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FOREWORDS



LORD BILIMORIA
Chairman of Cobra Beer
Chancellor of University of
Birmingham
Officer of the APPG for
Entrepreneurship

I congratulate the APPG for Entrepreneurship on its report on enterprise education.

When I was an undergraduate in the UK in the late 1980s, the words 'enterprise', 'entrepreneurship' and 'business' barely existed. Today, we have business schools at virtually every university, and enterprise education is recognised as being crucial for both our students and for our country's future.

Having started my business, Cobra Beer, from scratch, I discovered the need to have – and discovered that I did have – the ability to be innovative and creative, in order to be an entrepreneur and to not only start-up but also scale-up a business.

The report provides several important recommendations, including ensuring the right incentives are in place so that education isn't delivered in silo, exclusively in business schools.

It also emphasises the wider importance of enterprise education, making it clear that exposure to and development of these skills will benefits students, whatever their career in the future.

The report also says this Government should make sure that enterprise education is available throughout the education system – from primary school, right the way through to universities. Most importantly, implementing enterprise education makes students aware that becoming an entrepreneur is a career choice.

With Britain home to less than 1 per cent of the world's population, it has constantly punched above its weight. We have the finest universities in the world, along with the United States, and produce 16 per cent of the world's highly-cited research papers. I urge government to listen to the recommendations of this report and to make entrepreneurship and enterprise not just a priority, but the cornerstone of this country's creative, innovative future.



NATHAN BOSTOCK CEO of Santander UK

Enterprise Education is the future of learning and development for industries experiencing rapid change and reinvention, fuelled by new digital capabilities. Financial services is a frontier sector in the adoption and deployment of new technologies in order to meet and anticipate customer need, but we will only be truly fit for the future with a workforce which is primed to adapt, innovate and disrupt.

These are the qualities of a challenger mindset, which we value greatly at Santander UK. We are committed to bringing true competition to the market in banking for business by resolving real-time issues, such as our shared need to nurture and funnel a healthy flow of talent into industry. Entrepreneurial and creative skill-sets are at a premium, whether considering software and engineering development across all services, or export-led growth for small and medium-sized businesses.

This is why we have been working alongside higher education, apprentices and young entrepreneurs for many years. We support start-ups, business incubators, STEM research and SME-internships at 84 universities in the UK, and the transformative impact and effectiveness of these programmes have helped inform this report. One of the most important outcomes of enabling students to learn on the job whilst assisting local businesses has been to encourage the recruitment and retention of talent within regional economies.

Enterprise Education is a business imperative. We should invest in lifelong learning through practical application; breaking down barriers between business and academia, whose distinctions are increasingly redundant in our digital age. New tech means new approaches and applications, and that means education is everybody's business.

INTRODUCTION

To thrive in the modern world, Britain's next generation must be adaptable to change. Up until relatively recently, a job for life was both possible and preferable. It's increasingly neither. Universities have been central to many of the great intellectual revolutions across history – now they must embrace enterprise education to imbue students with the necessary enterprising skills to flourish in the twenty-first century.

Government has a role to play. Political action — or inaction — has significant repercussions for how enterprise education is delivered. This report aims to inform the government about the successes, challenges and opportunities for delivering enterprise education at universities. Its recommendations are based on responses to a Call for Evidence and aim to work with the grain of the latest thinking and practice.

Central to the recommendations is the need for government to be more engaged and its policies more consistent with those in universities delivering enterprise education. The ambition of "enterprise for all" will only be achieved if incentives are aligned and enterprise skills made a priority at the highest level.

The numerous case studies profiled throughout the report show the value that enterprise education delivers to students, but one size doesn't fit all. The report recommends the government should acknowledge that self-employment is an outcome that some students should be better prepared for, and that universities should be encouraged to tailor their language depending upon the course.

Incentives matter, and one easy policy win would be a minor reform to the Teaching Excellence and Student Outcomes Framework (TEF), which currently discourages universities from incubating start-ups, as it reflects badly upon them if students leave to start businesses – even if these businesses are successful.

The report also stresses the need for government to improve the pipeline of enterprise education through all levels of education, though more work and consultations are needed to ensure everyone across all levels of education are on board. Part of this should include improving the richness of destinations data to better understand outcomes.

