Higher Education (Dearing, 1997) 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 (Universities UK, 2000), 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 HEI's to contribute to the development of entrepreneurial and enterprising staff, students, and graduates (Davies et al., 2002).

Entrepreneurship through education was seen by many policy and strategy leaders as a positive venture, however the growth in the early 2000s did not appear to be co-ordinated or have a consistent approach with most curriculum-based programmes being offered through Business Schools (NCGE, 2008; McKeown et al., 2006; Matlay, 2005; ISBA, 2004; see also Brush et al., 2003 for provision in the US). Entrepreneurship education programmes respond on the one hand to an increasing interest from students about entrepreneurial careers and on the other hand to an increasing awareness from public authorities about the importance of entrepreneurship as a contributor to economic development (Fayolle et al., 2006). ISBA (2004) argued that there was a need to develop programmes tailored to the specific needs of target markets, rather than providing generic courses. This should include all facets of enterprise and entrepreneurship education: curriculum based, extra-curricular activity for students, and university-based business start-up support for students and graduates.

Parallel with the increasing calls for enterprise education, student numbers in UK Higher Education went through a large expansion in the 2000's, justified by the Government on economic grounds and assumptions about a future knowledge based economy (Holden et al., 2007). However, in 2008 and 2009 graduates had to contend with gloomy predictions of a serious shortfall in the number of graduate jobs available when they finished their degrees (e.g. High Fliers Research, 2009). The situation improved in 2010 (High Fliers Research, 2011) but with level growth and uncertain economic times ahead, it is not clear if this situation will continue. The loss of public sector graduate jobs is likely to be particularly acute meaning that graduates will require higher levels of skills in business and enterprise to compete in the changing job market, or to create self-employment opportunities and employment for others (Rae et al., 2010). Barnsley with its high proportion of public sector jobs is likely to be hit hard.

Constraints and Enablers to Entrepreneurial Engagement

Although there is evidence that the success of a venture is related to educational attainment, it would appear that entrepreneurial intent decreases at the highest levels of education (Weaver et al., 2006). A recent study of young people at a regional level in Yorkshire and the Humber (Dubit, 2009, commissioned by Business Link) echoed Weaver's pattern in the US showing that there is a drop-off in business aspiration for the region's students in Higher Education. The results lead Dubit to recommend that there should be a reduced focus on the region's universities as centres for entrepreneurship and that Business Links' efforts here should be abandoned in preference to lower levels of education where limited funds might be of more use. There is also a mismatch between students' rates of intent for self-employment and actual business start up. For example, although student intent to start-up in self-employment at some point was in excess of 60% in two Leeds-based Universities in early 2000's, and more than 26% intended to start-up within three years (Robinson and Collins, 2003) the actual rate of early stage graduate entrepreneurship in Yorkshire and Humber in 2005 was 10.2% for those graduating before 2000, and 5.6% for those graduating after 2000. The national rates were 8.9% and 7.3% respectively (Harding, 2007).

Looking at UK GEM data in more depth, Kwong et al. (2007) 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 society; graduates were also more likely to close businesses when things did not turn out as expected. 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 intent (Greene and Saridakis, 2007), and actual business start-up (Blackford et al., 2009). It would therefore appear that university-based enterprise education and start-up support programmes are vital to overcome negative attitudes towards an entrepreneurial career and loss of potential entrepreneurs to the job market.

The reasons for engaging with entrepreneurship and the models put forward to explain uptake are varied and complex, there is however a lack of research into the graduate specific experience (Matlay, 2011; Pickernell, et al., 2011; Nabi and Holden, 2008; Nabi et al., 2006; Robertson et al., 2003, Henry et al., 2003). The studies that have been carried out suggest that drivers are likely to include sociological factors and demographics such as gender, social-economic background and ethnicity, but also family background and childhood experiences, family involvement in business start up activities, work experience, and 'displacement of inertia' (Nabi et al., 2006; Reynolds et al, 2002). The balance of enabling and constraining factors will influence individuals' decisions on perceived desirability of the endeavour (for example, poor image, or lack of personal desire) and perceived feasibility (for example, lack of finance, skills or self efficacy to follow through and start up a business; Nabi et al., 2006, Harding, 2007).

Rae and Woodier (2006) completed a research report for NCGE in regard to graduate career choices and entrepreneurship at the University of Derby. They identified a series of constraints and enablers to choosing an entrepreneurial career (Table 1).

Table 1: Constraints and Enablers to Graduate Entrepreneurship from Rae and Woodier 2006

Constraints	Enablers
<ul style="list-style-type: none"> • Limited know-how on setting up a business. • Financial uncertainty. • Relevant work experience. • Limited entrepreneurship careers guidance. • Family discouragement. • Confidence. • Lack of awareness. • Creativity and innovative ideas. 	<ul style="list-style-type: none"> • Provision of sufficient enterprise modules, courses and enterprise events. • Involvement with role models, mentors and entrepreneurs in developing students' business ideas and opportunities. • Feeling the 'Enterprising Experience' from the first year at university. • Relevant work experience, before and during university. • Family background in self employment. • TV Programmes: The Apprentice and Dragons Den. • Flexible learning environment. • Space and facility. • Degree subject to enable vocational skills and development.

