The Centre for Graduate Entrepreneurship in Yorkshire, Leeds Metropolitan University

ENTREPRENEURIAL INTENTIONS SURVEY 2005-06

A collaboration between seven of the North of England's Universities

An analysis of the 2005-06 student entrepreneurial intentions survey conducted at Leeds Metropolitan University, the University of Leeds, the University of Huddersfield, the University of Bradford, the University of Hull, Sheffield Hallam University and Trinity & All Saints College

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Locating our survey in context: regional activity to promote enterprise

The current Entrepreneurial Intentions Survey has been developed via the West Yorkshire Universities Partnership, a programme of activity devised by Yorkshire Forward and the four West Yorkshire Universities of Leeds, Leeds Metropolitan, Huddersfield and Bradford, through to the Centre for Graduate Entrepreneurship in Yorkshire (CGEY). The Centre has been funded for the last two years by the Higher Education Funding Council of England (HEFCE) using the Higher Education Innovation Fund (HEIF). The HEIF funding has enabled the partnership to expand and include the Universities of Hull, Sheffield Hallam and Trinity & All Saints College. This Regional Universities Partnership aimed to convert the maximum number of University students into successful entrepreneurs, operating within Yorkshire and Humber. It also aimed to improve the business skills of student/graduate entrepreneurs and promote the adoption of innovation and technology within new and young business ventures. Partner institutions have been successful in developing a conveyor belt of link activities, ranging from business awareness raising through to business creation and sustainable business growth. Moreover, our focused collaborative activities undertaken over the past three years directly relate to the recently published Government Action Plan for small business. Central elements of the Action Plan addressed by our work include:

- Building an enterprise culture;
- Encouraging a more dynamic start-up market;
- Building the capability for small business growth;
- Improving access to finance for small businesses;
- Encouraging more enterprise in disadvantaged communities and underrepresented groups;
- Improving small businesses' experience of government; and
- Developing better regulation and policy (Small Business Service, 2004: 7).

Yorkshire Forward's Regional Economic Strategy (RES) highlights that closer engagement with enterprise is a key objective for the region – in terms of providing the basis for economic growth and regeneration. Specifically, our work has assisted one of Yorkshire Forward's key objectives to achieve a higher business birth rate in the development of new and competitive businesses (Yorkshire Forward, 2003: 26-28). Related work conducted through our partnership has also informed the promotion of enterprise by women (Yorkshire Forward, 2003: 27), the promotion of enterprise for black and ethnic minorities (Yorkshire Forward, 2003: 28), and the creation of a culture in which education and training are more highly valued by individuals and business (Yorkshire Forward, 2003: 39).

Executive summary and rationale for further work

For the survey period 2005-06, 34% intend to either definitely or probably become selfemployed.

Awareness of University-provided business-start up support has been raised to 19% of our students.

Of those students who intend to either definitely or probably become self-employed, 35% said they would do so within 2 years of graduation.

A strong intention to become self-employed

As with previous Entrepreneurial Intentions Surveys, a high proportion of our combined student base intends to become self-employed. For the survey period 2005-06, 34% intend to either definitely or probably become self-employed. Over the entire duration of our five year longitudinal survey period, we have consistently shown over one third of our students intend to become self-employed. Extrapolated out to our whole collaborative student population¹, this would equate to over 57,000 students holding a desire for self-employment within the Yorkshire and Humber region (see Section 1 for further details).

Our message of support and guidance

We are also pleased to report that our message of support and guidance to students is also improving and increasing. In the 5-year period leading up to 2005-06, we have raised student awareness of University-provided business and self-employment support to 19% of all our students. This raised awareness statistic is impressive and is, in part, a result of the strong collaborative relationship developed by seven regional partner Universities, and programme funding provided by the Regional Development Agency (Yorkshire Forward) and the Higher Education Funding Council for England's HEIF2 initiative (see Section 2 for further details).

Helping those who are already self-employed

With 2% of our current student population already self-employed in 2005-06 we are continuing to work closely with a variety of business support agencies, and the students themselves, to establish how we can assist the growth of this number, and how we can continue to support those already engaged in business-related activities. Almost half of our currently self-employed students have been operating their business for at least a year; approximately the same proportion also operate their business within the Yorkshire region.

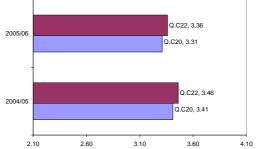
Consistently supporting and encouraging enterprise development

Of those who intend to become self-employed, this year's survey upholds the consistent desire we have found throughout the 5-year annual survey period – 35% of current students have a definite or probable desire to become self-employed within 2 years of graduation from University.

In terms of assistance with progressing to self-employment, 23% of students indicated that help should come from Banks, 11% Parents, 9% Business Link and 6% Universities. It is clear then, that there currently does not appear to be a strong expectation from students that support and other assistance should come from Universities. Our improved promotion work with students is helping to alter this expectation; this could also be strengthened by future funded project work.

¹ Higher Education Statistics Agency data for the year 2004-05 calculated total student numbers for the 7 partner institutions at 171,735. HESA (2006) Students in Higher Education Institutions 2004/05. Gloucester: Higher Education Statistics Agency.

Attitudes towards enterprise and the perception of support for self-employment remain fairly consistent and stable. At a general level, attitudes and perceptions of enterprise and entrepreneurship remain positive compared to previous years. Figure 0.1 below provides that entrepreneurial intent across the collaborative partner institutions remains stable. Fig 0.2 and 0.3 highlight that attitudes towards enterprise and the perception of support for self-employment remains fairly consistent and stable. The risk-taking propensity of our student base has risen marginally (Figure 0.4), whereas the perception of barriers to enterprise (Figure 0.5) have become slightly more pronounced compared to last year.