Perhaps the most enterprising thing a university student can do is start a business during or after university. Doing so is certainly one facet of enterprise education — a very important one as universities contribute

"The ambition of 'enterprise for all will' only be achieved if incentives are aligned and enterprise skills made a priority at the highest level."

to one in every hundred new business births in the UK,¹ and a survey found that two-thirds of founders of student start-ups said their university influenced them to start their business² — but in practice its aims are broader, and arguably more ambitious than this.³ Given the changing nature of all work, enterprise skills are increasingly prized by employers too. Innovation isn't just for small companies, there is a growing demand from corporates to prevent — or at least postpone — the creative destruction wrought by insurgent start-ups by fostering intrapreneurship to drive innovation.

There is a clear demand for these skills, but too few university students gain access to enterprise education. In fact, research undertaken by the Department for Business, Energy and Industrial Strategy (BEIS) has revealed that across the 2014/15 academic year, only 4.3% of undergraduate students received any identifiable training in enterprise; less than 1 in 20 students received formal training in business skills as part of their degree; and only half as many female students took enterprise modules as compared to their male counterparts.⁴

Enterprise educators in universities are already awake to the importance of inspiring the next generation through enterprise education, but they are ambitious to achieve more. This report aims to amplify the latest insights and research, specifically when it relates to the role of government.

"There is a clear demand for these skills, but too few university students gain access to enterprise education."

¹ David Godfrey and Verity Hubbard (2018) "Learning and Entrepreneurialism: The Impact of Entrepreneurial Education on Regional Economies" Localis.

² Research to Assess the Nature and Annual Value of Student Start-Ups, HEFCE.

The Quality Assurance Authority for Higher Education defines it as follows: "Enterprise Education is defined here as the process of developing students in a manner that provides them with an enhanced capacity to generate ideas, and the behaviours, attributes, and competencies to make them happen. It extends beyond knowledge acquisition to a wide range of emotional, intellectual, social, cultural and practical behaviours, attributes and competences, and is appropriate to all students. These are all underlying factors that can enhance employability prospects as well as be taken further through Entrepreneurship Education. The aim of Enterprise Education is to produce graduates with an awareness, mindset and capability to generate original ideas in response to identified needs, opportunities and shortfalls, and the ability to act on them, even if circumstances are changing and ambiguous; in short, having an idea and making it happen. Enterprise behaviours can include: taking the initiative, making things happen, reflecting, communicating, pivoting and adapting, storytelling, taking responsibility, networking, personal effectiveness and managed risk taking. Enterprise attributes can include: open mindedness, proactivity, curiosity, self-efficacy, flexibility, adaptability, determination and resilience. Enterprise competencies can include: intuitive decision making, identifying opportunities, creative problem solving, innovating, strategic thinking, design thinking, negotiation, communicating, influencing, leadership and financial, business and digital literacy."

Undergraduate Entrepreneurship Training Review, EEUK IEEC Tim DaffornRoundtable
 Provided by EEUK Call for Evidence Submission

POLITICAL CONTEXT

The UK Government sees entrepreneurial graduates as crucial for economic growth, and universities are critically placed to foster this entrepreneurial activity. Since the 1970s business schools have been offering courses in entrepreneurship, and entrepreneurship education has since become an important research domain in itself. In the UK, both enterprise and entrepreneurship education are now a recognised part of the higher education curriculum.⁵

Given the calibre of the UK's higher education sector, it is perhaps to be expected that we punch our weight when it comes to expertise on enterprise education. Many responses to the Call for Evidence specifically lauded the QAA 2012 guidance on Enterprise and Entrepreneurship⁶ (updated in 2018) as the culmination of years of thinking, which built on previous reports, including, but not exclusively, the APPG for Microbusinesses 2014 Report: An Education System Fit for an Entrepreneur⁷ and the Government's Enterprise for All report, led by Lord Young.⁸

Last year's wide-ranging *Building our Industrial Strategy* green paper didn't ignore enterprise education either. It noted the need to support the next generation of entrepreneurs, and as part of the new Industrial Strategy, Professor Tim Dafforn was appointed to the new role of Chief Entrepreneurial Adviser at BEIS and tasked with producing a review that will include the role of education in entrepreneurship.