Robertson et al. (2003) also conducted a survey of Leeds Metropolitan University students considering business start-up on their perceived constraining and enabling factors. The survey found that in addition to lack of finance, students highlighted motivation (including confidence), the ability to generate viable business ideas, and lack of skills as three of the most constraining factors in starting a business.

The Barnsley Context

For much of the 20th Century Barnsley's economy was based on primary industries, predominantly coal and the associated supply chain activities that supported that sector. The 1980's and 90's saw a collapse of the mining industry and a substantial regeneration effort began to try and revive Barnsley's failing economy. Thanks to initiatives such as Objective 1, Barnsley has received substantial investment in its town centre, employment corridors and communities. Whilst economic recovery from the effects of industrial re-structuring has begun, it still has a weaker economy than the other South Yorkshire boroughs and is largely dependent on public sector employment. Economic growth has been at a slow rate with a relatively low level of established business. In 2005, GVA per head of adult population in Barnsley was £12,277 compared to the Yorkshire and the Humber regional average of £15,372; VAT registrations per 10,000 adult population (mid-year 2006) averaged 26 compared to the regional average of 31; 86.2% of VAT-based enterprises were micro

businesses (1 to 10 employees) and 33.5% were under 3 years old; and the number of employing units per 10,000 adult population in Barnsley in 2006 was 230 compared to 247 in South Yorkshire and 308 in Yorkshire and the Humber (MTL, 2007). If Barnsley had had the same rates of enterprises for their population as the Yorkshire and Humber region in 2006, they would potentially have had 1,500 more businesses providing additional employment and contributing to economic growth (MTL, 2007).

A Barnsley-specific enterprise strategy was developed following a 2007 report called “The Growth Plan for Barnsley’s Economy” (MTL, 2007). The growth plan stressed the need for enterprise development and the stimulation of an enterprise culture. It suggested that one possible method to address this shortfall of businesses and generate further employment in the borough is to create a fertile environment where entrepreneurial graduates can start-up and grow businesses.

Although the landscape is in a period of change, responsibility to implement European and UK Government policy (see below) in UK regions has most recently been in the hands of the Regional Development Agencies with Barnsley coming under the auspices of Yorkshire Forward (YF). YF has a good record in the promotion of enterprise as a key economic driver (Yorkshire Forward, 2006) with the region being recognised in the 2007 NCGE survey on enterprise and entrepreneurship in Higher Education as having the highest university enterprise mission in the UK (NCGE, 2006, p7). Much of the university based extra-curricular activity has been driven by initiatives such as the YF Single Pot funded regional Graduate Entrepreneurship Project, now being taken forward part-funded by the European Regional Development Fund (ERDF). Student and graduate entrepreneurship activity in Barnsley has been supported since 2009 by a second ERDF part-funded project called Enterprising Barnsley. Going forward, the responsibility for the enterprise agenda will fall to the Sheffield and Leeds City Region Local Enterprise Partnerships, both of which include Barnsley within their area of influence.

Enterprising Barnsley and the Barnsley Business Mine

To help bridge the gaps of the economic statistics for Barnsley described above and to stimulate development, economic growth and employment, Barnsley Metropolitan Borough Council (BMBC) produced a number of key themes which set the prime objectives to grow Barnsley’s economy. One of those key themes is ‘Best Place to Grow a Business’ which concentrates on trying to generate and attract businesses that will utilise the new capital developments and create jobs (MTL, 2007). The Barnsley Development Agency were charged with implementing the theme and invited key partners to join an Enterprising Barnsley Steering Group in early 2008 to discover possible methods of achieving the aims established in the growth plan. The steering group consisted of representative of the Barnsley Development Agency, the Barnsley Rotherham Chamber of Commerce, the Barnsley Business Innovation Centre, the University of Huddersfield, and Business Link Yorkshire. This led to a successful application to YF for £4.7m of Single Pot, ERDF, and Working Neighbourhood Funds to establish integrated business support for innovative and high growth businesses enabling them to grow more quickly, to promote a more enterprising and entrepreneurial culture, and to support the growth of all businesses at start-up and early stage and those with growth potential (BMBC, 2008). Business Link Yorkshire were not included as partner in Enterprising Barnsley as they were contracted separately by YF to provide general business start-up support but they continued to sit on the Steering Group to provide regional oversight and information on the support they could additionally offer to Barnsley business.

Barnsley is fortunate to have a university presence in its town centre through the University of Huddersfield’s University Campus Barnsley with around 1600 student registrations. The University currently engages with graduates and students who wish to start up their own businesses through the Barnsley Business Mine, part-funded by ERDF as a partner in the Enterprising Barnsley Programme described above. The Barnsley Business Mine promotes entrepreneurship to students and supports current students and graduates actively looking to start-up in business, self-employment, or social enterprise, facilitating the transition from first ideas to business creation, to sustainable business. Support is provided through inspirational events and showcase materials, up to 12 months of one-to-one business advice and personal coaching, hot desk office space and access to office equipment. Micro-finance is also available through proof of concept grants (up to £1000), and start-up grants (£2,400, spread over 6 months). Links with the Enterprising Barnsley programme enable signposting to growth support at appropriate points in the student or graduate business journey.