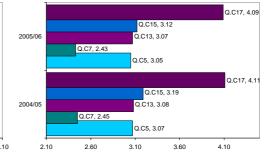


Figure 0.1: Attitude statements – 2004/05 and 2005/06 respondents 'Entrepreneurial intent', mean values

Figure 0.2: Attitude statements – 2004/05 and 2005/06 respondents 'Attitudes towards entrepreneurship', mean values

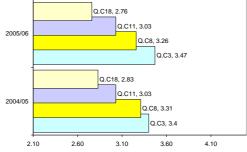


Figure 0.3: Attitude statements – 2004/05 and 2005/06 respondents 'Perceived support factors', mean values

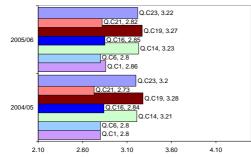


Figure 0.5: Attitude statements – 2004/05 and 2005/06 respondents 'Perceived barriers', mean values

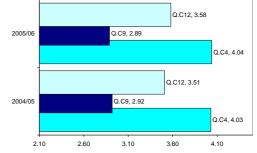


Figure 0.4: Attitude statements – 2004/05 and 2005/06 respondents 'Risk-taking propensity', mean values

Introduction and format of report

This report builds on similar work conducted in previous years (Robertson and Wilkinson, 2005) to enhance the regional understanding of students and their entrepreneurial intentions in order to inform strategic decision-making at an institutional, regional and national level. In particular, the survey satisfies the requirements associated with Yorkshire Forward funding, which aims to encourage regional increases in entrepreneurship.

Substantial elements of this year's report provide comparisons between recent survey periods (2003/04 to 2005/06). These comparisons provide a number of powerful indicators of the partnership's performance and can act as focal points for future directions of related survey work. In order to maintain overall clarity in the analysis we have combined institutional data from the partner institutions throughout the report. Therefore, in a limited number of places (where 2003/04 data are used as comparator points) some comparisons relate only to the four original West Yorkshire partners of Leeds, Leeds Metropolitan, Bradford and Huddersfield University.

In order to explore and examine entrepreneurial intentions, in a useful and policyrelated way, this report is structured around a number of key areas: intention to become self-employed, specific local and national policy considerations, developing entrepreneurial talent, tackling a 'risk-averse' student base, and trends in intention to become self-employed.

Methodology

Building upon work conducted in 2004-05, this survey obtained the views of a broad range of students enrolled on programmes of study with the seven partner institutions of Leeds Metropolitan University, Leeds University, the University of Huddersfield, Bradford University, the University of Hull, Sheffield Hallam University and Trinity and All Saints College. The questionnaire included both quantitative and qualitative questions, and aimed primarily to gather information about the students and the institution they attended. In order to achieve a representative sample of students all institutions observed their own student mix and selected/targeted respondents accordingly. As with the previous year's exercise, questionnaires were administered face-to-face at various locations frequented by students across the partner institutions' campuses. The questionnaire was administered in Semester/Term 1 of the 2005-06 academic year and collected the views of 7012 students.

Drawing upon work conducted elsewhere examining and exploring personality traits, we developed a range of attitude statements to assist with determining whether certain students displayed typically entrepreneurial traits (Brandstatter, 1997: Chen et al., 1988: Luthie and Franke, 2003). We examined attitudes of respondents to a set of statements, rated 1 (not accurate) through to 5 (very accurate). Mean figures were established for each statement and comparisons were made between respondents by intention to become self-employed, gender, age and ethnicity. We ranked our results by highest mean value and assigned our statements to a set of related constructs; adapted from work by Luthje and Franke (2003). The table overleaf presents the statements used, their related constructs and where they are applied in this report. We have omitted to consider statements relating to locus of control (whether actions/interventions are influenced or controlled by the individual or external forces) as we believe that the statements developed by Luthje and Franke are limited and should be expanded upon for our regional use. Future work conducted by the partnership would seek to develop more relevant statements related to this construct area.

The survey was administered in 2005-06 and collected the views of 7012 students.

Construct	Formulation of statements (5-point rating scale – 1=not at all accurate; 5=very accurate)	Figures in this report
Risk-taking propensity	C4-I like to try new things; C9-When I travel I tend to use new routes; C12-I have taken a risk in the last six months.	0.4; 4,7; 4.8; 4.21; 4.22; 5.1
Locus of control	C2-When everything goes right, I think that it's mostly a question of luck; C10-I often feel that's just the way things are and there's nothing I can do about it.	
Perceived barriers	C1-Banks do not readily give credit to start up companies; C6-The law is a barrier to running your own company; C14-It's hard to find a business idea for a business that hasn't been realized before; C16-I don't have the necessary skills to start my own business; C19-I would struggle to raise the capital necessary to start my own business; C21-I lack the confidence to start my own business; C23-The risks involved in setting up a business are too high.	0.5; 5.2
Perceived support factors	C3-Entrepreneurs have a positive image within society; C8-Qualified consultant and service support for new companies is available; C11-The creative university atmosphere inspires to develop new ideas for businesses; C18-My family encourage me to set up my own business.	0.3; 4.5; 4.6; 4.19; 4.20
Attitude towards entrepreneurship	C5-I'd rather be my own boss than have a secure job; C7-You can only make big money if you are self- employed; C13-I'd rather found a new company than be a manager of an existing one; C15-I relish the challenge of creating a new business; C17-I want to make money.	0.2; 4.3; 4.4; 4.13; 4.14; 4.17; 4.18
Entrepreneurial intent	C20-I want to be my own boss; C22-I want the freedom to express myself in my own business.	0.1; 4.1; 4.2; 4.11; 4.12; 4.15; 4.16

(Source: adapted from Luthje and Franke (2003))

Section 1: Intention to become self-employed

19% of those who have a desire for selfemployment <u>expect</u> assistance from Universities to enable this to happen. In the period 2005-06 our regional survey has determined that approximately 34% of our students had a desire for self-employment (see Figure 1.1 below). Moreover, of those who have a strong desire to either definitely or probably become self-employed, 19% expect assistance from Universities to enable this to happen. For over three years we have consistently encouraged at least one-third of our collective student base to hold a desire for self-employment. We believe that, given this excellent baseline, we could do much more.

