

Supporting the entrepreneurial potential of higher education

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1 University of Huddersfield: Entrepreneurship education across all Schools and how to teach the teachers

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Abstract

University of HUDDERSFIELD Entrepreneurship education (EE) at the University of Huddersfield (UoH) combines strong profiles in curricula offers, extra-curricular activities and organisational setup. The UoH is one of a few UK universities to offer new venture creation degrees: the UoH's Business School offers bachelor, masters, and doctoral degrees involving to start an enterprise. However, the most striking characteristic of EE at the UoH may be that EE teaching is "everyone's responsibility". Embedded EE is offered in all of the university's seven academic Schools. This approach is enabled by a concept that does not only promote "entrepreneurship" as starting a business but also, more generally, "enterprising" as making ideas happen. The UoH also offers major extra-curricular EE activities, mainly through the UoH's Enterprise Team's offers but also activities by teachers from various schools. As regards organisational establishment and set-up of EE, there is strong support from the university's top management and Deans. The UoH's strategy provides that by 2018 each student is to encounter EE in his or her study. The UoH has an Enterprise Team unit, which is an important element in the UoH's EE approach. The Enterprise Team helps UoH students and graduates start their business and it encourages and supports teachers especially from non-business Schools to teach entrepreneurship themselves. Moreover, entrepreneurs and businesses contribute to the design of the curriculum and help support students in many ways. While some EE activities are co-funded by the national government and the EU, the UoH's EE profile may largely be due to leadership that other universities could emulate fairly easily.

 Full name of the university, town, country 	University of Huddersfield (UoH), Huddersfield (150,000 inhabitants; 10 th largest town in UK), United Kingdom
Legal status	Public
Campuses	Queensgate, International Study Centre (on main campus)
Year of foundation:	1825 (Science and Mechanic Institute), formal name "University of Huddersfield" since 1992.
Number of students (year):	20,435 (2012/2013) (Source: HESA 2014a)
Number of employees:	1,035 (academic); 1,480 (non-academic); 165 (academic atypical) (Source: HESA 2014b)
 Budget in most recent financial year: 	Income 2013: 142.5 million £ (approx. 174.5 million €) (According to UoH Financial Statements 2013, p. 11)
Academic profile:	Academic schools: Applied Sciences; Art, Design and Architecture; Computing and Engineering; Education and Professional Development Business; Human and Health Sciences; Music, Humanities and Media. Entrepreneurial University of the Year at Times Higher Education (THE) awards 2012; University of the Year at the THE awards 2013.
Entrepreneurship education profile:	Degree courses at the Business School embed entrepreneurship into the curriculum; teaching EE is "everyone's responsibility"; every student shall encounter EE by 2018
 Activities focused in this case study: 	Curricular offers and extra-curricular activities in EE across the university and how the UoH "teaches the teachers" about EE
Case contact person(s):	Gatekeeper: Kelly Smith, Head of Enterprise Team
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Case study fact sheet

The status of information provided in this case study is end-2014 unless stated different.



1.1 The university's entrepreneurial profile

1.1.1 The university's overall approach to entrepreneurship

Key characteristics of EE at the UoH

Entrepreneurship education (EE) at the University of Huddersfield (UoH) combines strong profiles in curricula offers, extra-curricular activities and organisational set-up. As regards curricular offers, EE is a key part of the UoH's strategy. The university targets to ensure that every student encounters EE at some point in his or her study by 2018. Notably, the UoH defines EE not only in the common meaning as "entrepreneurship" and "venturing", i.e. starting a new business, but also more generally as "enterprising", i.e. having an idea and making it happen. Correspondingly, on the teachers' side, a striking characteristic of the UoH is that teaching about entrepreneurship and enterprising is "everyone's responsibility". This case study pays special attention to this issue. It raises the ensuing issue how the UoH ensures that those teaching about entrepreneurship are qualified to do so, i.e. how the UoH "teaches the teachers". The UoH pursues a diverse approach in this respect. Thus, this case study presents a broader picture of what the UoH offers in EE as well as a more specific view on how the UoH supports the offers.

Publicity of the UoH case

The University of Huddersfield received the Times Higher Education (THE) award for the "**Entrepreneurial University of the Year**" in the UK for 2012. The UoH received the award for its "entrepreneurial outlook championed at the highest levels of the institution".¹ This included establishing an innovation centre, working with national entrepreneurship bodies, regional leadership in fostering student and graduate business start-ups, an excellent record in student employability and self-employment, and top national ranks in various higher education indicators. As regards curricular EE, the UoH "was also commended for the way in which degree courses embed entrepreneurship into the curriculum and in particular for the BA in Enterprise Development".

In 2013 the UoH was furthermore awarded the title "**University of the Year**", also due to its entrepreneurial profile. The UoH's support for entrepreneurship education has been included as a case study in three influential policy reports to UK Government (see Wilson 2012, Witty 2013, Young 2014). Already in 2009, the work by John Thompson, now emeritus professor in entrepreneurship, was recognised by a Queen's Award for Enterprise Promotion. It also honoured setting up the UoH's Business Mine, the precursor to the Enterprise Team.

Due to these awards the case of EE at the UoH may be well-known in the UK. However, the UoH apparently has not yet reached considerable international attention. The reason may be that most of the UoH's major entrepreneurial activities were launched since 2009 and are thus fairly recent.

¹ Quoted from http://www.hud.ac.uk/about/the-university/our-awards/the-entrepreneurial-award/.



1.1.2 Leadership and governance

Importance of government strategies

The UoH's focus on entrepreneurship and EE is influenced by the importance which the UK government attributes to EE. However, the UoH also influences national and regional government strategies and programmes. For example, UoH's Head of Enterprise Kelly Smith is a co-author of the UK's Quality Assurance Agency's national guidelines for enterprise and entrepreneurship education in higher education from 2012 and a 2014 report for the UK Government's All Party Parliamentary Group for Microbusiness on an "education system fit for an entrepreneur" (Anderson et al. 2014).

Importance of entrepreneurship in the university's strategy

Entrepreneurship and entrepreneurship education are core parts of the UoH's strategy. One of three aims of the UoH's "**Teaching and Learning Strategy 2013-2018**" is "to inspire employable and enterprising graduates". The two other aims are "to inspire our students to attain the highest academic and professional standards" and "to inspire our students to enjoy an outstanding university experience". "Enterprising Students" is the second of six "enabling strands" supporting the delivery of the three overall aims. The enterprising students strand contributes to all three.

Extent of high level commitment to implementing entrepreneurship

The theme of **enterprise and entrepreneurship is promoted at the highest level** by UoH's Vice-Chancellor,² Professor Bob Cryan, and through the Deans of Schools working with the Research and Enterprise office. The teaching and learning strategy, which includes the Enterprising Students strand described above, is led by Professor Tim Thornton, Pro Vice Chancellor for Teaching and Learning. While the UoH always had a practical, business-oriented and entrepreneurial flavour, entrepreneurship became an explicit objective when Bob Cryan became Vice Chancellor in 2005. Since then "it has been strengthened, strengthened and strengthened", as Head of Enterprise Kelly Smith said. She also said that the majority of staff were very proud of being awarded the title of "Entrepreneurial University of the Year". The UoH's Annual Review 2012, the most recent issue at the time of writing this case study, strongly emphasised the UoH's mission to support enterprise and entrepreneurship. There were however some "agnostics" (Kelly Smith) and also some resistance. Tim Thornton said that "we need to explain the benefits of enterprising and entrepreneurship for other parts of education and research" in order to decrease such resistance.

Level of faculties' and units' autonomy to act

As Kelly Smith explained, the **UoH's academic schools are largely independent**: "Schools are responsible for the implementation of the University's teaching and learning strategy and will be required to do so, but they have a large amount of autonomy in how it is done. They will be expected to produce School-level plans for delivery and report on progress." The strategy's strand "Enterprise modules (...) to be provided at each level of every course" implies that Schools must provide at least one enterprise-related module in every year of every course. This may be about "being enterprising" but not necessarily in

² At the UoH as in the UK university system in general, the Vice Chancellor is the highest executive position, while the Chancellor has a rather representative function.



terms of new venture creation – the Schools will be free to decide how. According to Kelly Smith, "there is also encouragement to provide additional degrees and courses related to enterprise and entrepreneurship, but no explicit pressure to do so and no requirement in the teaching and learning strategy".