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⁵ Submission to APPG for Entrepreneurship, Plymouth Marjon University.

⁶ QAA Enterprise and Entrepreneurship Review (2018) "Enterprise and Entrepreneurship Education: Guidance for UK Higher Education Providers" Quality Assurance Agency for Higher Education

⁷ APPG for Microbusinesses (2014) "An Education System fit for an Entrepreneur"

⁸ Lord Young (2014) "Enterprise for all: The relevance of enterprise in education" Department for Business, Innovation, and Skills.

⁹ Building our Industrial Strategy Green Paper, Department for Business, Energy and Industrial Strategy

The data we have to work from is also improving. Between July 2015 and June 2017, the new Destinations of Leavers from Higher Education (DLHE) review was conducted, which improves upon the model for finding out what higher education students do after graduating. ¹⁰ This will allow more longitudinal and granular data.

Another significant step in raising the status of enterprise education came when the Department for Education's (DfE) Teaching Excellence and Student Outcomes Framework (TEF) incorporated goals around enterprise education and entrepreneurship, such as including the extent of student involvement in enterprise and entrepreneurship and the number, impact, and success of graduate start-ups."¹¹

The Higher Education Funding Council for England (HEFCE), now Research England, developed the third leg of the HE stool, the Knowledge Exchange Framework (KEF), which was launched by MP Jo Johnson for consultation last November. ¹² It will sit alongside TEF and the Research Excellence Framework (REF), and builds upon the data collected by the extensive UK-wide Higher Education Business & Community Interaction (HE-BCI) survey¹³ and the information provided for the Higher Education Innovation Fund (HEIF) in England. ¹⁴ The definition of knowledge exchange includes support for enterprise and entrepreneurship activities.

In Scotland last year, an Enterprise and Skills Strategic Board was created in response to the 2016-17 Enterprise and Skills Review, while the Making it Happen initiative is aiming to address the gaps of enterprise and entrepreneurship education in Scottish higher education. The Welsh Government's Youth Entrepreneurship Strategy provided strategic direction and funding for activities, such as Big Ideas Wales. ¹⁵ In late 2017, the Welsh Government's Economic Action Plan called for more entrepreneurship and innovation driven enterprises. ¹⁶

^{10 [2017] &}quot;NewDLHE: Destinations and outcomes review." Higher Education Statistics Authority

¹¹ Teaching Excellence and Student Outcomes Framework specification, Department for Education

¹² Knowledge Exchange Framework, Research England, UK Research and Innovation

¹³ Higher education - business and community interaction survey (HE-BCI). Higher Education Funding Council for England

¹⁴ Higher Education Innovation Fund. Higher Education Funding Council for England.

¹⁵ Youth Entrepreneurship Strategy. Business Wales.

¹⁶ Prosperity for All: Economic Action Plan. Welsh Government.

Northern Ireland's Think/Create/Innovate Education Action Plan¹⁷ informed its 2014-25 Innovation Strategy, which included the provision of skills needed by innovative companies.¹⁸ It noted that entrepreneurship education was a basic requirement, and will feed into the Creative NI Framework.

At the EU level, the European Joint Research Centre (JRC Seville) published the EntreComp¹⁹ in 2016, which was informed and influenced by the UK 2012 QAA guidance and then fed back into the recent 2018 QAA update.²⁰ As noted, many respondents to the Call for Evidence stressed the importance of the QAA guidance, with ICURe's submission describing it as a "seminal moment in 2012 when the QAA presented to the UK (and global) community a coherent and rigorous approach to the need for and methods to develop enterprise and entrepreneurial mind-sets in our community."²¹

British universities have a long and distinguished history as institutions independent of government control, so there are established limitations. As such, central government isn't able to drive radical reforms, which would be both unwelcome and might well be unworkable. The submissions to the Call for Evidence were supportive of this constraint. In China, where policy is driving all undergraduates to have education of this type, the scheme is struggling because the quality of providers is so variable. This is an example of the need for caution with regards to policy push, especially if there is limited funding or resources attached to the policy change.²²

"British universities have a long and distinguished history as institutions independent of government control, so there are established limitations."