This study will build on previous research to investigate the constraints and enabling factors that influenced seven recent graduates of the University of Huddersfield in their choice to start their own business, and through into the early stages of business start-up in the creative and digital industries in Barnsley. It will look at the participants’ experience of internal and external business advice and ask what additional support the Barnsley Metropolitan Borough Council and the University of Huddersfield might look to provide to assist

graduates with business potential in the future to overcome constraining factors and to make Barnsley a fertile environment where entrepreneurial graduates can and want to start up businesses.

Methods

Seven nascent graduate entrepreneurs in five early stage start-up businesses completed an initial questionnaire and follow-up in depth interviews. Six of the participants were in receipt of a £2,400 start-up grant awarded to the five businesses by the Barnsley Business Mine in 2009-2010 as part of the Enterprising Barnsley programme; one additional participant was the business partner of a grant award winner, taking forward a related but different idea. All participants had either completed their final year exams or were recent graduates of the University of Huddersfield with six of the seven studying or having graduated from University Campus Barnsley when the research project commenced. All were full members of the Barnsley Business Mine. A summary of the BBMP's academic background, business ideas and future business goals can be seen in Table 2.

Using an action research paradigm (O'Brien, 1982), questionnaires were distributed and the interviews conducted by the Enterprising Barnsley Programme Manager, who was not previously known to the participants. The participants were informed of the researcher's role within the BMBC and were assured that any response would not affect their support from the Barnsley Business Mine.

The purpose of the questionnaire was to build a profile of the participants emerging perceptions and career aspirations and to gain insight into their experience of the transition from student into career choices. The questions were intended to discover the options participants were considering after the completion of their studies (where appropriate); what factors influenced their decision making; what they identified as barriers to self employment; and previous experience of support and development. The questionnaires were completed near the start of Barnsley Business Mine intervention.

Table 2: Participant information

Name	Age	Degree (BA Hons)	Business Idea	Future Goal
Steve*	20 – 23	Popular Music	Music workshops	Run music workshops in schools
Michael*	24 – 26	Popular Music	Music workshops	Run music workshops in schools
Richard	34 – 36	Art & Design	Photographer	Freelance photographer for sports and events
Chris**	34 – 36	Music Production	Sound Engineer	Run a sound studio
Deborah**	20 – 23	Music Production	Music Workshops	Run music workshops in schools linked to the music curriculum
Dan	20 – 23	Music Production	Music workshops	Run music workshops for pre-school children
Paul	20 – 23	Graphic Design	Graphic Designer and Animation	Be the proprietor of his own graphic design company specialising in motion graphics

* and ** are business partners

Five semi-structured face-to-face interviews, one per business, were conducted with participants near the end of the 12 month support period to compare and contrast their initial views with those after formal start-up. The time difference between questionnaire and interview was around 10 months. Semi-structured interviews were adopted to cover the pertinent areas of research and allow flexibility for the participants to respond and discuss any issues they had concerning the support they had received. Questions explored emerging perceptions of career aspirations; enablers and barriers to self-employment; opinions on the support and development opportunities offered by the Barnsley Business Mine, Enterprising Barnsley, and the wider business support available in Barnsley; and any perceived gaps in provision.

The aims of the study were:

1. To understand and discuss in detail the push and pull factors in relation to graduates setting up their own businesses

2. To gain further insight into perceptions of enabling and constraining barriers to starting a graduate business
3. To understand what assistance the participants and other graduate entrepreneurs need from University start-up units and wider business support agencies to help them success in business

Results

Initial Questionnaire

Gender, Age, Ethnicity, and Entrepreneurial Background

As can be seen in Table 2 above, six participants were male and one female, with five of the participants younger than 26 and two in the age range 34-36. All participants were White British in line with the ethnic profile of the borough where 99% of the population are white (BMBC, 2009). Two of the seven participants identified that they had come from entrepreneurial backgrounds.

Career Aspirations

Four of the seven participants reported that they had been considering self-employment when they started University. Two participants were considering looking for a full time position in employment, whilst one participant was unsure. On completion of their studies the number intending to pursue self-employment had increased to four; three were still undecided when they graduated but chose to explore the option of self-employment with the Barnsley Business Mine.

The business ideas of the participants matched specialisms of University Campus Barnsley with five of the seven setting up music-related businesses. One participant was starting-up as a sports/events photographer and one in motion graphic design (Table 2). All felt confident that they even though they were in the early stages of the Barnsley Business Mine membership they would be starting businesses in Barnsley and trading at the end of the process.

Other sources of support

Three participants had contacted Business Link Yorkshire. The remaining four participants had only sought support from the Barnsley Business Mine.

Obstacles

Four participants reported that slow growth was likely to be the main temporary or long-term obstacle to setting-up their own business. The remaining three participants thought it would be access to finance.

Follow-On Interviews

Table 3 summaries the constraints and enablers identified by participants during the interviews. These will be explored in more depth below.

Constraints on Graduate Business Start-Up

When interviewed towards the end of their formal Barnsley Business Mine support, participants reported that constraining factors included lack of access to finance, contacts, and specialist advisory support. Slow growth was not reported here despite being highlighted in the earlier questionnaires; access to contacts and specialist advisory support had emerged as a constraining factor over the course of the intervention.

In accordance with other studies (Robinson et al., 2003; Rae and Woodier, 2006; Kwong et al., 2007), lack of finance was raised as a constraining factor either for provision for capital equipment or to pay bills in the early stages of start-up. This was partly mitigated for at least two of the five businesses through the award of a start-up grant.