Organisational implementation

The UoH's approach to EE is largely decentralised. The UoH thus has a "radiant" approach to entrepreneurship education. While the Business School offers three degrees in entrepreneurship education at the other schools although it may provide support to non-Business colleagues. Where enterprise or entrepreneurship is included in a course of study, it will most likely be taught by teachers with a different core thematic expertise. There are three ideas behind this approach. The first is credibility and cultural proximity: non-business students may not accept being taught by business professors but they do accept it from the professors in their school. Second, there is an issue of scale: A decentralised approach may help enabling all students at the university have an enterprise education experience at all levels of their course, as targeted by 2018 – this could be difficult to be achieved with a centralised EE unit. A third advantage is that it allows EE to be contextualised to the students' subject of study – potentially industry-specific rather than generic.

University's importance for driving entrepreneurship in its environment

The UoH plays a **vital role in regional entrepreneurship**, manifested in a leading role in the regional university co-operation "Graduate Entrepreneurship Project", the 3M Buckley Innovation Centre, and board memberships.

The UoH is the lead partner in the **Graduate Entrepreneurship Project**³ (GE) funded with £2.7 million from the European Regional Development Fund (ERDF). GE is a collaboration of the ten Universities across Yorkshire and the Humber, one of England's nine official regions. ERDF funding ceased in November 2014 but the partners are committed to continuing with non-funded collaborative activity.

The UoH also supports the region's innovative small and medium-sized enterprises (SMEs) through the **3M Buckley Innovation Centre** (3MBIC)⁴ located on campus. 3MBIC was funded by the ERDF, Kirklees Council, 3M, and the UoH. It opened in 2012. This centre provides state of the art facilities, facilitating partnerships between businesses and with the university. 3MBIC houses start-ups, SMEs, and large corporations. The Centre offers access to finance, markets and technology through a range of commercial, technical and support services. Tenants and network members are encouraged to establish close working relationships with the UoH's staff.⁵ The UoH's Enterprise Team unit is based in the Duke of York Young Entrepreneur Centre housed in the 3MBIC.

The UoH's role in developing regional entrepreneurship also manifests itself in **memberships on regional boards**.⁶

³ See http://graduateentrepreneurship.co.uk/.

⁴ See http://www.3mbic.com.

⁵ See http://www.3mbic.com/about/.

⁶ Vice Chancellor Bob Cryan: Leeds City Region LEP Board and its Business, Innovation and Growth Panel; Pro Vice Chancellor Tim Thornton: Employment and Skills Panel; Enterprise Team Leader Kelly Smith: Enterprise Education Group; Liz Towns-Andrews: Kirklees



1.1.3 Resources: people and financial capacity

Human resources for entrepreneurship education

The UoH seeks to involve university teachers from all UoH Schools into EE. The UoH has also an entrepreneur in residence and it involves entrepreneurs in EE. For example, 3M New Ventures President Stefan Gabriel is Visiting Professor of Innovation, and Theo Paphitis, owner of three UK retail chains, champions the BA Enterprise Development degree and has given Master classes to enterprising students and graduates.

Financial resources for entrepreneurship education

The UoH funds its EE offers and extra-curricular activities through several public and private sources. For curricular-based activity, as enterprise teaching and learning will be embedded as a core part of every course by 2018, sustainability is built in. Enterprise Team staff in the university's student and graduate business start-up unit, who deliver the Enterprise Placement Year and provide extra-curricular start-up support, are funded through the UK's Higher Education Innovation Fund (**HEIF**). HEIF also provides small micro-finance grants. The UoH recently became a "**Santander University**", joining an alliance with the Santander bank which comes with some funds to support business start-up support activity and micro-finance grants were funded through the European Research and Development Fund (**ERDF**) as part of the Graduate Entrepreneurship Project. The UoH is currently looking for funding to supplement HEIF.

Moreover the UoH gained funds to promote social enterprise from the Higher Education Funding Council for England (**HEFCE**). This funding finished in August 2013, but the UoH set up a social enterprise consultancy unit as a result where some of the income generated will be used to sustain micro-finance grants for social enterprise.

1.2 Entrepreneurship in curricula and teaching

1.2.1 Overview of curricular offers and units providing them

Curricular EE offers at the UoH

The UoH has curricular EE offers in all schools. Using the terminology of the National Centre for Entrepreneurship in Education, the UoH offers **three types of curricular offers**, by decreasing level of formalisation and contents: (1) full awards or qualifications in enterprise and entrepreneurship, (2) credit bearing enterprise and entrepreneurship modules, (3) embedded modules with enterprise and entrepreneurship. Furthermore, a placement opportunity, the **Enterprise Placement Year**, supports students as they set up their own business instead of working in employment. Exhibit 1-2 shows an overview about some of the most prominent curricular offers in entrepreneurship education at the UoH.

Employability and Skills Board and Deputy Chair of the Yorkshire Universities' Knowledge Transfer (KT) Directors' Network.

No.	Name, degree			Offered since [year]	No. of participants in [year]	
(1)	Degree offers	Business School				
1	BA Enterprise Development			2009/2010	20 places available (2014/15: six seeking the degree)	
2	BA Entrepreneurship and Business	Substantial elements of enterprise education; no expectation of actual business start-up	-		30 places available (2014/15: 24 seeking the degree)	
3	Masters of Enterprise (MEnt)	"The emphasis is on enterprise creation and personal entrepreneurial development within the chosen area, rather than on the study of business organisations." One year full time or two years part time "research degree with little or no taught component".	Students "wishing to explore a potential business or social enterprise idea, either to start-up their own business or for a new venture within public- or private-sector organisations" (course description)	2010/2011	10/2014: three current students	
4	Doctor of Enterprise	Same as for MEnt	e as for MEnt "students whose emphasis is on the need for research to underpin a new business, social enterprise, or innovative service idea" (Course description)		10/2014: seven current students	
(2)	Credit modules (exemplary)	School of Music, Humanities and Media				
	Magazine Design and Production	Increasing (self-)employment opportunities through practical learning how to launch a new magazine	BA(Hons) Journalism BA(Hons) Music Journalism BA(Hons) Sports Journalism BA Hons Business with Design	n.a.	n.a.	
	Other offers					
	Enterprise Placement Year	Supporting students in preparing to start an own business	All students	2004	20	
Games-Industry Enterprise Placement Yea		Supporting students in preparing to start their own games business	Students in the School of Computing and Engineering	2014	10	

Exhibit 1-1: Overview about prominent curricular EE offers at the University of Huddersfield



Curricular EE offers at the Business School

The UoH's Business School has around 6,000 full-time, part-time and distance learning students. This means that almost one third of the UoH's students are at the Business School. It has five departments: Accountancy, Leadership and Management, Logistics and Hospitality Management, Strategy and Marketing, Law School.

The most prominent EE offers are **full awards**. The UoH's Business School offers "three programmes of study which explicitly provide opportunities for students to start-up their own business or social enterprise, or to develop a new service innovation".⁷ These three programmes cover all three levels of higher education: bachelor, master and doctor. There is a Bachelor of Arts in Enterprise Development, a Master of Enterprise (MEnt), and a Doctor of Enterprise (Ent D). Furthermore there is a BA in Entrepreneurship and Business. The BA in Entrepreneurship and Business will include substantial elements of enterprise education, but there is no expectation of actual business start-up. The MEnt and EntD are also offered by other academic Schools, too, as they are research degrees. Students will register with the academic school that best meets their research requirements.

Beside the full awards there are **other entrepreneurship-related offers** at the Business School. In Transport and Logistics, enterprise is taught through financial, commercial and marketing modules. Within the Business Management course they have specific modules, such as personal development, business enterprise and an employment module, which are more explicitly enterprise modules. Events Management students at the Business School design and deliver real events linked to the Prince's Trust Million Makers competition.

Curricular EE offers outside the business school

In 2010 and 2012, the UoH's academic schools were required to self-report their EE modules according to the descriptions of the National Centre for Entrepreneurship in Education (NCEE). The UoH's Teaching and Learning Institute carried out a **baseline audit** of course descriptors in 2013 so that the UoH can look at the future impact of its Enterprising Students strategy theme. They found that the "enterprising modules" strand of the UoH's strategy "produced many responses, despite the number of courses not having definitive modules in enterprise". Experience suggests that enterprise activity in the modules is not always made explicit. The following lists some exemplary offers:

- The Drama degree programme at the School of Music, Humanities and Media does not have an enterprising module as such, but the teachers in charge encourage students to do free-lance work. They also have a student theatre company which gives the students the mechanics on how a theatre would work and how to budget.
- Music Technology and Audio Systems, also at the School of Music, Humanities and Media, has an enterprising module named "Business in the Music Industry" in the final year, where students learn how to draw up contracts and manage businesses within the music industry.

⁷ See

http://www.hud.ac.uk/research/developmentarea/enterprise/enterpriseinthecurriculum/enterprise degrees/.