¹⁷ Entrepreneurship and education action plan. Department Enterprise, Trade and Investment, Education and Employment and Learning (Northern Ireland)

¹⁸ Northern Ireland Innovation Strategy, Department for the Economy (Northern Ireland)

¹⁹ EntreComp: The Entrepreneurship Competence Framework. European Union

²⁰ Submission to APPG for Entrepreneurship, Enterprise Educators UK (EEUK). Entrecomp is gaining traction across the UK as it is highly accessible yet thoroughly underpinned for use at all academic levels.

²¹ Submission to APPG for Entrepreneurship, ICURe.

²² Joint Submission to APPG for Entrepreneurship, Coventry University and The University of Buckingham.

There are, however, a number of significant policy levers that experts in enterprise education would like to see pulled in order to better support their work. Although a one-size-fits-all approach is neither possible nor desirable, government policy is important for directing and incentivising universities. In a recent Enterprise Educators UK (EEUK) Policy Workshop, it was concluded that:²³

- Policy reports are vital in providing the evidence of national importance and interest of this agenda, often working best for EEUK members as a lever to engage others both internally and externally.
- Policy inevitably lags behind university activities, but is invaluable in the ways that it informs, and convinces senior managers and key stakeholders.
- Policy has limited direct impact upon the operational delivery of enterprise activities, but forms a vital part of communicating the approach/strategy to stakeholders.
- EEUK members (university staff) are primarily driven and informed by the individual institutional direction. As professionals advancing work in this sector, their task is often to influence senior managers through use of policy and institutional comparison to engage more directly with this agenda.
- Enterprise educators are also directed/influenced by educational policy
 as well as wider Knowledge Exchange/enterprise and entrepreneurship
 (start-up) policy, and specific targeted guidance on areas such as
 social enterprise.

"There are, however, a number of significant policy levers that experts in enterprise education would like to see pulled in order to better support their work."

²³ Submission to APPG for Entrepreneurship, Enterprise Educators UK (EEUK). "The message from EEUK members in Sept (2017) was 'Give us policy that supports our work, not dictates our practice'. EEUK Members are not seeking policy that seeks to create Government approval of operational/institutional structures and approaches but is seeking 'green light' to make this change happen. This will prevent a 'one-size-fits-all' directive from policy makers that can only fail to respond to local, regional and institutional opportunities and demands."

ENTERPRISE EDUCATION EVIDENCE

There are challenges measuring the effectiveness of enterprise education. First, there just isn't the funding to properly assess everything being done. Second, there is the challenge of measuring all the positive – and negative, for that matter – outcomes. If someone is imbued with the skills from enterprise education to start a successful business after being made redundant a decade after university it's not going to show up the records; and if someone develops skills that allow them to run their department in a large corporate to produce more innovation, we aren't going to know. Even when we see positive outcomes, these might be less to do with the impact of enterprise education and more to with selection bias – in other words, even without the intervention these students may have gone on to show the same, or even more pronounced, entrepreneurial traits.

However, some of the more substantive research below tries to account for selection biases and the other evidence points to cautious optimism that enterprise education leads to worthwhile outcomes. The European Union has identified 91 studies on entrepreneurship education from 23 countries and demonstrated its multiple benefits.²⁴ A 2013 Business Innovation and Skills (BIS) report conducted a systematic review of published literature from the UK and beyond.²⁵ The authors conclude that there are "positive statistical relationships between various enterprise and entrepreneurship education learning activities in school and tertiary education and economic impacts including starting a new business (strong evidence for entrepreneurship course graduates); increasing employability and earnings; and contributing to the growth of businesses (especially for graduates entering small businesses). These suggest that enterprise and entrepreneurship education is a positive stimulus." The report also suggested more research was needed, but ultimately the meta-study made the case for enterprise education.

The government is aware of the value of enterprise education. At the 2016 International Entrepreneurship Educators Conference (IEEC) Roundtable, Professor Tim Dafforn, who was Chief Entrepreneurial Adviser at BEIS from November 2016 to October 2017, drew upon a range of studies demonstrating a correlation between entrepreneurship education and entrepreneurial activity and success, including: HEFCE finding that

²⁴ Entrepreneurship Education - A Road to Success, European Commission, 2015.