The [start-up grant] money has been extremely helpful and got us going. We have spent every penny we have been given. Without that we would have to borrow a lot of money

Steve

Table 3: Participant reported constraints and enablers before and during business start-up

Constraints	Enablers
<ul style="list-style-type: none"> • Lack of finance • Initial lack of general business skills • Access to specialist advice and contacts • Confusing interactions with external support agencies • Experience of family entrepreneurship 	<ul style="list-style-type: none"> • Confidence and attitudes towards risk and control • Innovative and creative ideas • Business partner mentoring and support • Degree subject to enable vocational skills and development • Displacement of inertia • Potential for wealth creation • TV Programmes: Dragons Den • General support provided through the Barnsley Business Mine • Timely and stage-appropriate interactions with external support agencies

Lack of initial general business skills were seen as a potential constraint, but one that can be overcome. Richard noted that starting and running a business is “like a jigsaw puzzle”, whilst Paul explained “As a creative I needed assistance in regards to tools to actually set up and run business”.

Participants were particularly concerned about the lack of creative and digital industry sector-specific business advice available within and beyond the Barnsley Business Mine.

When you are trying to get your vision across and your ideas aren't being understood or received its frustrating ... there is very little expertise in Business Link and the Business Mine to some extent when it comes to our field and so there is lack of people who can advise us.

Chris

A further constraining factor of note is how the Barnsley Business Mine interacts with external business support agencies. The Barnsley Business Mine considers input from other professionals to be important for the development of graduate business through access to wider networks, specialist provision, and loans and grants. However, two of the participants raised issues on the quality, necessity and timing of external involvement, particularly that of Business Link Yorkshire. There was particular concern that external business support was driven by the need to meet targets rather than support the specific needs of the business owner.

Business Link are coming from the angle that we need numbers to sustain our viability whilst the Business Mine look at it that we are here to support...there is a push and pull between the two and in the initial stages it causes confusion and can slow you down.

Chris

Rather than being the enabling factor suggested by the literature (e.g. Rae and Woodier, 2006), having an entrepreneurial family background was seen as a potential constraint for the two affected participants who had seen it a source of family friction due to the associated long hours and stress.

Enablers to Graduate Business Start-Up

Signs of confidence and independent personality traits were in evidence during the interview process. This is in line with the literature review conducted by Nabi et al., (2006) who highlighted personality traits such risk-taking propensity, innovativeness, need for independence and confidence as factors that affect nascent graduate entrepreneurs to venture into self-employment. However, unlike Rae and Woodier (2006) and Robinson et al., (2003) they were enablers here.

It will be risky and for me that is a good thing. I love risk. I don't like mundane I like my days to be completely chaotic ... I am a creative individual and sometimes that

creative part of me creates a bit of havoc but generally for myself it is about the hustle and bustle the variations of the role the risk factor.

Chris

Hopefully I will make more money and be in control. And be able to do what I want to do. It outweighs the negatives. I don't class it as work as I enjoy it and that's the big key factor.

Richard

The ability to form innovative or creative ideas was an enabling factor in this study that encouraged participants into self-employment. This is again contrary to research such as that by Rae and Woodier (2006) and Robinson et al., (2003) who found that creation of ideas is a constraining factor to starting a business.

The idea for my business came before I knew I wanted to set up a company.

Paul

I had ideas [from] what I learnt on my degree... I put these ideas on paper and took it to a number of teachers...but I wasn't clear on how to implement them.

Dan

The enabling nature of creative idea generation result may be a product of this particular set of participants for who creativity was part of their entrepreneurial identity (see Chris's comment on risk above). This is in line with suggestions that entrepreneurship and innovation are linked to creativity, and that creative individuals are more likely to engage in entrepreneurial behavior (Hamidi et al., 2008; Penaluna and Penaluna, 2009).

A further example of this is given by Paul:

The thing that made to do it was as a creative I wanted to be in charge of my destiny. I wanted to be in charge of the project and make them look like the way I want them to look but still to satisfy the needs of the client. But it's nice to have that creative influence. I also like the idea of being my own boss.

The two sets of participants who were in business together had faith and confidence in each other; this co-mentoring seemed to be the overriding influence that encouraged them to choose to set up in business and engage with the Barnsley Business Mine. Note that a module of study is also mentioned in the quote below confirming that education can be an enabling factor in encouraging business start-up as a potential career option.

We completed a module called 'Music and Education' and as part of the course we had to work as a pair. I knew Steve so we worked together and it worked well, so for the module afterwards we worked individually. Our course tutor recommended that we work together again because it worked well last time and it just seemed to work. As it seems to be an effective partnership we thought we progress our ideas through the Business Mine.

Michael

For Deborah, the support and encouragement from her business partner, Chris, was particularly important in her decision to starting up her part of the business offer.

I had a passion for education and Chris wanted to set up a recording studio so we decided to put our ideas together ... I wouldn't have done it if I haven't met Chris. I always wanted just to be a teacher and Chris said you can be a teacher but you don't necessarily have to be in a school.

Another factor that influenced three of the participants' decisions to start businesses was the state of the economy and lack of jobs. This was a deciding factor for three of the participants to start their own companies and for two included 'displacement of inertia' after being made redundant.