- In Architecture at the School of Art, Design and Architecture, students have to draw up contracts in respect to buildings, and planning permission, providing students with the tools they need to start a business after their academic study.
- Computer Games Design students from the School of Computing and Engineering can apply for a sandwich placement where they run their own games studio for programme accreditation, Canal Side Studios. At the same school there is a project tasking students to publish a game for a mobile device, which has enterprising aspects such as personal marketing skills, in which they develop simultaneously to differentiate their product from others.

Exemplary curricular offers

The following box text describes an EE offer in more detail: "Magazine Design and Production", offered at the School of Music, Humanities and Media. This offer was selected for this case study because it is long-established and successful.

Magazine Design and Production (School of Music, Humanities and Media)

The UoH's School of Music, Humanities and Media runs a module "Magazine Design and Production". It "analyses the diversity and complexity of the magazine market and considers the nature of design and production. The economics, costs, techniques, and organisation of design and production are examined and the nature of the publishing industry investigated." The module is core for general Journalism students and offered as an elective to students of Music Journalism, Sports Journalism, and Business with Design. Caroline Pringle, Senior Lecturer Digital and Practical Journalism, runs the module. According to the UoH, "the module offers a holistic view of the magazine industry and production process; it allows students to see through a project from conception idea for a magazine, to the production of a dummy copy, via market research, budgeting, design iteration and marketing. All of this is then presented to a Dragon's Den style panel of Industry professionals that the staff group have built up over the years." In the first term, the delivery of the module is fairly traditional via lectures - also including visiting practitioners - as well as seminars and practical design workshops. In the second term students work in groups as a business team, taking on responsibility for design, editorial, business and finance. The project culminates in a twelve-page dummy copy of a magazine with representative copy, design and advertising as well as evidence of market viability, marketing strategy, basic balance sheet and basic business plan. The UoH considers this module as a good practice in enterprise education and enhancing employability.

Source: University of Huddersfield, description sheet for the module "Magazine Design and Production". For a more elaborate description see the annex of this case study.

Enterprise Placement Year (all Schools)

The Enterprise Placement Year is a year-long accredited module of study. Students explore self-employment instead of working in a company as they would in a traditional placement. By the time of writing this case study it was already available to the majority of students, although spaces were limited. Schools were being encouraged to create their own enterprise or innovation-related placement years in addition to the generic EPY. An example was a game-industry enterprise placement year launched in 2014 by the School of Computing and Engineering with ten students looking to start-up three games businesses.

Source: Kelly Smith, UoH Enterprise Team, 2014



1.2.2 Target groups

Main target groups of entrepreneurship education

The UoH targets all students to learn about enterprising and entrepreneurship. Statistics show that this objective is currently only partly fulfilled. The bi-annual mapping survey for 2012 of the National Centre for Entrepreneurship in Education (NCEE) shows that in 2012, the total number of offers and students participating differed largely between the schools. It was by far the largest in the School of Art, Design and Architecture (ADA) which offered 71 embedded modules and 4 credit modules. The ADA School also counted the largest number of students involved: 2229 for embedded modules and 222 for credit modules (per module, so double counting may occur). The reason is that most ADA graduates start their own business sooner or later. The Business School had 17 modules and 775 students, followed by the Schools of Music, Humanities and Media (8 modules, 503 students), Applied Sciences (6 modules, 249 students) and Computing and Engineering (4 modules, 230 students). At two schools there was not much EE activity: The School of Educational and Professional Development (3 modules, 82 students), and the School of Human and Health Sciences (3 modules, 54 students). The typical graduate's career in these schools was to work for public services or charities. However, interviewees mentioned increasing interest for example in social entrepreneurship from this school.

In the 2013 audit by the UoH's Teaching and Learning Institute, the **challenge in the UoH's strategy strand about enterprise modules** became evident in those courses where enterprising modules were not yet embedded because course teams perceive their course as being one which does not particularly need enterprising aspects. This applied for example to Youth and Community Work, Criminology, Health & Nutrition, Photography and Childhood Studies. All these courses do, however, have guest speakers from their discipline and placement students sharing their experience with second-year students. An audit of academic School's performance in 2014 showed that the majority of Schools either complied or were close to complying with the strategy requirement of an enterprise module against QAA guidelines.

Continuous education

The UoH offers some continuous education in EE, i.e. education for people who already left university and were employed elsewhere. However, the UoH does not put particular weight on such offers. The UoH offers support to its graduates up to five years from graduation through its Enterprise Skills series and Enterprise Support. These offers are not accredited. The Business School can offer bespoke short courses, and UoH's Master's level courses across all subject areas may include enterprise learning opportunities.

Bridges to secondary education

The UoH also builds bridges to EE in secondary school education. The UoH was founding partner in a regional business competition for 16-19 year olds named "Umph!". Various academic schools run "Dragon's Den" style competitions for secondary schools they are looking to recruit from. The UoH's Events Management lecturers created a competition for schools called "EVENTerprise". The UoH has strong links with the Kirklees Creative and Media Studio School and the Kirklees College Peter Jones Enterprise Academy. The UoH also partners in an initiative for young people – not only



from secondary schools – in digital entrepreneurship named "iDEA - the inspiring Digital Enterprise Award".

1.2.3 Designing lectures and courses – basic curricular decisions

Objectives of entrepreneurship teaching

The UoH's "Teaching and Learning Strategy 2013-2018" formulates three overall aims which thus also applied to EE: "To inspire our students to attain the highest academic and professional standards", "to inspire our students to enjoy an outstanding university experience", and "to inspire employable and enterprising graduates". Within the six "enabling strands", Strand 2 about "enterprising students" had the following four specific objectives:

TB1. Tightening of definition of "work-related activity", present in all courses, to include significant "live" project & problem-solving elements.

TB2. Enterprise modules (against QAA enterprise learning outcomes) at each level of every course.

TB3. Volunteering opportunities developed.

TB4. Enterprise / innovation placement year and enterprise final-year module to be available to all students (subject to PSRB limitations).

Contents of entrepreneurship teaching

In its EE teaching, the UoH distinguishes between enterprise education ("having an idea and making it happen") from entrepreneurship education ("new venture creation"). "Enterprise education" has a broader meaning of realising innovations, not necessarily involving to start a business. The UoH provides both types, depending on student and subject need. The Enterprise Team does not even promote using the term "entrepreneur" but prefers terms like "business owner, "freelancer", and "self-employed". "Entrepreneur" may be used in programmes where the lead academic deems it to be appropriate, for example in the BA Enterprise Development degree.

The content of entrepreneurship teaching at the UoH differs according to the types of courses and the aspirations of the target groups. EE at the UoH "needs to be context-related", said Pro-Vice Chancellor for Teaching and Learning, Tim Thornton, and other interviewees. The degree courses at the Business School offer the full range of business subjects needed to launch an enterprise on one's own. All courses and modules across the university include, or are planned to include by 2018, practical insights needed to become enterprising or entrepreneurial. They are meant to motivate students to actually do so, supporting their career, which may be as an entrepreneur, self-employed or as an – enterprising thinking – employee. Entrepreneurship-related modules at non-business schools make the students familiar with business issues related to their School's area of subjects, familiarising the students with things they need to know and be able to do in case of actually launching a business. Enterprise or entrepreneurship education can be presented as stand-alone modules, or embedded where Schools provide information that familiarises the students with the opportunities of behaving entrepreneurial in specific fields whilst studying their chosen subject.



Methods and media

The UoH provides a wide range of methods and media in EE. Methods include, but are not limited to, lectures and tutorials by staff or by guest speakers as well as case study workshops. A method to which the UoH attributes specific importance is enterprise placement for practical learning, live work-based elements and project work. Media include for example videos about business practice, and business simulation software. Similar to content, the range of methods and media applied differs by the types of courses.

The UoH also runs a strategic project related to software for facilitating enterprising and entrepreneurship. Supported by the University's Teaching and Learning Institute, the UoH was in 2014 exploring how the **business simulation game SimVenture** could be rolled out across campus and used as a tool for embedding enterprise education in subjects as diverse as business, fashion and psychology. SimVenture is commercial software that was launched in 2006 and, according to the supplier in 2014, was used in more than 150 universities all over the world as well as in schools and in communities.

Informal evaluation of learning outcomes and feedback for students

Informal feedback to students about learning outcomes in EE, i.e. feedback regardless of formal marks and credits, differs by the teachers concerned. Generally the UoH encourages such informal feedback in order to reach the university's overall aims, i.e. to inspire graduates for attaining the highest academic and professional standards, enjoying an outstanding university experience, and becoming employable and enterprising. The UoH's Enterprise Team also provides such informal evaluation and feedback.