²⁵ Enterprise Education Impact In Higher Education and Further Education, Department of Business, Innovation and Skills.

around two thirds of respondents to their study felt influenced to develop start-ups by their university support, including through their courses and specific enterprise support;²⁶ and that graduates who participated in entrepreneurship education reported higher scores in 10 out of 12 key entrepreneurship competences, compared to a control group.²⁷

ENTERPRISE EDUCATION AND EARNINGS

A thorough report from Arizona reveals that, on average, entrepreneurship graduates are three times more likely than non-entrepreneurship graduates to start new business ventures. ²⁸ Controlling for the personal characteristics of graduates and other environmental factors, entrepreneurship education increased the probability of an individual being instrumentally involved in a new business venture by 25% and increased the probability that a graduate will owns his or her own business by 11% compared to non-entrepreneurship graduates.

Entrepreneurship education has a significant impact on the income of graduates. On average, entrepreneurship graduates have an average annual income that is 27% higher than the average annual income of non-entrepreneurship students. This is the case even if graduates don't become business owners themselves, after adjusting for individual characteristics, entrepreneurship graduates are more likely to be employed full time working and those working for large firms earn approximately \$23,500 more per year than other graduates. Furthermore, they own 62% more assets than their counterparts. Controlling for personal characteristics, entrepreneurship education increases the income of graduates by \$12,561 beyond that of other business graduates.

Entrepreneurship education contributes to the growth of firms, especially small firms. On average, small firms employing entrepreneurship graduates have greater sales and employment growth than those that employ non-entrepreneurship graduates.

[&]quot;Entrepreneurship graduates are three times more likely than non-entrepreneurship graduates to start new business ventures."

²⁶ Research to Assess the Nature and Annual Value of Student Start-Ups, Higher Education Funding Council for England, 2015.

²⁷ Effects and impact of entrepreneurship programmes in higher education, Entrepreneurship Unit, European Commission, 2012.

Case Studies: The Skills to Stay-up

The Hive at Nottingham Trent University

The Hive is Nottingham Trent University's purposebuilt Centre for Entrepreneurship and Enterprise. It helps students, graduates and anyone with a viable business idea turn it into reality, as well as delivering expert entrepreneurship education into the curriculum across the university.²⁹ The intensive HeadStart programme, which provides a structured process designed to help students shape their business concept, identify and evaluate the opportunities and potential, and structure a business plan, has supported the creation of more than 500 businesses in the last 15 years, almost 70% of which are still trading today. Given that over 50% of new businesses fail within the first five years, this is an impressive outcome.³⁰ Having a centralised and dedicated location for entrepreneurship education ensures students from all departments know where to go to access support.

Venture Creation Programme at the University of Buckingham

Professor Nigel Adams of the University of Buckingham has started a longitudinal research project to verify the effects of the University's BSc Business Enterprise Venture Creation Programme (VCP) on students' entrepreneurial self-efficacy.³¹ The first results of this research were reported at the European Conference on Innovation and Entrepreneurship in Jyvaskyla, Finland, and showed that:

- Before they started the programme, the 2015 cohort of VCP students were less entrepreneurial than the total database of pre-start-up students, except for two factors: their attitude to risk and their appetite to start a business.
- After one year on the programme, the 2015 cohort of VCP students were more entrepreneurial than they had been at the start of the programme in all the factors, apart from, attitude to risk, which had decreased.

The conference paper also reported that the students

29 Submission to APPG for Entrepreneurship, IPSE

believed that they had:

- Changed as people and their entrepreneurial factors had increased.
- Achieved learning outcomes in a wide range of business and other subjects, some of which they originally did not think would be important for them.
- Become more confident and as a result developed their entrepreneurial self-efficacy or "can-do" artitude
- Developed an ability to "think on their feet" and no longer have a "comfort zone".
- Capabilities to develop their own business, take a Masters' degree or start their career with an employer.

The Hub for Innovation and Enterprise at the University of Kent

The Hub for Innovation and Enterprise, is the University of Kent's dedicated resource for student entrepreneurship, ideas generation, start-up guidance and incubation.³² It provides support to students, staff and graduates wishing to start their own company. It complements the enterprise agenda within academic schools and the growth of the student start-up journey through a variety of additional extracurricular services.