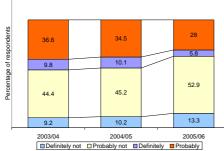


Figure 1.1: Intention to become selfemployed

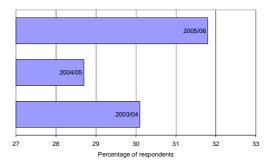


Figure 1.2: School/College developed an interest in enterprise

Our supporting actions:

All partner institutions provide access to business development or incubation space. Many of our incubator units within the partnership have a pre-start area – where those students thinking of starting a business are given facilities and support to encourage them to research and explore ideas before committing themselves to a specific business idea. These business 'generators' play a vital and crucial role in encouraging more people, and especially our younger graduates, to explore the idea of creating their own businesses as an alternative to finding employment.

We are also committed to working with collaborators and partners in school-based phases of education. Figure 1.2 provides that sizable proportions of our enterprise-committed students did something at school/college that ignited their entrepreneurial appetite.

Approximately half of all males surveyed have some desire for self-employment. In promoting and developing our provision and approach, we acknowledge and recognise (through our own collected data) that entrepreneurial and selfemployment desire is more prevalent in male than female students. Figure 1.3 (next page), shows that approximately half of all males surveyed have some desire for self-employment. Our female respondents have shown less selfemployment desire. More support, encouragement and promotion of the guidance we, as regional enterprise facilitators, can provide, should help to counter the perceived gender imbalance.

We have also found (Figure 1.4) that those who have some desire for selfemployment (either definitely or probably) tend to be over 21 years of age.

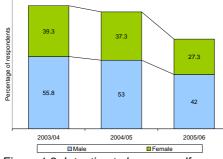
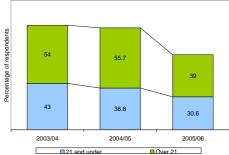


Figure 1.3: Intention to become selfemployed (either definitely or probably) – male and female respondents



1.4 Intention to become self-employed (definitely or probably) by age. Note: 2003-04 data represent respondents '21 and under', all other data represent respondents as 'Under 21'

Our supporting actions:

Carlton Addison is a Leeds University graduate who is in the process of setting up a company to manufacture ice cream. He's also worked in recruitment for part of the year and his experience in a competitive, pressured environment was one of the factors that made him think about setting up his own business. He says: *"Ever since I was 12. I had crazy ideas and an ice cream company was one of them."* Inspired by Ben and Jerry's Ice cream and their start-up, he hopes to start trading this summer. Carlton has applied for Proof of Concept funding (to fund his business idea) from Spark at the University of Leeds.

Section 2: Our message of support and guidance

6% of our students <u>expect</u> business-start up assistance from Universities. Student expectations in relation to business start-up and enterprise advice have changed in recent times. In this year's survey (2005-06) we introduced a question asking students where they <u>expected</u> business start up support. A range of responses were received including the expectation from 6% of respondents that Universities should provide assistance.

We have, for some considerable time, been engaged in promotion and awareness raising of the institutional and collaborative support we can provide current and budding entrepreneurs in the region. Recent measurements taken via our survey suggest that we are succeeding here (see Figure 2.1 below); almost a quarter of our students are aware of the range of services we provide.

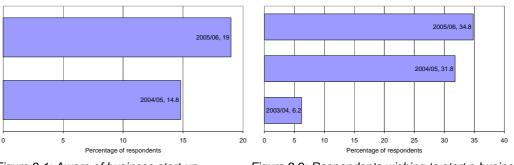


Figure 2.1: Aware of business start-up support at University

Figure 2.2: Respondents wishing to start a business within two years of graduation

The comparison of those who have a desire to become self-employed over recent survey periods (see Figure 2.2) provides a stable and consistent percentage for those aged over 21. Approximately one third to half of students in this age group have self-employment desires or goals. As most of our graduates (at graduation) are over the age of 21, it is reasonable to conclude that our survey has captured those with a strong desire at the end, or towards the end, of their programme of study. From here, they are in a strong position to fully utilize their desire.

Our supporting actions:

A host of activities and interactive materials have been developed by partner institutions for use by students who wish to develop their self-employment ideas. These include the Business Start-Up CD Rom produced by Leeds Metropolitan University, the Business of Art CD Rom produced by performance arts colleagues at the University of Leeds and an Enterprise DVD produced by the Huddersfield Business Generator at the University of Huddersfield. All three valuable interactive resources provide students with detailed enterprise advice, guidance and contact information for further support.

Our supporting actions:

The Entrepreneurial Summer School is a five day residential course promoted and hosted by Business Start-Up at Leeds Metropolitan University, designed to provide students and graduates with all the practical information, advice and motivation needed to start their own business. During the course the delegates are given the opportunity to meet with solicitors, accountants and business advisors in addition to participating in interactive workshops. There is also the opportunity to network with existing entrepreneurs who can provide inspiration and an insight into what is really involved in starting up in business as well as networking along side like minded people who are also keen to become potential entrepreneurs.

Our supporting actions:

Inspired to 'go it alone' and take the plunge after attending the Business Start-Up @ Leeds Met Annual Entrepreneurial Summer School 2004, BTEC Graphic Design Graduate Paul Waddington has launched his own digital design company. 'DDME Ltd' will work with companies throughout the UK offering design and development for CD-Rom, Broadcast Animation, DVD and websites. Attending the Annual Entrepreneurial Summer School run by Business Start-Up @ Leeds Met enabled him to develop the skills and know-how necessary to start up in business – it gave him the confidence and final push he needed to get started: *"The Summer School was a very positive experience and I wouldn't feel as confident starting my own business had I not attended the course."*

Section 3: Helping those who are already self-employed

137 students from the partner Universities are already self-employed.