Using results of entrepreneurship research

UoH researchers frequently carry out empirical studies about entrepreneurship and EE at the own university and publish results in journal articles and conference papers (e.g. Smith at al. 2013). The UoH also seeks to implement the lessons learned from entrepreneurship research into teaching. UoH teachers share practice through best practice sessions organised with bodies such as Enterprise Educators UK (EEUK), Institute for Small Business and Entrepreneurship (ISBE), VITAE (a national organisation for postgraduate research students and early stage researchers), and through presentations at relevant national and international conferences.

1.2.4 Setting of entrepreneurship teaching

EE at the UoH does take place in the university's lecture halls and classrooms, but may be more likely to be found in studios, workshops, and laboratories, and also in businesses through long- and short-term placement opportunities. Occasionally there are also excursions to enterprises in the region and other locations outside the university. Such change of scene is supposed to enhance learning experiences and increase learning motivation.



1.2.5 Instructors: teachers and mentors

Professors, other employees and external lecturers of the university

Teaching staff are primarily academics in their subject-specific area although many modules include guest speakers from industry. The UoH has only a few teachers who deal exclusively with entrepreneurship. At the end of 2014, the Business School's staff list named eleven professors, among them one explicitly for "entrepreneurship", Gerard McElwee.⁸ There is also an emeritus professor in entrepreneurship, John Thompson.

Kelly Smith explained that at the UoH teaching enterprise and entrepreneurship is "everyone's responsibility". Most teachers who impart EE at the UoH have another specialty and teach enterprising and entrepreneurship on the basis of additionally acquired knowledge and experience. This is part of the UoH's specific approach to EE. However, there is no compulsory requirement for UoH teachers to teach about enterprising and entrepreneurship. So the UoH does not see a need to make teaching the teachers obligatory. One of the interviewees from the Department of Informatics said that one cannot compel teachers to teach entrepreneurship. Rather, there need to be ambassadors for such teaching within the departments.

In 2012/2013, the UoH introduced a new promotion route for enterprise activity: the title of "Principle Enterprise Fellow", equivalent to "Reader" and "Principal Teaching Fellow".

"Real entrepreneurs" as teachers

All UoH programmes of study are required to have industry or professional input into the approval process. In many instances this will involve small business and entrepreneurs. For example, the School of Art, Design and Architecture regularly benefits from co-operation with industrial designers.⁹

The University has an **Entrepreneur in Residence** – Professor Graham Leslie¹⁰ – based at the 3M Buckley Innovation Centre (3MBIC).

The University is also working with two **Visiting Professors** from the Royal Academy of Engineering: President of 3M New Ventures Stefan Gabriel¹¹ and Jonathan Sands, the CEO of leading brand agency Elmwood. They explore and deliver enterprise and entrepreneurship education opportunities. More recently, Alan Lewis, one of the UK's top businessmen, was appointed Visiting Professor in Entrepreneurship.

The UoH has a **Royal Society Lifetime Industry Fellow**, and collaborative research fellows linked to strategic partnerships with industry.

Mentors

The UoH's Business School has an Advisory Panel with entrepreneurial representation.¹² It also has schemes with partners in law and accountancy which provide students with

⁸ Last accessed June 2014.

⁹ See http://www.hud.ac.uk/research/researchcentres/circ/externalrelationships/.

¹⁰ See http://www.hud.ac.uk/business/visitingprofessors/grahamleslie/.

¹¹ See http://www.hud.ac.uk/news/allstories/3mpresidentbecomesvisitingprofessor.php.

¹² See http://www.hud.ac.uk/uhbs/businessschool-about/advisoryboard/.



networking, mentoring and training opportunities via internationally renowned legal and accountancy firms.¹³

1.2.6 Management of entrepreneurship education

Teacher and trainer management

"Teaching the teachers" is a particularly important issue at the UoH because the teachers at the different schools teach about enterprise and entrepreneurship issues while their main expertise is in a different academic discipline. The UoH has a multiple approach to teaching the teachers, consisting of internal and external elements:

- (1) Internal information: The Enterprise Team aims to be present at all relevant networking events at the UoH in order to talk with teachers about EE and offers to support related teaching. The Enterprise Team has built up a network of EE "ambassadors" across all schools who help spread information about EE and the Enterprise Team.
- (2) Internal consulting on demand: On demand, the members of the UoH's Enterprise Team consult teachers – individually and in groups – about how to teach enterprising and entrepreneurship. Such inquiries reach the Enterprise Team about once a week. Head of Enterprise Kelly Smith said she has "a suite of presentations and workshops that I run as required by academic schools". If teachers need industry-specific information, the Enterprise Team can help retrieve it by tapping into a licensed business reference resource. In some cases the UoH's Teaching and Learning Institute (TALI) helps.
- (3) **Internal workshops for open audience**: The UoH also offers workshops for an open audience. In January 2014 TALI held a half-day workshop called "Enterprise Matters" which is planned to become a separate annual event.¹⁴
- (4) External training: The UoH is member of EEUK, the UK's national network for enterprise educators which has the objective "to support our members to increase the scale, scope and effectiveness of enterprise and entrepreneurship teaching within their institutions" (http://www.enterprise.ac.uk/). Some members of UoH staff attended Best Practice Workshops.
- (5) **Internal and external conference participation**: EEUK also offers an annual International Entrepreneurship Education Conference. On site, enterprise regularly features within the UoH's annual Teaching and Learning Conference. The 2010 conference had enterprise explicitly in the title.¹⁵

The Enterprise Team's approach is to encourage and to **empower teachers to teach EE themselves**. This has several reasons: The Enterprise Team is small and cannot deliver many lectures across the university; it increases respect for the teacher among students if he or she teaches EE him- or herself; and students are more willing to take up knowledge from a teacher with the right pedigree. Thus, individual consulting of teachers about EE often takes the form of encouragement to use and build upon own existing expertise. Kelly Smith said that oftentimes teachers have more entrepreneurial expertise

¹³ See http://www.hud.ac.uk/uhbs/businessschool-about/partnersinlaw/.

¹⁴ See http://www.hud.ac.uk/tali/projects/sp_enterprise/ent_matters/.

¹⁵ See proceedings at <u>http://www.hud.ac.uk/tali/prof_dev/tl_conf/</u>.



than they are aware of, for example from working as freelancers or from working as "enterprising" employees in specific industries.

As EE teaching is voluntary and as the UoH is a large institution, one could assume a **communication challenge** to make the offers for teaching the teachers known among teaching staff. Due to the "Entrepreneurial University of the Year" award in 2012 and the related promotion, every UoH teacher should either know about the existence of the Enterprise Team or know someone who can direct to this team. Furthermore, the Enterprise Team communicates their offers through the UoH's central marketing team.

Research for this case study suggests that this scope of teaching the teachers ensures a sufficiently high **quality of EE teaching** at the UoH. As the lecturer from the School of Music, Humanities and Media who runs the "Magazine Design and Production" module said: "We don't have the strict business knowledge, but it's not necessary, what we have is industry expertise." In this module, if specific expertise is needed which the teacher cannot provide, they invite guest speakers, often alumni, for example in the panel for magazine assessment.

Managing student support

The UoH has a unit dedicated to managing student support in the field of entrepreneurship, the Enterprise Team headed by Kelly Smith. The Enterprise Team is there, according to its homepage, "to support you right from the beginning to help you grow your seed of an idea into a successful business". The Enterprise Team offers support not only to current students but also to those who graduated within the past five years. It offers "one to one business advice and coaching" as well as hot desk facilities in the Duke of York Young Entrepreneur Centre with free access to computer, printer, telephone and meeting rooms. Students may also apply for a Proof of Concept Grant of up to £500. Support may be continuous; the Enterprise Team invites to "periodic updates to review your progress"¹⁶. The Enterprise Team also offers a free events series providing an introduction to various aspects of business and self-employment. Sessions include advice on writing a business plan, researching the market, branding a product and developing essential networking skills.¹⁷ The status of being a Santander University (see section 1.1.3 above, financial resources) helps the UoH provide additional proof of concept and business start-up grants, and enables participation in national Santander pitching and business planning competitions for students and recent graduates.

Internal and external network management

The UoH offers regular opportunities to discuss and share opinions and experiences about EE. Enterprise education often emerges naturally in other teaching and learning and support services events, too. Entrepreneurs, who may be alumni, are often invited back for guest lectures through academic schools and staff contacts. Alumni of the Enterprise Team's student and graduate entrepreneurship support regularly return to speak to the next generation of supported students and the UoH can link them into academic schools too as required.