With regard to economic climate it is scary times for everybody. I worked in industry for thirteen years whilst studying part time. I was made redundant back in September and in some respects it was a good kick in the backside to get moving

forward with my business ideas. Whilst we were working we had a safety net with an income coming in that has now been taken away so I have had to step my game up and push forward with the business.

Chris

The major factor in my trying to set up my own company was that after graduation I was trying to find a job but I couldn't get one. So I thought well I might as well try and set up my own company.

Dan

It may be argued that social and cultural attitudes in the UK pose the strongest barrier to entrepreneurship due to negative attitudes towards wealth creation and business start-up as a career option (e.g. Kwong et al., 2007). Here, the potential for wealth creation for personal gain and to employ staff was seen as a positive enabler rather than a negative constraint. Money has been mentioned in several of the quotes above and can be seen in a further quote from Deborah below. Deborah also mentioned the television programme, Dragons Den, also seen as an enabler by Rae and Woodier (2006).

The only thing that influenced me was Dragons Den, seeing the potential to make money.

Deborah

The over-arching enabling factor was the Barnsley Business Mine itself. The cocktail of encouragement, advice, and support it offers to the participants has received positive feedback through this study. Even though the aim of the paper wasn't to evaluate the Mine, the intensive business advice mixed with the small grants, seems to negate the majority of the constraining factors that have been identified. Steve stated that the "Mixture of assistance is just right". For Deborah, "We are at that stage already we don't rely on the Business Mine anymore. They have given us everything we need". Whilst Dan stated "I am planning for the future, once the Business Mine has finished I should have the foundations in place to succeed".

One business stated it would not have started up with the encouragement of the Mine which helped them take the first step. Two businesses felt they may have started up, but that it would have been harder without the support they received, and although two businesses stated they would have started up without the help of the Barnsley Business Mine they still valued the support they had received.

Although initially a constraining factor, external support from Business Link has become an enabler for Chris. The key aspects would appear to be the timing and the fact that the offer is linked to a financial grant rather than non-specialist business advice.

Business Link can play a pivotal role for us at the moment by supporting us in the next steps by grants which they run, ... they have got a £250 voucher that is up for grabs [for initial accountancy support] that would really benefit us as this time. That's the kind of next step with Business Link.

Chris

Future plans

All five businesses felt they were likely (one), very likely (two), or definitely (two) going to continue their business. Four of the five had no apprehensions for the success of their business. The increase in likelihood of self-employment as a career choice from the initial questionnaire suggests that that the Barnsley Business Mine equipped the participants with the skills and confidence they need to be successful in at least the early stages of business and may have offset the potential for closure reported in previous studies (e.g. Kwong et al., 2007). The majority of the participants stated that they would 'just get on with it' after the Barnsley Business Mine support period comes to an end although some reservations were reported.

It will be daunting not to be able to refer back into the Business Mine but you just have to get on with it.

Michael

Improvement of Business Support Opportunities

Networking, additional specialist and follow-one advisory support, and a permanent and bigger Barnsley Business Mine were all raised as areas that would help the current and future University Campus Barnsley students and graduates looking to start-up in self-employment. The need for mediated contacts, either from the Mine or from the BMBC was also raised. Expectations of the beneficiary would need to be managed if the request was not appropriate or able to be put into action to prevent dissatisfaction with the service.

Contacts into schools would be the biggest help. That is our customer base so if they could assist us in getting us into a handful of schools that word get the word out there. The push from the Councillor would help us get into schools.

Steve

When asked what would attract similar companies into Barnsley, the participants suggested grants, additional and better-equipped courses, and ongoing support from the university as factors which would attract and make entrepreneurs stay in the borough.

Discussion

The participants in this study are all recent graduates who successfully completed an undergraduate degree that could be described as 'creative' and who were establishing businesses in the creative and digital industries sector. This reflected the nature of those requesting to join the Barnsley Business Mine and was not a condition of support or entry into the study. The creative emphasis, however, may have had an influence on the constraining and enabling factors identified here and may explain why the reported results differ in some aspects from those previously described in the literature.

Personality traits influenced all of the participants to seek self employment, specifically risk taking, innovativeness and the ability to generate creative ideas, need for independence, and confidence. Rather than being constraints suggested by previous research (e.g. Rae and Woodier, 2006; Robinson et al., 2003), they were an enabler here. This may suggest either that those with a 'creative identity' or those looking to set up in the creative industries are 'different' to a more general cohort - perhaps more at ease with uncertainty and generating ideas - or that different stages of development have been investigated. Hamidi et al., (2008) found that high scores on a creativity test were positively correlated with entrepreneurial intent, but did not explore actual start-up. Further research is needed here.

Sociological experiences, such as an entrepreneurial family background and childhood experiences, co-mentoring of business partners and inspiration from a course of study again influenced the participants to seek self employment. Here, the pattern was mixed with entrepreneurial family background being seen as more of a constraint than an enabler, again contrary to previous research and assumptions. There was a small cohort of participants here, however, and the family background result may have been due to a small number of bad experiences which may have been averaged out in a larger group. It was not clear if the family experience had been in a similar sector to that of the participants. It would be worth exploring if sector-specific family experience might have an interactive effect on nascent graduate intent and actuation. Co-mentoring by business partners was particularly important to those setting up in business as a pair, potentially as a way of sharing sector-specific information and enthusiasm that they were unable to find elsewhere through lack of specialist advice and external networks. As previously suggested by the literature (e.g. Nabi et al., 2006; Reynolds et al, 2002), displacement of inertia influenced several of the participants to seek self employment after being made unemployed or not being able to find paid employment.