With 2% of our current student population already self-employed in 2005-06 (representing 137 separate business organizations – see Figure 3.1 below), we are continuing to work closely with a variety of business support agencies, and the students themselves, to establish how we can assist the growth of this number, and how we can continue to support those already engaged in business-related activities.

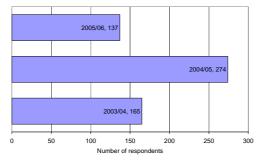


Figure 3.1: Respondents stating that they are already self-employed

Our supporting actions:

Incubation space units provided through the partnership offer three essential ingredients for growing successful businesses: an entrepreneurial and learning environment; ready access to mentors and investors, and visibility in the marketplace.

Our supporting actions:

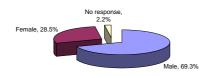
Current business incubatees of partner institutions are developing and running a range of business ventures, including: web design, public relations consultancies, events management organisations, bars and restaurants, media production houses, and business services companies.

Figure 3.1 above shows that self-employed numbers fluctuate as student respondents enter and leave University, and this therefore reflects the fluid nature of the student base. However, over the period 2003/04 to 2005/06 we had an average of 192 self-employed students within our regional Universities. If this were to be extrapolated across other Universities in the UK, this could equate to over 2,000 existing businesses.

Those who are currently elf-employed tend to be Business Studies, Engineering, or Social Sciences students. In terms of discipline studied, those who are currently self-employed tend to be enrolled on programmes of study in Business (22%), Engineering (22%) or Social Sciences (17%). Many of them are male (69%), are aged 18-21 (44%) and are currently in Year 1 or Year 2 of their University programmes of study (72%) – see Figures 3.2 to 3.4 (next page). Not surprisingly, over half (53%) have parents who already run their own businesses.

Our supporting actions:

At the University of Huddersfield, there is clear evidence of substantial academic research in entrepreneurship and SMEs within the Business School, with valuable applied research taking place within Engineering. Recent research includes the investigation of third generation family businesses and the development of Entrepreneur Indicators which will help identify those with enterprise and entrepreneurial potential. This work is backed by a growing body of primary research including work on the Global Entrepreneurship Monitor (GEM) programme in New Zealand.



No resp/Other, 46+, 3.6 36-45, 5.8% 25-35, 18.2% 22-24, 26.3

Figure 3.2: Respondents already selfemployed (2005/06) by gender

Figure 3.3: Respondents already self-employed (2005/06) by age

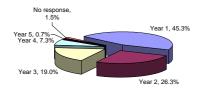


Figure 3.4: Respondents already selfemployed (2005/06) by year of study

Types of businesses currently operated by our self-employed respondents typically fall into one of six broad areas:

- Marketing/advertising;
- Computing/IT/Web-design;
- Clothing/designing;
- Entertainment/Events Management;
- Property letting/development; and
- Food/café/restaurant services.

Our supporting actions:

Leeds Metropolitan University has produced substantive publications in relation to SMEs, regional enterprise policy and practice, and tools and techniques to support and aid graduate/student start-up. The main output producers at Leeds Metropolitan University have been the European Regional Business and Economic Development Unit (ERBEDU), the Policy Research Institute (PRI), Business Start-Up and the Institute for Enterprise.

Almost half of selfemployed students, have been operating their businesses for at least a year. Almost half operate their business in the Yorkshire region. Our current survey work has established that almost half (47%) of our currently self-employed students, have been operating their businesses for at least a year (see Figure 3.5 below). Whilst a sizable proportion (47%) currently operate their businesses within the Yorkshire region (see Figure 3.6 below), this figure could be enhanced and increased through focused support. It is perhaps a little surprising that students of our region choose to operate businesses elsewhere. It may be instructive to investigate further the reasons for this. Limited comments were received from this group in relation to types of assistance they received in starting up. Assistance tended to be received from Business Link, parents and other family members, The Princes Trust, and University-provided support. Given that less than a quarter of those currently self-employed (24%) reported receiving any substantive assistance in becoming self-employed, there may be more that we as business facilitators, enablers and supporters can do.

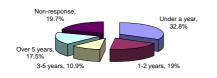




Figure 3.5: Length of trading for those already self-employed

Figure 3.6: Proportion of those currently selfemployed located in the Yorkshire region

Our supporting actions:

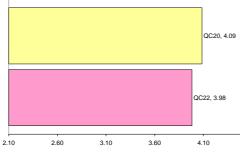
"My business 'Byteflex' is being supported by Think Business @Bradford. I've learnt more doing the business than I did through doing my degree. The theory is one thing, but putting it into practice is much more difficult. I'm more aware of my strengths and weaknesses now, for example, I'm good at ideas, but not so good at sales. My advice to others would be to take advantage of the support available to you." Paul Clapham, Byteflex, supported by Think Business@Bradford.

Section 4: Regional and national policy-related issues

Intention to become self-employed

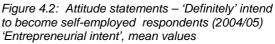
Intention to become self-employed remains strong in our collective student base. Objective 2a of the Yorkshire Forward Regional Economic Strategy seeks to: 'create a long term culture change to value entrepreneurs and creativity', and 2c seeks to: 'develop entrepreneurial skills and business skills'. Our work exploring the views, perceptions and attitudes of respondents in our survey provides valuable data to support these key areas.