Student start-ups are nurtured from business concept to business launch and beyond, and the Hub recognises individual student ideas are unique, as one-size-support does not fit all. It offers a flexible professional working environment to its Entrepreneurs in Residence with ongoing support to for the start-ups. The Hub team runs an audit annually to determine the number of businesses started, the number of jobs created, and the turnover these businesses generated. The business failure rate is much lower than the national average. Since 2010, 124 companies have started trading from the Hub, this has resulted in 182 jobs created and over £6m contributed to the local economy.

ENTERPRISE EDUCATION AND INNOVATION

32 Kent: Innovation to Incubation – Extra-curricular entrepreneurship education, Impact Showcase, Enterprise Educators UK.

³⁰ Gabriel Heller Sahlgren (2018) "Human Capital and Business Stay-up" Centre for Education Economics.

³¹ Joint Submission to APPG for Entrepreneurship, Coventry University and The University of Buckingham.

Entrepreneurship education also promotes the transfer of technology from the university to the private sector. On average, entrepreneurship graduates are more likely to work in high-tech firms, firms that use licensed technologies and firms that license technologies to others. Among self-employed entrepreneurship graduates, nearly 23% own a high-tech firm, compared to less than 15% of non-entrepreneurship graduates. Entrepreneurship programme graduates also are more apt to be instrumental in developing new products. They spend more time in R&D, work with products that have shorter life spans, and are more likely to work in high-tech industries. Controlling for other factors, entrepreneurship education increases the graduate's probability of being with a high-tech firm by close to 13% and of developing new products by almost 9%.

The close ties of the Massachusetts Institute of Technology (MIT) in the USA with technology-based industries has led to a number of acclaimed spin-offs by staff and alumni. The annual revenues (estimated to be \$2 trillion) and employment footprint (estimated to be 3.3m employees) of the firms founded by alumni of MIT are equivalent to the eleventh largest economy in the world.³³

The impact of MIT alumni goes beyond the US. The majority of MIT alumni firms are founded in the US, but 790 MIT alumni firms have been created in Europe, mainly in England, France and Germany. MIT alumni companies are highly active in innovative sectors such as software, electronics (including instruments, semiconductors, and computers) and biotechnology and constitute 25% of the sales of all companies in Massachusetts.³⁴

"Entrepreneurship education increases the graduate's probability of being with a high-tech firm by close to 13% and of developing new products by almost 9%."

³³ Entrepreneurship Education: A Road to Success, European Commission, 2015.

³⁴ Ibid.



Case study: From PhD to Entrepreneur

Innovation to Commercialisation of University research (ICURe)

Research published in 2010 by the Royal Society identified that only 3.5% of PhD completions progressed into permanent research staff.³⁵ As such, 97% of PhD completions have to find employment outside of academia. ICURe requires a university to identify IP that it believes has commercial potential. It nominates an Early Career Researcher (ECR) near the end of their funding to lead the exploration of the opportunities ahead. They are supported by their Principal Investigator (PI), their universities tech transfer department (or equivalent business development team) and an external commercial adviser. These four form an ICURe Team. While it is the ECR that does the majority of the development work, the team brings the support necessary should future exploitation be the preferred outcome.

The ICURe programme is estimated to have created £3.94 of economic benefits for every £1 invested to date.³⁶ Participation in the programme increased and deepened links between participating academics and industry, accelerating the commercialisation and the technology development process. As of February 2018, it had:

- Supported over 160 teams from 28 UK Higher
- 35 Martin Taylor, Ben Martin, and James Wilsdon (2010) "The scientific century: securing our future prosperity." The Royal Society.
- 36 George Barrett & Tomas Ulrichsen (2018) "ICURe Evaluation Final Evaluation Report" Ipswos MORI.

- Education Institutions (HEIs).
- Developed commercial awareness and commercialisation potential for over 300 university academics.
- Engaged in over 11,000 new conversations with commercial organisations and industry leaders.
- Established 44 new companies that have created over 125 jobs.
- Raised around £33m additional funding for new ventures and their host universities.
- Benefitted 78 teams from the first six rounds of ICURe.
- Created an estimated 24 additional spin-outs, with an average age of one year at the time of this evaluation, raising a total of £6.9m in private equity finance. This valued the businesses at a total of £35m.