Social and cultural attitudes towards entrepreneurship and wealth creation as a significant barrier to entrepreneurship were not issues with the participants in this study, contrary to other reports (e.g. Kwong et al, 2007). With the exception of the potential for long hours and stress, participants saw personal and business-related wealth creation and entrepreneurship-related risk, and control as enabling factors.

Lack of business acumen was an initial barrier for most of the participants, but was overcome as they progressed further on the Barnsley Business Mine programme. Support from university-based start-up units may therefore be important in facilitating the transition from student or recent graduate to small business owner, and may help mitigate negative attitudes towards entrepreneurship and the propensity of nascent graduate entrepreneurs to close businesses early to take up paid employment. Indeed, the interviewer personally concluded that the idea that the participants could complete their studies and then start their own businesses does not seem feasible without the intensive support through the Barnsley Business Mine.

Sector-specific advice and support, however, could not be adequately provided by the general business advisors that the Mine employed and help was sort from Business Link Yorkshire. BLY was also unable to provide the specific advice that participants needed which put strain on the young businesses looking for help that was not available. Links with alternative sources of support through developing Enterprising Barnsley networks in creative and digital sectors will help with this going forward, but does raise the issue of how specialist knowledge is communicated and shared with new businesses when current support from agencies such as Business Link close and we move into a new era of free online general business support and paid-for advice going forward. Whilst funding for Enterprising Barnsley is available, relationships between the participants, the Barnsley Business Mine, and external business support provision needs to be timely and appropriate. This means that communication between stakeholders, management of expectations, and an understanding of each other's needs and priorities is vital. The priority, however, has to be the needs of the entrepreneur and their business.

All stakeholders in the support and development of Barnsley-based nascent graduate entrepreneurs would like to see the Barnsley Business Mine extended in size, duration, and for a full time presence to be maintained at University Campus Barnsley. However, activity in Barnsley - and indeed in many areas across the UK - is currently dependent on internal and external funding through HEFCE, HEIF, ERDF, and local council funding streams. These funding streams are at risk on a national level from funding cuts, either directly or through the availability of match funding (see also Matlay 2011 for stakeholder perceptions of Government policy and funding cuts on entrepreneurship education).

From the higher education perspective, although the current round of HEIF funds for knowledge transfer explicitly includes the use of funds for enterprise education and student and graduate business start-up, no metrics on these aspects are included in the funding formula, despite being collected as part of the Higher Education - Business and Community Interaction Survey (HE-BCI) which informs the HEIF process. This has lead some institutions to consider reducing student and graduate entrepreneurship support in favour of business development and enterprise income generation that are including in the formula and that will directly affect the amount of HEIF funding an institution receives. Further, although enterprise education is mentioned in the recent BIS White Paper for Higher Education (BIS, 2011), there is a sole emphasis on employment statistics and salary information in the Key Information Set that universities will be required to provide to prospective students; no metrics are currently to be collected or allowances made for self-employment. As self-employment will necessarily reduce graduate employment rates and is highly likely to reduce salary statistics at least at the six month census period, there is a risk that too successful promotion of student and graduate entrepreneurship will have a detrimental effect on future applications and teaching income.

From the Local Government perspective, although initiatives such as the Barnsley Business Mine may increase the success of graduate start-up - all of the businesses in this study are still active more than 12 months after start-up – the numbers of businesses they help create and sustain may not be enough to have a significant impact on the number of VAT registered companies or unemployment levels in the locality. If an impact is made, it may not be see for many years. There is also a potential that graduates, being relatively mobile, will relocate their business more readily than non-graduates meaning that any early-stage investment is lost. This has been seen in the group of participants described here since the research was conducted. Despite all participants committing to Barnsley on initial application to the Barnsley Business Mine, and all but one stating at interview that they intended to continue their business in Barnsley (the fifth business was exploring moving to London), three of the five have moved outside the borough for family reasons or to sit within larger cities which the graduate entrepreneurs perceive to have a more established reputation for the creative and digital industry and a greater potential for growth. More work needs to be done, both from the start-up unit and local government, in encouraging supported graduate businesses to key into the local business community, and to encourage graduates from other universities into the area. Despite these issues, there is a strong commitment to continue the work of the Barnsley Business Mine out of University Campus Barnsley.

Conclusions

The research study reported here identified constraining factors to graduate business start-up to be the slow growth of the economy, lack of business acumen, contradictory and poor advisory support from external agencies, lack of sector-specific mentors and advisory support, lack of finance, and experience of familial entrepreneurship. The perceived enabling factors were co-mentoring from business partners, content of undergraduate study programme, financial gain, creativity and innovative ideas, control and risk taking, and the Barnsley Business Mine initiative as an overarching package of support.

Although participants' experience of the Barnsley-specific programme reported here was generally positive, there was room for improvement, particularly in the linkages between university-based and external business support provision. Strong linkages between universities, local government, and wider business support initiatives is needed to better support nascent graduate entrepreneurs and to identify and drive joint economic regeneration activity into the areas of most need.