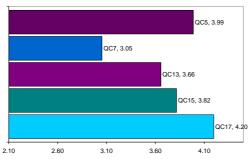
Intention to become self-employed amongst our collective student base remains strong this year – as in previous years. Compared to baseline data, those with a definite intent for self-employment, understandably, have a much more pronounced entrepreneurial intent (see Figures 4.1 and 4.2 below). Attitudes towards entrepreneurship are also extremely positive in relation to 2005-06 baseline values. There are also general positive movements in attitudes towards entrepreneurship when we compare 2005-06 respondents to 2004-05 respondents (see Figures 4.3 and 4.4 below). This suggests that those who strongly desire self-employment are becoming, through our comparison, more convinced by it as an employment option.



QC20, 4.23 QC20, 4.23 QC22, 4.05 2.10 2.60 3.10 3.60 4.10

Figure 4.1: Attitude statements – 'Definitely' intend to become self-employed respondents (2005/06) 'Entrepreneurial intent', mean values





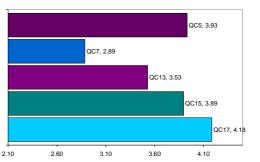
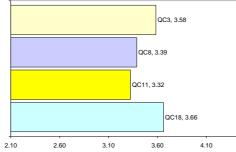


Figure 4.3: Attitude statements – 'Definitely' intend to become self-employed respondents (2005/06) 'Attitude towards entrepreneurship', mean values

Figure 4.4: Attitude statements – 'Definitely' intend to become self-employed respondents (2004/05) 'Attitude towards entrepreneurship', mean values

Perceived support factors from this year's data are generally more positive than previously. Understandings, perceptions and awareness of the available support services and facilities also appear to be changing, in a positive way, amongst those who definitely intend to become self-employed. Perceived support factors from this year's data are generally more positive than previously (see Figures 4.5 and 4.6). This is an interesting finding and may indicate that Universities and other support agencies are more successfully promoting their message to would-be entrepreneurs.



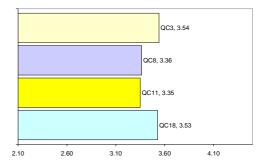
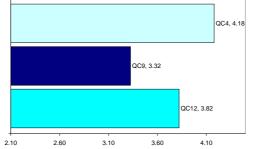


Figure 4.5: Attitude statements – 'Definitely' intend to become self-employed respondents (2005/06) 'Perceived support factors', mean values

Figure 4.6: Attitude statements – 'Definitely' intend to become self-employed respondents (2004/05) 'Perceived support factors', mean values

Willingness to take in our poten average, that was last year.

We are also more successfully developing and nurturing innovation and creativity in our potential entrepreneurs. Their willingness to take risks is also greater, on average, than it was last year (see Figures 4.7 and 4.8 below).



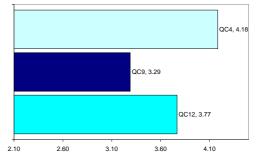
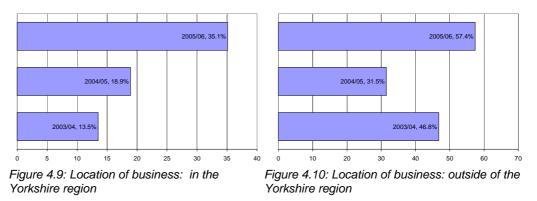


Figure 4.7: Attitude statements – 'Definitely' intend to become self-employed respondents (2005/06) 'Risk-taking propensity', mean values

Figure 4.8: Attitude statements – 'Definitely' intend to become self-employed respondents (2004/05) 'Risk-taking propensity', mean values

35% of those who intend to become selfemployed would consider setting up in the Yorkshire region. In recent years we have been interested in exploring whether or not those who have some desire for self-employment would wish to start-up their business within the Yorkshire region. Figure 4.9 shows that approximately 35% of those who either definitely or probably will become self-employed would consider setting up in the region. A little over half of the current survey group would consider setting up outside of the Yorkshire region (see Figure 4.10).



Gender

By focusing upon and exploring gender differences to becoming self-employed in this and future survey work, we may be able to effectively inform the continued development of activities that: 'promote enterprise by women' (Yorkshire Forward, 2003: 26 (Objective 2a(v)).

There is a significant difference between male and female respondents in relation to their intention to become self-employed. This year, as in previous years, there is a significant difference between male and female respondents in relation to their intention to become self-employed (see Figures 4.11 and 4.12 below). Generally, males have a more positive intention to become self-employed than females. Perhaps, not surprisingly there are also significant differences in attitudes towards entrepreneurship between the two groups. One of the largest differences in attitude was the reaction to the question: 'Would you rather be your own boss than have a secure job?' Many more males than females indicated that this was desirable (see Figures 4.13 and 4.14).

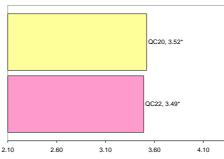


Figure 4.11: Attitude statements – male respondents 'Entrepreneurial intent', mean values

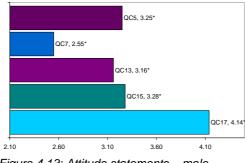
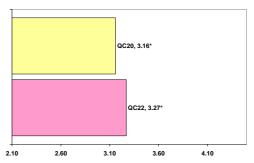
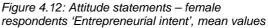


Figure 4.13: Attitude statements – male respondents 'Attitude towards entrepreneurship', mean values





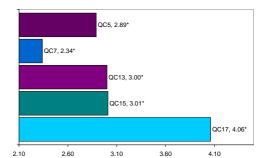


Figure 4.14: Attitude statements – female respondents 'Attitude towards entrepreneurship', mean values

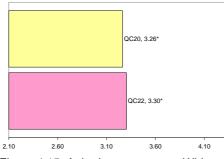
Our supporting actions:

In order to address some of the gender issues faced by women in enterprise, the national research project Empathy-Edge was conceived by colleagues at the University of Hull. The project has resulted in the development of an innovatory E-mentoring programme for professional women. Through a combination of research and web-based E-mentoring the project has successfully paired 122 women, across the Humber region, Leeds, Sheffield, and East and West London with experienced professionals who acted as role models. The recent publication of the DTI Women and Work Commission's Report *Shaping a Fairer Future* – has proved timely for the project. In its evidence to the Commission, the CBI reported that, 'mentoring and networking schemes are effective ways of working through the so called "glass ceiling" and went on to recommend the setting up of 'e-networks for senior and professional women.'