¹⁶ See http://www.hud.ac.uk/enterprise/enterprisesupport.

¹⁷ See http://www.hud.ac.uk/enterprise/enterpriseawareness/.



Management of curricular integration and attracting new groups of students

The UoH manages the integration of enterprise and entrepreneurship modules into curricula through its defined overall aims, its strategy and, operationally, through the Enterprise Team. In this way all students will deal with enterprise or venturing at some point of every course.

Evaluation of courses and programmes

Each School at the UoH is required to respond to the teaching and learning strategy with plans to the University's Teaching and Learning Committee for approval – this will include explicit reference to enterprising students. Also, in 2014, the annual evaluation of teaching and learning included the following question: "How are enterprising skills being defined and developed in student work?" Individual module evaluations will differ and enterprise activities may or may not be explicitly covered. The UoH encourages academic staff to evaluate this however, and can support them to publish or present at conferences.

1.3 Extra-curricular activities in entrepreneurship education

Overview about extra-curricular EE activities at the UoH

The UoH offers numerous extra-curricular EE activities which are however not focused in this study. Some are directly dealing with entrepreneurship or enterprise, others just include it among other themes. Activities directly related to EE include, above all, the Enterprise Team's activities: business skills workshops, general enterprise support, the SimVenture business simulation game, Collabhub and Huddersfield Enterprise Society meetings and social media platforms. On a regional level, the Graduate Entrepreneurship project is directly about EE. Activities dealing with EE among other themes include an annual teaching and learning conference that also deals with being enterprising.

No.	Name	Objectives	Target group	Offered since [year]	No. of participants in [year]
	Direct relation to EE				
1	Business skills workshops	Raising awareness for enterprise and entrepreneurship	UoH students and graduates	2007	25 – 50 per workshop (2014)
2	Start-up support	Up to one year start-up support (finance, office space in Duke of York Young Entrepreneurs Centre)	UoH students and graduates	2006	≈ 100 (2014)
3	Graduate Entrepreneurship Project	Promote entrepreneurship, advise about it, and facilitate access to start-up resources	Students and graduates in Yorkshire and Humber Region	2009 (Transferred to UoH as Lead Partner) ¹⁸	≈ 8,800 (2010 - 2014)

Exhibit 1-2: Overview about extra-curricular EE activities at the University of Huddersfield

¹⁸ (xxx Project had started before this date under a different organisation, noted KS in her comment on draft final.)



4	Honeypot	Software and event to pitch start-up ideas and assemble teams	UoH students	2013	880
5	Innovation and Creative Exchange (ICE)	Lectures, workshops, networking events and skill exchanges aiming to bring the best of innovative design and industry thinking into the undergraduate curriculum	Engineering and design students	2013	(2013 – 2014, Honeypot and ICE together)
	Indirect relation to EE				
7	Annual conference "Teaching and Learning"	Enterprise and entrepreneurship featured in some way.	Academic teaching professionals	2006	≈180
8	SimVenture business simulation game	Tool for embedding enterprise education in different university subjects.	To be defined	2014	≈ 20
9	Collabhub	Pitching ideas for enterprising projects and find collaborators	All UoH students, also UoH staff and community members	2013	> 50 (2014)

Start-up support from the UoH's Enterprise Team

The UoH's **Enterprise Team** supports around 100 individuals in around 80 pre-start companies a year, of which at least 35 will convert into sustainable business start-ups. Support is provided in two tiers:

- 1. Enterprise Awareness: Primarily a series of 15 to 20 **business skills workshops** a year with each attracting 25 to 50 attendees.
- 2. Enterprise Support: Up to a year's free pre-start and early stage start-up support including access to business advisors, hot desk office space in the UoH's Duke of York Young Entrepreneurs Centre which is part of the 3M Buckley Innovation Centre, micro grants for proof of concept, and other services for students and recent graduates up to five years from graduation.

There also used to be an activity named **Activ8 Your Business**, an intensive six-month support scheme with a start-up grant for recent graduates and new venture creation degree students. It ended in August 2013 due to the immanent closure of the ERDF programme that funded it.

Collabhub: a new type of enterprise society

Until very recently, the University did not have a traditionally recognised "enterprise society". Huddersfield Enterprise Society was founded in December 2014 and launched in January 2015. However, a new type of enterprise society was seeded in 2013 by a senior lecturer in Music Technology, Elizabeth Dobson, and is generating much attention, internally and externally:¹⁹ Collabhub – Innovation Through Collaboration. Collabhub encourages students from all disciplines to pitch ideas for enterprising projects and find collaborators – including staff and members of the local community – through Facebook or face-to-face events. Collabhub is an example of an initiative that is rather

¹⁹ See also Dobson (2015).



unintentionally "entrepreneurial", as Elizabeth Dobson said: "Initially I had no 'affinity' with the terms enterprising or entrepreneurship. I recognise that CollabHub is enterprising, and how incredibly enterprising our students are by way of this 'platform'."

Honeypot: using software to assemble start-up teams

Honeypot stands for Huddersfield Open Network for Enterprise Creativity, Prototype Design and Test. It provides special software that enables UoH students to pitch their ideas and then assemble teams of fellow students who between them have the requisite set of skills. Honeypot is interdisciplinary, it targets students from arts and computing: 500 second-year students from selected courses within the UoH's School of Art, Design and Architecture and School of Computing and Engineering are eligible to register. There are prizes to win: The idea that in the end scoops the most votes wins a set of vouchers. Some projects may also receive funding for proof-of-concept. Stefan Gabriel, President of 3M New Ventures mentors the project.²⁰ Honeypot is financially backed by the Royal Academy for Engineering. While Honeypot is currently extra-curricular, additional curriculum-based elements are planned.

Start-up events

The UoH offers several rather traditional events to support start-ups and entrepreneurial behaviour. **Innovation and Creative Exchange** (ICE) is a series of lectures, workshops, networking events and skill exchanges – and also a more untraditional "24 hour design challenge". It aims to bring "innovative design and industry thinking into the undergraduate curriculum" and to embed "innovation and design methodologies into the curriculum for engineering and design students".²¹ Like Honeypot, ICE is financially backed by the Royal Academy for Engineering.

Among the extra-curricular activities that include EE among other themes is an **annual** "**Teaching and Learning**" **conference** where enterprise and entrepreneurship education has featured in some way every year for at least since 2010. For example, the theme of the 2010 conference was "Connections between Teaching and Learning and Research and Enterprise".

Graduate Entrepreneurship Project: regional universities support start-ups

On a regional level, the **Graduate Entrepreneurship Project** (GE) partners all ten higher education institutions in Yorkshire and the Humber to provide start-up support to students and graduates. The UoH has been the lead partner since 2009. The project enables each institution to provide a wide range of enterprise support in terms of guidance, finance or networking with like-minded individuals. According to GE's website, the project is "widely recognised as an exemplar of best practice in enterprise education in the UK and EU".²² Specifically, it offers business start-up advice, proof-of-concept funding up to £1,000, start-up grants up to £2,500, an annual four-day residential boot camp, and an annual awards scheme. GE attracted £1.3 million of investment from the European Regional

²¹ See

²⁰ See

http://www.hud.ac.uk/schools/artdesignandarchitecture/enterpriseandengagement/studentprojec ts/studentname,92591,en.php.

http://www.hud.ac.uk/schools/artdesignandarchitecture/enterpriseandengagement/studentprojec ts/studentname,92590,en.php.

²² Quoted from http://graduateentrepreneurship.co.uk/about/.



Development Fund (EDRF) as part of Europe's support for local economic development through the Yorkshire and Humber ERDF Programme 2007–13. Between September 2010 and March 2014, the project worked with over 2,600 student and graduates looking to start-up, with over 8,800 attendees to start-up events.

Managing extra-curricular activities

Research findings for this case study suggest that managers of extra-curricular activities may not necessarily need any instructions or training in order to "instruct" about enterprise and entrepreneurship. Motivating may be more important, as Elizabeth Dobson, initiator of the Collabhub initiative, said: "I'm not sure what 'entrepreneurial skills' are, but Kelly [Head of the Enterprise Team] identified and supported the work that I was doing. By celebrating and encouraging it she gave me confidence to continue and believe that it was making positive changes. (...) I probably wouldn't have time to attend any talks or events, the seed comes from my own idea supported by the enterprise team. This, for me, is enough."

As regards the issue of curricular integration, research for this case study found no tendency to move extra-curricular activities to curricular offers. Students were found to be highly motivated to spend time on extra-curricular activities when it is rewarding for themselves, their study and their career.