Some additional areas for future exploration emerged. These included further research on the concept of the creative identity, and whether differences in the pattern of constraints and enablers from previous studies could be explained by this concept, or emerge at later stages of business development. Further work could also explore whether there is a sector-specific dimension of family experience on graduate entrepreneurial intent: would family experience have been an enabler rather than a constraint here if it had been in the creative industries too? Could this have offset the need for external industry-specific mentors and advisors?

The results of this study have given confidence that university-based business start-up units are vital to convert initial intent to actual graduate business start-up and ongoing success. Graduates can contribute to entrepreneurial culture change and drive economic growth and - although there is likely to be a time lag before this can be seen in metrics such as VAT registrations and there is a risk that early stage investment may benefit other locations if the business moves - university-led business support needs to continue and be enhanced where possible.

References

- BERR (2008). *Enterprise: Unlocking the UK's Talent*. <http://www.berr.gov.uk/files/file44992.pdf>. Accessed July 2011.
- BIS (2010). *Strategy for Sustainable Growth*. <http://www.bis.gov.uk/assets/biscore/corporate/docs/s/10-1058-strategy-for-sustainable-growth>. Accessed July 2011.
- BIS (2011). *Students at the Heart of the System*. <http://www.bis.gov.uk/assets/biscore/higher-education/docs/h/11-944-higher-education-students-at-heart-of-system.pdf>. Accessed July 2011
- BMBC (2008) *Enterprising Barnsley ERDF Business Plan*. Internal document.
- BMBC (2009) *Annual Population Survey (July 2008-June 2009)*. Internal document.
- Blackford, B., Sebor, T., & Whitehill, T. (2009). The Effects of Collegiate Entrepreneurship Education on Post-Graduation Startup of New Ventures: A First Look. *International Review of Entrepreneurship*, Vol. 7, No. 3, pp 1-26.
- Brush, C.G., Duhaime, I.M., Gartner, W.B., Stewart, A., Katz, J.A., Hitt, M.A., Alvarez, S.A., Meyer, G.D., and Venkataraman, S. (2003); Doctoral Education in the Field of Entrepreneurship. *Journal of Management*, 29(3), 309-331.
- Davis J., Hides M., and Powell J. (2002). Defining the development needs of entrepreneurs in SMEs. *Education + Training* Vol 44, No 8/9, pp 406-412.
- Dearing, R., (1997). *Higher Education in the Learning Society: The National Committee of Enquiry into Higher Education*. <https://bei.leeds.ac.uk/Partners/NCIHE/>. Accessed July 2011.
- Dubit (2009). *Capturing the Enterprise Potential of Young People Across the Yorkshire and Humber Regions*. Report to Business Link. <http://www.enterprisingyorkshire.co.uk/documents/uploads/Capturing%20the%20Enterprise%20Potential%20of%20Young%20People.pdf>. Accessed July 2011.
- European Commission (2006). *Implementing the Community Lisbon Programme: Fostering Entrepreneurial Mindsets Through Education and Learning*. <http://eurlex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2006:0033:FIN:en:PDF> . Accessed July 2010.

- European Commission (2008). Entrepreneurship in Higher Education, Especially in Non-Business Studies: Report of the Expert Group. http://ec.europa.eu/enterprise/policies/sme/files/support_measures/training_education/entr_highed_en.pdf. Accessed July 2011.
- Fayolle, A, Gailly B, Lassas-Clerc, N (2006). Assessing the impact of entrepreneurship education programmes: a new methodology. *Journal of European Industrial Training*. Vol. 30, No 9, 2006, pp. 201-720.
- Gibb, A. (2005). Towards the entrepreneurial university: entrepreneurship education as a lever for change. *National Council for Graduate Entrepreneurship, Policy Paper*, NCGE: Birmingham.
- Greene, F.J., and Saridakis, G., (2007). Understanding the Factors Influencing Graduate Entrepreneurship. *National Council of Graduate Entrepreneurship, Research Report 001/2007*. NCGE: Birmingham.
- Hamidi, D.Y., Wennburg, K., and Berglund H., (2008). Creativity in Entrepreneurship Education. *Journal of Small Business and Entrepreneurship Development*. Vol. 15, No. 2, pp. 304-320.
- Harding, R., (2007). Graduate Entrepreneurship in the UK: Summary Report from GEM UK Data. *National Council of Graduate Entrepreneurship, Research Report 003/2007*. NCGE: Birmingham.
- HEFCE (2011). *Opportunity, choice, and excellence in Higher Education*. <http://www.hefce.ac.uk/aboutus/stratplan/Strategystatement.pdf>. Accessed July 2011.
- Henry, C., Hill, F., and Leith, C. (2003). *Entrepreneurship Education and Training* Ashgate, Aldershot.
- High Fliers Research (2009). The Graduate Market in 2009: Annual Review of Graduate Vacancies and Starting Salaries at Britain's Leading Employers. <http://www.highfliers.co.uk/download/GraduateMarket09.pdf>. Accessed July 2011.
- High Fliers Research (2011). The Graduate Market in 2011. <http://www.highfliers.co.uk/download/GMUpdate11.pdf>. Accessed July 2011.
- Holden R., Jameson S., and Walmsley A. (2007). New Graduate employment within SME's: still in the dark? *Journal of Small Business and Enterprise Development* Vol. 14, No 2, pp. 211-227.
- ISBA (2004) Making the Journey from Student to Entrepreneur - A Review of Existing Research into Graduate Entrepreneurship. *National Council of Graduate Entrepreneurship, Research Paper #001*
- Kirby, D. (2006). Entrepreneurship Education and Incubators: Pre Incubators, Incubators and Science Parks as Enterprise Laboratories. *National Council of Graduate Entrepreneurship, Working Paper 004/2006*. NCGE. Birmingham.
- Kuratko, D.F. (2005), The emergence of entrepreneurship education: development, trends and challenges, *Entrepreneurship Theory and Practice*, Vol. 29 No. 5, pp. 577-97.
- Kwong, C., Brooksbank, D., and Jones-Evans, D. (2007). The State of Graduate Entrepreneurship in the UK: Preliminary Policy Paper Based on GEM 2005 Data. *National Council of Graduate Entrepreneurship, Working Paper 026/2007*. NCGE, Birmingham.
- McKeown, J., Millman, C., Sursani, S.R., Smith, K., and Martin, L.M. (2006); Graduate Entrepreneurship Education in the United Kingdom. *Education + Training*, 48 (8/9), 597-613.
- Matlay, H., (2011). The Influence of Stakeholders on Developing Enterprising Individuals in UK HEIs. *International Journal of Entrepreneurial Behaviour and Research; Special Edition on Developing Enterprising Individuals*. Vol 17, No. 2, 166-182.
- Matlay, H. (2005). Entrepreneurship Education in UK Business Schools: Conceptual, contextual and policy considerations. *Journal of Small Business and Enterprise Development*. Vol 12, No 4, pp 627-643.
- MTL (2007). *The Growth Plan for Barnsley's Economy* http://www.barnsley.gov.uk/0xac16000b_0x00483636 Accessed July 2011.