Ethnicity

Our in-depth examination of ethnic groups within our survey population provides valuable data to further inform Objective 2a(v) of the Regional Economic Strategy, to: 'promote enterprise by ... black and ethnic minorities'.

In terms of entrepreneurial intent, there is a significant difference between White and Non-white respondents (see Figure 4.15 and 4.16). This positive intent also influences attitudes towards entrepreneurship. Amongst the Non-White respondent group, attitudes are generally significantly more positive than for White respondents (see Figures 4.17 and 4.18). Non-white respondents also perceive support and guidance available for would-be entrepreneurs more positively in a number of areas (see Figures 4.19 and 4.20). In particular, they believe more strongly that Universities support and encourage enterprise and that their families have influence on their self-employment goals.



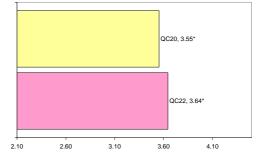
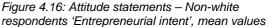


Figure 4.15: Attitude statements – White respondents 'Entrepreneurial intent', mean values



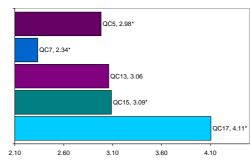


Figure 4.17: Attitude statements – White respondents 'Attitudes towards entrepreneurship', mean values

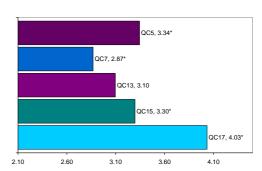


Figure 4.18: Attitude statements – Non-white respondents 'Attitudes towards entrepreneurship', mean values

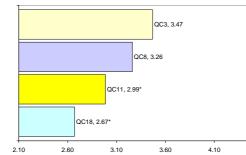


Figure 4.19: Attitude statements – White respondents 'Perceived support factors', mean values

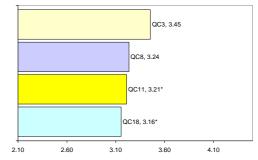
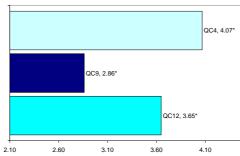


Figure 4.20: Attitude statements – Non-white respondents 'Perceived support factors', mean values

Non-White respondents have more positive attitudes towards enterprise than White respondents. Non-white respondents tend to be more conservative in their risk-taking than their White counterparts. When exploring respondent attitude towards risk-taking, Non-white respondents tend to be more conservative than their White counterparts – particularly when asked overt risk-taking questions such as: 'Do you like to try new things?', and 'Have you taken a risk in the last 6 months?' However, it is interesting to note that when presented with a less overt query relating to risk-taking ('When you travel, do you tend to use new routes?'), Non-white respondents show more pronounced signs of risk-taking. This presents an apparent contradiction that may be worthy of further investigation: whilst Non-white respondents are generally more positive about enterprise and entrepreneurship, they tend to be more risk averse than their White counterparts (see Figures 4.21 and 4.22)



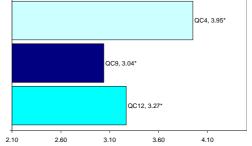


Figure 4.21: Attitude statements – White respondents 'Risk-taking propensity', mean values

Figure 4.22: Attitude statements – Non-white respondents 'Risk-taking propensity', mean values

An enterprise-rich culture in higher education

Objective 4a: 'Create a culture in which education, learning and skills are highly valued by individuals and business'. Our attitude statement analysis indicates that Universities in the partnership are successfully developing an environment which nurtures and encourages enterprise and entrepreneurship.

Assisting the development of key industry clusters

Part of Yorkshire and the Humber's focal points between 2003 and 2006 has been to: 'Invest in priority regional clusters of advanced engineering and metals, bioscience, chemicals, digital industries, and food and drink (including agriculture), placing universities at the heart of economic development' (Yorkshire Forward, 2003: priority action 'a'). Our work examining sectoral/discipline areas has enabled detailed exploration of student views within a number of these cluster areas.

As with previous years, we have mapped respondent programme of study, where possible, to the relevant regional industry cluster. This has produced usable data (i.e. where respondent numbers reach a threshold of over 100) for the areas of: Advanced Engineering, Biosciences, Environmental Technologies and Healthcare.

Universities in the partnership are successfully developing an environment which nurtures and encourages enterprise and entrepreneurship.

Our supporting actions:

The success of our Partnership has also led to, or enabled, other recent enterprise initiatives and developments within partner Universities. In late 2004, the success of the partnership informed the development of two HEFCE-funded national Centres of Excellence in Teaching and Learning of Enterprise – the Institute for Enterprise at Leeds Metropolitan University and the White Rose Centre of Excellence in Teaching and Learning of Enterprise.

The Institute of Enterprise at Leeds Metropolitan University (building upon the success of Business Start-Up) seeks to create a focal point of activity through a physical presence across all three of its campuses. The White Rose Centre of Excellence in Teaching and Learning Enterprise at the Universities of Leeds, Sheffield and York continues and enhances the work of the White Rose Centre of Enterprise (WRCE) and will firmly embed enterprise across the curricula of the partner institutions.

Other local developments include the development of social and community provision at the University of Huddersfield, and the award of European Social Funding for enterprise-related activities at the University of Bradford.

Approximately onethird of respondents studying within areas related to key industry clusters have some desire for self employment. On average, approximately one-third of respondents studying within areas related to these key industry clusters have some desire for self employment. When we compare these data with that collected for last year (2004/05), there has been a considerable increase of intention to become self-employed for students within the 'cluster' areas (see Figure 4.23 below).