1.4 Institutional aspects of entrepreneurship education

1.4.1 Organisational set-up and change

Measures for coordinating and integrating EE across the university

Following his appointment as **Vice Chancellor** in 2007, Bob Cryan placed a strong emphasis on enterprise. He put in place a supportive infrastructure with the appointments of a Pro-Vice Chancellor for Research and Enterprise, a Director of Research and Enterprise, and a Head of Enterprise responsible for student and graduate enterprise and business start-up. For EE in curricula the Pro-Vice Chancellor for Teaching and Learning is in charge. The Vice-Chancellor's Office is responsible for the co-ordination and integration of university business, providing advice and support to the Vice-Chancellor on strategic, policy and management matters. The Vice-Chancellor's Office works closely with Directors from across the University. The Directors play an important role in advising the Vice-Chancellor on the management of the University in pursuing its vision, aims and objectives. The School's Deans are also actively engaged.

Kelly Smith pointed out that the Teaching and Learning Strategy 2013 – 2018 strand for "Enterprising Students" and the events and projects put in place by the university's Schools to facilitate the strand's delivery, demonstrate how the UoH combines top-down strategy and bottom-up staff experience into organisational change.

The university has an **Enterprise Team** unit that helps students and graduates actively explore self-employment and business through pre-start and early-stage trading activities. The enterprise team also plays an important role in supporting teachers from the various Schools of the UoH to developing their ability to teach about enterprise and entrepreneurship. At the end of 2014, the Enterprise Team had four core employees: the Head of Enterprise (Kelly Smith) as well as two business advisors and an office administrator.



Influence of external stakeholders in the EE programmes

Several external stakeholders have been facilitating the UoH's organisational change towards putting enterprise and entrepreneurship at the core of the university's strategy. These include for example the Duke of York, Stefan Gabriel from 3M, and business leader Theo Paphitis.

1.4.2 Laws, statutes and codes

Incentives for staff to engage in or support entrepreneurship education

As regards incentives for staff to engage in or support EE, Kelly Smith explained that the UoH's academic schools and the staff in them work towards delivery of the teaching and learning strategy. Other than this there are no incentives as such – it is just a normal part of what the UoH's teaching staff does. There are however, progression routes for enterprising staff. For example, the UoH has **Principal Enterprise Fellows** equivalent to Readers (of which Kelly Smith is one) which recognises enterprise-related expertise. There is also a professorial route for enterprise. However, teaching and learning are also recognised in this way and excellence in enterprise education can feature in both.

Incentives for other stakeholders contributing to entrepreneurship education

As regards incentives for other stakeholders contributing to EE, Kelly Smith explained that there may be some remuneration. However, most guest lecturers will not be incentivised and would probably not expect to be. Much is done on a pro bono basis.

1.4.3 Mindsets and attitudes

A commitment to develop entrepreneurial mindsets and encourage entrepreneurial behaviour can be seen in all items mentioned above. Further examples include working with a social enterprise fund for Universities – HEFCE UnLtd – to provide grants to staff, students, and graduates up to one year to encourage social enterprise start-up. Eleven grants were provided to the value of £42,000. One of the grants helped start-up Collabhub described above. A second helped seed a social enterprise support consultancy idea called CASE Futures lead by University staff, one of which has now registered for an Enterprise Doctorate to explore business models and potential spin out. In another recent initiative, a student-led "law clinic" and an events management company run by placement students took up residence in a Huddersfield shopping centre to offer their services to the community.²³ These endeavours lead by entrepreneurial staff were supported by their academic Schools and encourage entrepreneurial thinking in the students involved.

The results of a recent survey of 100 post-graduate research students at the UoH showed that the majority of them identified with entrepreneurial attributes (Smith at al. 2013): "They were positive towards enterprise skills development with a large majority (>60%) rating it as important or very important. 65% felt that their research could have commercial impact, and 38% reported that starting up their own business appealed to them."

Research findings suggest that there are also UoH teachers who are reserved about enterprise and entrepreneurship. However, to some extent it may rather be a matter of

²³ See <u>http://www.hud.ac.uk/uhbs/lawclinic/</u>.



wording, as one interviewee said: "Some tutors are put off by the words [enterprise and entrepreneurship] as they are associated with business. Especially more traditional disciplines. Staff use all kinds of language that fosters enterprising behaviours, i.e. talks about the (..) industry, starting business, transferable skills, innovating, inventing, designing."

1.5 Outreach to external stakeholders of EE

1.5.1 External stakeholders involved in entrepreneurship education

Enterprises

The UoH involves many external stakeholders and many different types of stakeholders into its EE. Enterprises play a particularly important role. All of the university's study programmes are required to have industry or professional input into the approval process. In many instances this will involve small business and entrepreneurs. Several modules will include guest speakers such as entrepreneurs in lectures. Enterprises and entrepreneurs benefit for example the School of Art, Design and Architecture.²⁴ As another example, the UoH's Business School has an Advisory Panel with entrepreneurial representation²⁵ and Partners in Law and Partners in Accountancy schemes which provides students with networking, mentoring and training opportunities via internationally renowned legal and accountancy firms.²⁶

The UoH has strategic alliances with 3M and Siemens. Entrepreneur Theo Paphitis, owner of the UK stationary company Ryman, has delivered master classes and has invited students to Ryman's Head Quarters.

Financial institutions

In the field of EE, the UoH interacts with Funding Circle, a large peer-to-peer funding platform (see section 1.1.3 above).

Support services

The university has strong links with the Local Enterprise Partnership and Kirklees Council's Economic and Creative Economy teams. It has Partners in Law and Partners in Accountancy schemes. Consults often give their time pro bono to help support students' business ideas. The Enterprise Team has also negotiated support, pro bono in the first instance, with specialist providers such as IP Lawyers. There are links with the local Chamber of Commerce, and support potential via the 3MBIC incubator.

Incubators, accelerators, science parks and technology parks

The UoH's campus hosts the **3M Buckley Innovation Centre**, "where global companies (..) sit alongside innovative start-ups and our best student and graduate businesses". The centre was funded with \pounds 12 million by the ERDF. The UoH considers it a "cross-sector"

²⁴ See examples at http://www.hud.ac.uk/research/researchcentres/circ/externalrelationships/.

²⁵ See http://www.hud.ac.uk/uhbs/businessschool-about/advisoryboard/.

²⁶ See for example http://www.hud.ac.uk/uhbs/businessschool-about/partnersinlaw/. (xxx Profiling template, point 9.)



hub for open innovation". The UoH is also a partner in a project to establish a so-called Globe Innovation Centre in West Yorkshire, linked with the 3MBIC.²⁷ In January 2015 the UoH was awarded funds towards another university-related incubator for advanced manufacturing and the digital and creative industries.

1.5.2 International relationships

The UoH's international relationships in EE include, for example, educator training through attendance and presentations at international conferences, being part of the Santander international network of Universities, and links with 3M as a global company supporting.

1.6 Impact and lessons learned

1.6.1 Evaluating impacts of entrepreneurship education

Overview of impact evaluation methods applied

While the UoH does not as yet systematically collect and analyse data about the impact of its entrepreneurship education, there is quantitative and qualitative data indicating such impact. Impact **indicators** relate to numbers of students supported in starting a business, numbers of students who started a business, and the survival rate of these businesses.

Statistics on students supported and on start-ups from the UoH

The UoH's submission to the UK's National Centre for Entrepreneurship in Education 2012 bi-annual mapping survey showed that over 7,000 students benefitted from curricular offers and extra-curricular enterprise activities. The university's Enterprise Team helps more than 100 students and graduates per year to explore self-employment and business through pre-start activities. Approximately 35 students and graduates per year have converted their explorations into actual start-up to date. The UoH expects this figure to increase with an increase in the numbers being supported since opening of the Duke of York Young Entrepreneur Centre in 2013. Kelly Smith said that "our Enterprise Team (...) has helped literally hundreds of new entrepreneurs start their business journey". The UoH ranks in the UK top ten for undergraduate and postgraduate employability, student placements in industry, and the number of student and graduate businesses supported. The UoH ranked 11th for graduate businesses surviving more than three years in 2012.²⁸ Data from the Destinations of Leavers from Higher Education (DLHE) survey in 2011/2012 and 2012/2013 showed that the vast majority of selfemployed graduates remain in the North of England six months after graduation. See Annex 3 of this case study for more detailed data about start-ups and self-employment of UoH graduates.