- Nabi G., and Holden R. (2008). Graduate entrepreneurship: intentions, education and training. *Education + Training*. Vol. 50, No 7, pp. 545-551.
- Nabi G., Holden R., and Walmsley A. (2006). Graduate career-making and business start-up: a literature review. *Education + Training*. Vol. 48, pp. 373-385.
- NGCE (2006) *Enterprise and Entrepreneurship in Higher Education: A Report by the National Council for Graduate Entrepreneurship*. NCGE, Birmingham, UK.
- NGCE (2008). *Developing Entrepreneurial Graduates: Putting Entrepreneurship at the Centre of Higher Education*. A joint report by CIHE, NCGE, and NESTA. Birmingham, UK.
- O'Brien R. (1998). An overview of the methodological approach of action research. <http://www.web.net/~robrien/papers/arfinal.html>. Accessed July 2011.
- Penaluna A., and Penaluna K. (2009). Assessing Creativity: Drawing from the Experience of the UK's Creative Design Educators. *Education + Training*. Vol. 51, No. 8/9, 718-732.
- Pickernell, D., Packham, G., Jones, P., Miller C., and Thomas, B. (2011). Graduate Entrepreneurs are Different: They Access More Resources? *International Journal of Entrepreneurial Behaviour and Research; Special Edition on Developing Enterprising Individuals*. Vol. 17, No. 2, 183-202.
- Rae, D., (2008). Riding Out the Storm: Graduates, Enterprise and Careers in Turbulent Economic Times. *Education + Training*, Vol 50, No. 8/9, pp 748-763.
- Rae, D., Martin, L., Antcliff, V., and Hannon, P. (2010). The 2010 Survey of Enterprise and Entrepreneurship in Higher Education. Presented at 33rd ISBE Conference. London. November 2010.
- Rae, D., and Woodier N., (2006) Graduate Career Choices and Entrepreneurship. *National Council for Graduate Entrepreneurship Research Report 007 / 2006*.
- Reynolds, P., Bygrave, W., Autio, E., Cox, L., and Hay, M., (2002). Global Entrepreneurship Monitor: 2002 Executive Report. http://www.gemconsortium.org/download/1311587888205/WebGlobalGEMReport11.12_1.pdf. Accessed July 2011.
- Robertson, M., & Collins, A. (2003). Developing entrepreneurship in West Yorkshire: West Yorkshire universities' partnership and Business Start-up @ Leeds Met. *Education & Training*, Vol. 45, No 6, pp. 303 – 307.
- Robertson, M., Collins, A., Medeira, N., and Slater, J. (2003) Barriers to Start-Up and Their Effect on Aspirant Entrepreneurs. *Education & Training*, Vol. 45, No 6, pp. 308 – 316.
- Small Business Service - SBS (2002). *Small Business and Government – The Way Forward*. http://www2.accaglobal.com/pdfs/smallbusiness/sb_gov_thewayforward.pdf Accessed July 2011.
- Universities UK (2000). *A Forward Look: Highlights of our Corporate Plan 2001-2004*. <http://www.universitiesuk.ac.uk/Publications/Documents/CorpPlan2.pdf>. Accessed July 2011.
- Weaver, M., Dickson, P., & Solomon, G., (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*. United States Government Printing Office; Washington, US.
- Yorkshire Forward (2006). *The Regional Economic Strategy for Yorkshire and Humber 2006-2015*. Yorkshire Forward, Leeds UK.