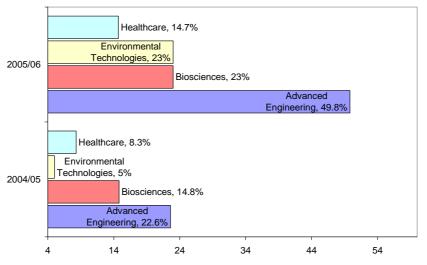


Figure 4.23: Intention to become self-employed, key industry clusters (2004/05 and 2005/06 comparison)

Our supporting actions:

The University of Leeds research outputs has been influenced by the activities of the White Rose Centre for Enterprise (WRCE) and Leeds University Business School. The WRCE, through project funding, has facilitated the production of a range of research-based outputs, such as conference papers and analyses of specific enterprise learning approaches.

Section 5: Tackling a 'risk averse' student base

From our more recent survey periods we can assess the general risk-taking propensity of our collective student base. Whilst attitudes of and acceptance towards risk-taking are more positive amongst those eager to become self-employed, this isn't the case for our general survey population.

Our supporting actions:

An initiative that has attempted to assist self-employment and mitigate risk for students and recent graduates is the 'Proof of concept' programme. The 'Proof of concept' programme is a partnership-wide initiative, funded under HEIF2 and designed to enable students to progress their business ideas or concepts. Funding is awarded (to a maximum of £1,000) to students or graduates to test market ideas or develop products or services. Over 100 awards have been made to young entrepreneurs from across the Yorkshire and Humber region – enabling students and recent graduates to progress towards their self-employment goals.

When posed risk-taking questions such as: 'Do you like to try new things?' (Q. C4), 'Do you use new routes?' (Q.C9), and 'Have you taken a risk in the last 6 months?' (Q.C12), recent results (2005/06) provide that students are becoming more conservative and less likely to move outside of their comfort zones and take risks (see Figure 5.1 below).

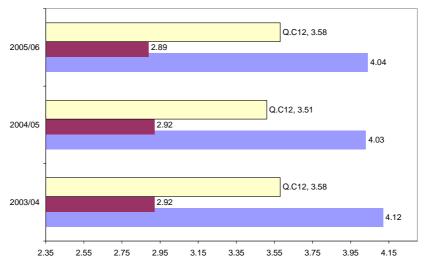


Figure 5.1: Attitude statements – (2003/04 to 2005/06 comparison) 'Risk-taking propensity', mean values

If risk-taking is prevalent amongst successful entrepreneurs and self-employed individuals, we need to achieve a greater acceptance of this by others if we are to develop more enterprising and entrepreneurial individuals.

Recent results provide that students are becoming more conservative and less likely to move outside of their comfort zones and take risks.

Our supporting actions:

Neil Warnock, graduated from the HND Computer Studies course at Leeds Metropolitan University fourteen years ago and set up his business in September 2003 after a failed attempt years before. Neil felt that there was so much more support for start-up businesses available now that it was worth giving it another try: "...several colleagues were made redundant. We'd been putting the world to rights for months down the boozer; it seemed the right time to put up or shut up. I emailed an old lecturer asking if I could use the library to work on a business plan and he suggested I contact the Leeds Metropolitan University Incubator. Two weeks later we were in business... The Leeds Metropolitan University Incubator was brilliant. The staff were very helpful and this has greatly contributed to the success of my business."

Our supporting actions:

Business guidance and support services provided by partners has already generated successful small businesses: "We are a teacher recruitment agency placing teachers day-to-day on short-term, long-term and permanent posts in Schools in Bradford. We have very strong values in quality, consistency, commitment, honesty and value for money; this is what sets us apart from other recruitment agencies. Think Business @Bradford have been excellent in supporting us. They have made us think of things that hadn't even occurred to us at first. They were really honest about what hurdles we would come across and how we need to prepare for them.

Perceptions in relation to entrepreneurial barriers have marginally increased in the latest survey period. Comparisons of responses to questions relating to perceived self-employment and entrepreneurial barriers have also marginally increased in the latest survey period. Figure 5.2 below shows that of the seven 'perceived barrier' statements used in the questionnaire, attitudes towards five of them have become more negative. This suggests that, for the general student population, perceived barriers to enterprise and entrepreneurship are becoming more overt. It would seem that more effort is required to change or alter this perception. We have already raised awareness across the collaborative partnership in relation to the considerable guidance and support work Universities provide. Future collaborative effort could concentrate upon removing barriers to enterprise and entrepreneurship and encouraging a more risk-taking, innovative and creative student population.

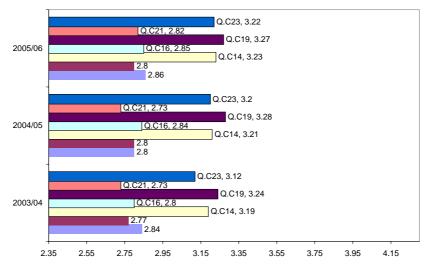


Figure 5.2: Attitude statements – (2003/04 to 2005/06 comparison) 'Perceived barriers', mean values

Section 6: Trends in intention to become self-employed

We have consistently shown that approximately one third of our entire student base has some desire for self-employment. In order to focus our services and support for such individuals, it is useful to examine the current and emerging profile of such students.

Taking those who expressed a desire to become self-employed in the 2005/06 survey (34% of all respondents), the following profile of potential entrepreneurs can be produced:

- 70% are 21 and under;
- Almost 16% are Asian or Asian British;
- 79% are currently studying towards undergraduates degrees;
- Over half (53%) are currently in Year 1 of their programmes of study;
- Disciplines studied tend to be either Business (27%), Engineering (20%) or Social Science (18%);
- 27% are aware of business start up support available at their University;
- 40% have parents who run their own businesses;
- 36% would start their business within two years of graduation;
- 35% would positively consider starting up a business in the Yorkshire region;
- Customer base (53%) and available resources (34%) would be two of the most important considerations for location of business; and
- 19% would <u>expect</u> help from their University in progressing to selfemployment.