Such impact data need however to be interpreted cautiously. In a working paper for the ISBE 2014 conference, Kelly Smith (2014) concluded on the values of UK surveys about start-ups from universities: "The overall picture is complex and issues are present in each

²⁷ See

http://www.hud.ac.uk/news/2014/january/theglobeinnovationcentregrantedplanningapproval.php

²⁸ Data from University of Huddersfield (2012).



data set that need careful consideration in order to understand what is being shown. (...) Data on HE-support student and graduate business start-up is routinely collected via surveys and reports to external funders but there is a lack of literature assessing their reliability and appropriateness for measuring impact of the HE sector on start-up, survival, and growth."

Qualitative indicators of UoH EE impact

UoH students and business support alumni have been regular winners of regional and national competitions relating to enterprise and entrepreneurship. They have been featured on television programmes including BBC 3's "Be Your Own Boss".²⁹

Research for this case study found that the UoH's intention is to foster the emergence of small businesses, not necessarily fast-growing ones. As UoH's entrepreneurship Professor Gerard McElwee said: "There is a case to argue that there can be more value to the regional economy in creating ten small ventures than one larger SME. Multidisciplinary approaches to supporting new venture creation has to be the way forward, whereby students and staff from differing disciplines work together to create new opportunities." Some examples of new business established by students and graduates:

- EG Visuals Ltd., an animations service provider, by recent graduates and Duke of York Young Entrepreneurs of the Year Award winners;
- Jacob Hill of the Lazy Camper, a provider of quality camping equipment, in September 2014 a BA Enterprise Development degree student;
- U-Lott, a university lottery provider, a social enterprise started by two BA Enterprise Development degree students;
- Hypersloth, a computer-animated games studio started by Enterprise Placement Year Alumni and UoH students;
- ProperMaid, an innovative baking product caterer, started by a graduate from 2008.

Impact through board memberships

UoH experts also provide high-level leadership in entrepreneurship education through sitting on boards of Enterprise Educators UK and the Institute of Small Business and Entrepreneurship as well as actively contributing to national policy including the QAA Guidelines for Enterprise and Entrepreneurship Education. UoH staff and PhD students regularly present at events and publish on enterprise education topics.³⁰

1.6.2 Lessons learned

Summary of lessons learned from this case

The UoH provides insightful experiences on many different levels, mainly in conceptualisation and organisation. All in all, five key "lessons learned" can be extracted from the case study. They explain the foundations for the UoH's approach to make every student encounter EE at some point of study and to make EE teaching "everyone's responsibility":

²⁹ Data from University of Huddersfield (2012).

³⁰ Information from University of Huddersfield (2012).



Conceptualisation of "entrepreneurship" as "enterprising and venturing": The UoH distinguishes between "enterprise" ("having an idea and making it happen") in the sense of behaving entrepreneurially without necessarily starting a business, and "entrepreneurship" in the sense of new venture creation, i.e. actually starting a business. This conceptualisation may help reaching students who do not seek to start a business – and teachers who do not seek to support students in starting businesses – but who may apply their enterprising thinking and behaviour for the benefit of their individual career and for the economy and society at large. For some students and teachers even the term "enterprise" may be unattractive. They may prefer terms like designing, inventing, innovating.

Ensuring sustainability of EE through support from high management: Strong leadership from the Vice Chancellor was apparently the most important reason why entrepreneurship and EE became key objectives of the UoH and were developed ever stronger in the past five years. Having established the positions of a Pro-Vice Chancellor for Research and Enterprise, a Director for Enterprise and a Head of Enterprise as well as involving the Deans helps sustain these objectives.

Enabling EE throughout the university's schools through decentralised teaching: Kelly Smith stated that "perhaps the novelty of our approach is that you can find enterprise and entrepreneurship education almost everywhere at the University of Huddersfield". The UoH seeks to ensure delivering EE throughout the university by involving teachers who are no experts in entrepreneurship. This approach can be characterised as decentralised, as opposed to a possible approach in which EE courses are offered through one central unit, which could potentially be the business school.

Enabling non-business teachers to impart EE through a train-the-teachers concept: The UoH enables non-business teachers to impart EE through a concept for "training the trainers". Internally, the concept includes support from the UoH's Enterprise Team, staff development sessions organised by the Teaching and Learning Institute, and attendance at enterprise-related sessions at the UoH's annual Teaching and Learning Conference. Externally, support includes instructions from Enterprise Educators UK (the UK's national network for enterprise educators) as well as attendance of EE good practice workshops and the annual International Entrepreneurship Education Conference.

Supporting enterprising students and managing EE through an "Enterprise Team": The UoH's Enterprise Team, an organisational unit of the UoH, plays a crucial role in supporting enterprising students as well as contributing to the development of EE across the university's Schools.

Transferability to other universities

EE at the UoH has many characteristics that could potentially be adopted by other universities. This may apply in particular to the Enterprise Team as an organisational unit as well as decentralised EE teaching and a specific concept for teaching the teachers. The UoH does not have a very specific profile, no outstanding endowments and no very specific preconditions that would make it particularly difficult to transfer its approach elsewhere. One could assume that the UoH's approach might work best at universities with a traditional strength in engineering and business, just as the UoH. However, the UoH is also strong at fields that are not obviously linked with enterprise and entrepreneurship but which have considerable related activities.



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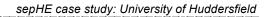
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Annex 1: Contents of EE degree courses

Enterprise Development BA(Hons) 2014-15

At a Glance

UCAS code: N190

Start date: 22 / 09 / 2014

Duration: 3 years full-time

Places Available: 30 (this number may be subject to change)

Course Type: Full Time

Entry Requirements: Minimum entry requirements include one of the following:

- BBB at A Level
- From DMM-DDM in National Diploma
- 300 UCAS tariff points

We welcome students of any age and will consider each applicant, via interview, on the strength of their motivation and suitability for the course. Entrants to the course would be expected to demonstrate the following personal qualities: self assurance and self confidence; motivation to do something on their own; a willingness to accept responsibility for their own decisions and actions; in possession of drive and a determination to succeed; comfortable with setbacks.

The course

This distinctive and original course has been designed to help young entrepreneurs start and run their own business whilst studying for a degree. Dragons' Den panellist and selfmade retail millionaire Theo Paphitis has given his support and backing for this pioneering degree at Huddersfield. Over the three years of the course you'll have the benefit of access to several successful entrepreneurs, including Theo, who has agreed to mentor students with his very own 'Masterclass'. In a managed risk environment you'll screen opportunities to find one with real potential, plan the business, launch it and grow it. We develop the idea, the person and the business so you can graduate with both a degree and a viable business. You'll receive guidance and mentoring from our own Enterprise Team business incubation service and from external professionals, as well as help in finding the necessary funding to get your business off the ground.

Course content

On this course you'll start your own business while you study the necessary business disciplines. You will focus initially on the process of identifying and screening a number of ideas, homing in on one that is viable. Once you've decided on your business opportunity, you'll develop your plan and start your enterprise. Finally, you'll operate your business in the final year and gain credits from this experiential learning. We maintain links with a wide range of successful businesses and organisations. We encourage you to network with successful role model entrepreneurs, professional experts and external mentors as well as our Business School and Enterprise Team staff. Most types of business are relevant and possible and there is some opportunity to study more technical support modules from across the University.



Year 1

- + Marketing Analysis
- + Enterprise Development 1: Developing The Entrepreneur
- + The Legal Environment of Business and Employment
- + Accounting for Managers (Foundation)
- + Creativity and Innovation for Business

Year 2

- + Small Business Enterprise and Planning
- + Management and Research Methods
- + Enterprise Development II Developing the Business Plan

Plus one option choice of either:

+ Customer Insight

or

+ Market Research and Consultancy

or these three modules:

- + Marketing Communications
- + The Customer Experience
- + Introduction to Operations Management

Year 3

- + Business and the Entrepreneur
- + Enterprise Development III Developing the Business
- + Enterprise Development Dissertation

Teaching and assessment

You'll learn through lectures, seminars and tutorials, with a strong focus on practical work. Our varied assessment methods, which include assignments, exams and individual project work, are focused upon the development of transferable skills which will provide immediate benefit in your future career.

Facilities

The Business School was opened in 2010 at a cost of £17m and is the most eco-friendly building on campus. It's a state-of-the art facility and provides you with a modern, professional environment in which to learn and develop. Located right next to the Huddersfield Narrow Canal it's in a leafy and picturesque location at the heart of the campus.

Our students can take advantage of start-up facilities and business support in the Centre for Young Entrepreneurs. The Centre is located in the University's new £12 million 3M Buckley Innovation Centre which was opened by HRH The Duke of York in May 2013.

(Source: <u>http://www.hud.ac.uk/courses/2014-15/full-time/undergraduate/enterprise-development-</u>ba-hons/, last accessed 15/5/2014)



Master of Enterprise

The Masters of Enterprise (MEnt) programme allows you to undertake a one year (full time) or two year (part time) research degree. It contains little or no formal taught component. Such programmes are attractive to those wanting a briefer research degree than a PhD. It is ideal for individuals wishing to explore a potential business or social enterprise idea, either to start-up their own business or for a new venture within public- or private-sector organisations. The emphasis will be on enterprise creation and personal entrepreneurial development within the chosen area, rather than on the study of business organisations. On graduation, you will have acquired entrepreneurial knowledge, behaviours, and skills with the ability to use research to develop and underpin your ideas. Depending on your research project, you will be in a position to take a new service or product to market; increase your likelihood of success in business, social enterprise, or self-employment; and have a better understanding of issues impacting on enterprise activity related to your area of research.

The Research Programme

The programme of research normally involves a literature study, followed by the critical and reflective development of an evidence-supported business plan. The supporting evidence might include market research; empirical testing of materials, methods, or procedure; or full discussion of appropriate academic literature. A short version of the business plan should be provided in an appendix to your research thesis. You are expected to work to an approved programme of work including appropriate programmes of postgraduate study (which may be drawn from parts of existing postgraduate courses, final year degree programmes, conferences, guided reading or a combination of study methods). The programme of research is assisted by these background and related studies which can be especially important if you are a part-time/mature student who may have been away from formal studying for some time.

Supervision

You will have a minimum of one main supervisor who will normally be part of a supervisory team, comprising of up to three members. At least one member of the supervisory team will have a successful track record of supervision at the appropriate level, and at least one member of the supervisory team will be currently engaged in research in the relevant discipline(s) so as to ensure that the direction and monitoring of the student's progress is informed by up to date subject knowledge and research developments. They will be supported by an enterprise adviser, normally based in the University, although an external adviser may also be considered depending on individual project requirements. The research supervisor(s) will work with the student to select taught modules appropriate to their research project, and provide subject-specific guidance; the enterprise advisor will provide advice on issues such as business or social enterprise start-up, self-employment, or knowledge transfer.

Assessment

Examination for a Masters by Research is by thesis. The text of the thesis should not normally exceed 25,000 words. Where the submission is accompanied by material in other than written form or the research involves creative writing or the preparation of a scholarly edition, the written commentary should normally be a minimum of 5,000 words.

(Source:

http://www.hud.ac.uk/researchdegrees/typesofresearchdegrees/masters/masterofenterprise/, last accessed 15/5/2014)



Annex 2: Description of an exemplary credit-bearing course outside the Business School

Enhancing employability: good practice in enterprise education

Name: Caroline Pringle

Role: Senior Lecturer Digital and Practical Journalism

Institution: University of Huddersfield

Activity/practice: what it is and why it is innovative and/or offers something different;

Magazine Design and Production "analyses the diversity and complexity of the magazine market and considers the nature of design and production. The economics, costs, techniques, and organisation of design and production are examined and the nature of the publishing industry investigated. The module also looks at the market for new magazines, and investigates how editors and publishers identify and develop new opportunities."

This module, delivered to Journalism students (and offered to Business with Design students), offers a holistic view of the Magazine industry and production process; it allows students to see through a project from conception idea for a magazine, to the production of a dummy copy, via market research, budgeting, design iteration and marketing. All of this is then presented to a Dragon's Den style panel of Industry professionals that the staff group have built up over the years.

The delivery of the module is fairly traditional in the first term laying the ground work of knowledge and learning, via lectures (including visiting practitioners), seminars and practical design workshops.

In the second term students work in groups as a business team, taking on responsibility for design, editorial, business and finance. They are provided with a production schedule and all sign a contract agreement. We hold drop-in production workshops instead of traditional classes, this is to encourage a production environment and encourage informal peer collaboration and assessment.

These session runs throughout Friday afternoon and must include a production meeting with a tutor. Production meetings include feedback and directed learning, adhering as closely as possible to the production schedule. It also allows us, the tutors, to ensure work is progressing at a good rate for completion.

While each student takes ultimate responsibility for an area of the project, the aim is that they then delegate tasks to group members, ensuring all students tackle a range of tasks and skill sets. This includes writing copy, market research, page design, sourcing and contacting relevant advertisers and building a web/digital strategy.

The culmination of the project is a 12 page dummy copy of the magazine with representative copy, design and advertising; a portfolio of evidence that this is a viable magazine product, including market research, media pack, style guide and design analysis, web strategy, basic balance sheet and basic business plan; this is all presented to the panel of industry professionals and tutors.

The presentation is treated professionally and the panel ask challenging and pertinent questions. While their role is not to mark students, they add a real world angle to this



assessment. Practitioners range from magazine and newspaper editors, to print and digital media designers to online marketing strategists working in the publishing industry.

How students are engaged; students become very invested in this project, often producing above and beyond what is expected.

The weekly meetings with tutors and the production schedule serve to break down a large and potentially unwieldy project in to reasonable and achievable targets, these are skills that are incredibly important in enterprise and in honours level modules and beyond.

The production afternoons provide a flexible frame work for students to work in and are incredibly productive and positive working environments, ensuring that groups and students remain motivated and engaged.

Outcomes and evidence of impact: General outcomes are that students can see the whole process of production, putting the journalism writing and content production in context. The project also encourages the embedding of skills from outside the module, post pertinently at the moment web skills in implementing web strategies, and while this is addressed in teaching, students regularly bring their own skills and knowledge to the project.

Every year at least one of these projects will be taken further, into further education based projects or on to actual publications, this year a group took elements of their magazine idea and approached one of their advertisers with a magazine proposal, they went on to produce two 30 page digital magazines for this external client as part of an honours level module. The success of this has led to the client commissioning regular publications.

The panel that attend as Dragon's are regularly very impressed with the standard of work this module produces and this has led to a range of work experience places, for final year students, these include Press Association, Excelle Magazine and Barnsley Chronicle.

Magazine Design and Production

Intermediate Level Core for: BA(Hons) Journalism Optional on: BA(Hons) Music Journalism BA(Hons) Sports Journalism BA Hons Business with Design



Annex 3: Statistics about start-ups from the UoH

The UK's Higher Education – Business and Community Interaction (HE-BCI) survey shows data for start-ups from universities. In terms of the wider university provision, the UoH's HE-BCI data for graduate start-ups (up to two years from graduation) and three-year survival rates are provided below. The UoH only counts a graduate start-up if it has received dedicated start-up support, which means that the actual number may be higher. The numbers nominally dropped in 2011 – 2012 due to a change in reporting requirements that required universities to have evidence of business registration. Before 2010/2011, the UoH was ranked in the top ten or eleven of UK universities.

Destinations of leavers from higher education provide self-reported data on selfemployment and exploration of business start-up six months after graduation. The UoH rates of self-employment and business start-up are above national average. A new DHLE question was included in 2011/2012 onwards, asking how well prepared the graduates' universities prepared them for self-employment and freelancing. 40% of 3,660 graduates responded that the university prepared them "well" or "very well".

Year Survey / indicator	2008/ 2009	2009/ 2010	2010/ 2011	2011/ 2012	2012/ 2013
HE-BCI					
Number of graduate start-ups created	33	45	39	20	21
Number of graduate start-ups still active which have survived at least three years	51	61	77	51	58
DHLE					
Self-Employment	70	129	165	161	179
Business Start-Up				24	35
Well or very well prepared for self-employment / freelancing				39%	40%

The DLHE data also shows that the vast majority of self-employed graduates remain in the North of England six months after graduation. 66% are based in Yorkshire and the Humber with the majority of these in West Yorkshire in which Huddersfield is located (49% of all self-employed individuals). Only 3% are based in Greater London. A proportion of these businesses are likely to have been supported by the Yorkshire and Humber ERDF-funded Graduate Entrepreneurship Project that was specifically designed to help graduates start-up and remain in the region.

The mean salary for self-employed graduates who provided information was £23,000 in 2011/2012 and £23,900 in 2012/2013. These numbers are comparable or higher with the whole survey population that reported mean salaries of £23,300 and £21,800 respectively. Although a large number of self-employed individuals were not drawing a salary six months after graduation, four reported that they provided themselves with a salary of over £50,000 in each of the two years for which this data has been recorded.

The UoH's Enterprise Team data showed that 52 students and graduates signed up for business start-up support in 2012/2013, 37 of who were pre-trading and 15 trading. The Enterprise Team dealt with 281 general enquiries, held 450 one-to-one business advice meetings, and delivered 14 events with over 400 attendees in total. Over 80 students and graduates are currently signed up for Enterprise Support and access to the Duke of York Young Entrepreneur Centre.