Our supporting actions:

The collaborative activities of Universities in the Yorkshire and Humber region has augmented the development of a new enterprise pathway for undergraduate students at the University of Hull. Based in the Business School, the new free elective module was so popular when announced that the first intake had to be capped. Interested students from any discipline are organised into small groups and guided through the planning and establishment of a new company. The experience gained from the forming and running of a new business counts towards their final degree. The funding provided by the collaborative project was seen as a key element in supporting the success of the free elective, in particular providing finance for proof of concept, external mentoring and the coordination of enterprise activities between departments and partner HEIs.

40% of those who have some desire for selfemployment have parents who run their own businesses.

Section 7: Policy issues – developing enterprise talent through education, employment and a strong community presence

Our regional collaborative work directly relates to the recently published Government Action Plan for small business. Central elements of the Action Plan addressed by our work include:

- Building an enterprise culture;
- Encouraging a more dynamic start-up market;
- Building the capability for small business growth;
- Improving access to finance for small businesses;
- Encouraging more enterprise in disadvantaged communities and underrepresented groups;
- Improving small businesses' experience of government; and
- Developing better regulation and policy (Small Business Service, 2004: 7).

Yorkshire Forward's Regional Economic Strategy (RES) highlights that closer engagement with enterprise is a key objective for the region – in terms of providing the basis for economic growth and regeneration. Specifically, our survey and related work have assisted one of Yorkshire Forward's key objectives to achieve a higher business birth rate in the development of new and competitive businesses (Yorkshire Forward, 2003: 26-28). Our investigations and analyses also inform the promotion of enterprise by women (Yorkshire Forward, 2003: 27), the promotion of enterprise for black and ethnic minorities (Yorkshire Forward, 2003: 28), and the creation of a culture in which education and training are more highly valued by individuals and business (Yorkshire Forward, 2003: 39).

Other Regional Development Agencies (RDAs) are also committed to embracing and encouraging enterprise and entrepreneurship in a variety of ways – our nationally recognised work adds value to these activities. The East Midland Development Agency (EMDA) has launched a variety of initiatives to stimulate an enterprise culture – including the introduction of activities aimed at developing creativity and entrepreneurial attitudes into the school and higher education curriculum (EMDA, 2003). The East of England Development Agency's (EEDA) Economic strategy specifies a commitment to creativity, innovation and enterprise. Key actions within this include the continued development of enterprise 'hubs' which enhance and enable closer links between businesses and higher and further education teaching and research (EEDA, 2003).

We can also claim that our commitment to the development of enterprise and entrepreneurship has additional national significance. The National Council for Graduate Entrepreneurship (NCGE), launched in 2004 by the Chancellor of the Exchequer, seeks to work closely with a variety of organisations to encourage the formation of business enterprises. In doing this, it is actively seeking to work closely with the HE sector to ensure students (undergraduate and postgraduate) have the requisite enterprise and entrepreneurial skill to make such ventures successful. In addition, the Higher Education Academy (HEA) (a representative organisation of the HE sector) has recently launched a national initiative to encourage the development of enterprise and entrepreneurship in HE programmes of study.

Our survey and related work have assisted one of Yorkshire Forward's key objectives to achieve a higher business birth rate. The provision of incubation space, and related support services, has enabled new businesses to emerge and grow in the region. Our longitudinal survey work has also enabled the development of focused and directed support in high impact areas. For example, the provision of incubation space, and related support services, has enabled new businesses to emerge and grow in the region. Current incubatees are developing and running a range of business ventures, including: web design, public relations consultancies, events management organisations, bars and restaurants, media production houses, and business services companies.

Our supporting actions:

Leeds students James Jelliman and Jonathan Barnard are the founders of 'Burning Studios' - a new music production company which provides custom packages of original music and sounds for multimedia applications, films and television. Jon & J set up Burning Studios whilst studying for music related degrees at Leeds Metropolitan and Leeds University (BSc in Creative Music and Sound Technology - BA Popular & World Music). "We have always wanted to start our own business ever since we first discussed our ideas at school" said Jon. In order to help with the early stages of start up Jon & J applied to the 'Proof of Concept Fund' available through Business Start-up@ Leeds Met. Burning Studios used the Proof of Concept funding to help them carry out vital market research through targeted promotional activities, supported by the design and deployment of their website. Jon & J commented, "whilst receiving the funding contribution was excellent, applying to the Proof of Concept was also a success in that the entire application process made us reflect upon our ideas for the business and question some of the processes we had previously intended to have in place; having someone else objectively scrutinize our business proposition was a real bonus and one that has helped us to more clearly define what our business is going to be".

Sharing of good practice in relation to encouraging and growing new and potential entrepreneurs has been core to the collaboration's activities. Partner institutions have worked closely over recent years to ensure enterprise and entrepreneurship research is shared and disseminated appropriately for the benefit of the region. Particular research strength has been provided through Leeds Metropolitan University, the University of Leeds, and Huddersfield University's outputs. Expertise and research power has been expressed through the publication of a range of research-based materials. These have included substantial seminar and conference papers (primarily developed and presented by colleagues at Business Start-Up at Leeds Metropolitan University), articles in nationally and internationally peer reviewed journals, commentaries and position papers, and partnership publications.

In short, our collaboration has been extremely successful. Primary data, collected from our student base has been utilised (along with regional and national enterprise-related policy) to help inform and shape the development of provision that will bring about more enterprise and greater innovation and creativity within the Yorkshire region.

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