In addition:

- A larger proportion of Aid for Start Ups recipients reported they had secured private equity investment than those spinning-out without public funded support (74% versus 31%).
- Spin-outs employed an average of three workers and were generating an average of £86,000 in revenues by January 2017.
- Spin-outs taken forward with Aid for Start Ups funding grew more rapidly, reporting an average of six full-time equivalent employees and average turnover of £145,000.
- The total present value of licensing agreements signed as a result of the programme was £8.7m.

ENTERPRISE EDUCATION AND PREFERENCE FOR ENTREPRENEURSHIP

Survey evidence of alumni of higher education institutions across Europe shows the value of entrepreneurship education.³⁷ The survey includes alumni of JADE – an international umbrella organisation of junior enterprises established and set up by students.

It shows that the preference for alumni becoming self-employed is based on the advantages of entrepreneurship (pull factors) rather than the disadvantages of being employed (push factors), whereas the opposite is true for alumni who did not attend entrepreneurship courses. The realisation of a business opportunity is more often mentioned by entrepreneurship alumni (68% of the entrepreneurship and JADE alumni versus 61% of the control group alumni).

Entrepreneurship programmes stimulate the intentions of graduates to become entrepreneurs. Alumni who attended entrepreneurial courses have a stronger desire for a transition towards entrepreneurship than those who did not. Relatively more entrepreneurship alumni prefer to be self-employed. Around 57% of the JADE alumni and 55% of the entrepreneurship alumni have a preference for being self-employed, whereas 42% of the control group prefer to be self-employed.

The long-term measurement undertaken by FFE-YE in Denmark showed that higher education students that participated in entrepreneurship education are more likely to run a business than those in the control group.³⁸ In 2012, the number of entrepreneurship students who started their own company during their education increased by 50%, whereas the number of students in the control group doing so decreased by 49.4%. The study also shows that entrepreneurship student led businesses are more sustainable.³⁹

The study *Entrepreneurship in Israel: Theory and Practice* shows that the willingness of MBA students to engage in entrepreneurship rose significantly after taking part in an elective entrepreneurship course. 40 Students in the sample also indicated that experience in entrepreneurship would potentially increase their future engagement in entrepreneurship. The researchers found it particularly notable that participation in just one entrepreneurship course had such a significant impact on students' perception of entrepreneurship and personal intentions.

"Alumni who attended entrepreneurial courses have a stronger desire for a transition towards entrepreneurship than those who did not."

³⁷ Ibic

³⁸ Impact of Entrepreneurship Education in Denmark 2011, 2012 and 2013, FFE-YE, 2013.

³⁹ Ibid

⁴⁰ Tamar Almor, & Sibylle Heilbrunn (2013) "Entrepreneurship in Israel: theory and practice." American Journal of Entrepreneurship, 6(2), 16.

ENTERPRISE EDUCATION AND SOCIAL CAPITAL

Dr Sarah Preedy has examined the range of benefits students perceived to have attained from engaging in extracurricular enterprise education. Extracurricular enterprise activities were defined as "academic or non-academic activities that are not a required part of the curriculum, do not involve academic credit, and participation is optional." This may include business competitions, guest lectures, workshops and networking events, raising awareness, assisting students in setting up businesses or promoting entrepreneurship as a future career. The sample included qualitative data from 78 undergraduate and postgraduate students across 24 UK universities. 42

Skills development was the most commonly cited benefit of participating in extracurricular enterprise activities and valued for its applicability to both entrepreneurial activity and preparedness for employment:

- 92% of respondents cited skills development as a benefit of engaging in extracurricular enterprise education.
- 77% of respondents cited personal growth as a benefit of engaging in extracurricular enterprise education. Participation had enhanced their understanding of their strengths and weaknesses and bolstered their confidence.
- 73% of respondents cited knowledge acquisition as a benefit of engagement.
- 73% of respondents cited enhanced social capital as a benefit of engagement.

⁴¹ Sarah Preedy. (2017) "An Examination of Student's Entrepreneurial Learning through Extracurricular Enterprise Activities" PhD thesis, Plymouth University.

⁴² Submission to APPG for Entrepreneurship, Plymouth Marjon University.





Case Studies: Close to home

BSEEN at Aston University

The purpose of the Birmingham Skills for Entrepreneurship and Employability (BSEEN) project is to encourage and support student and graduate enterprise, providing an opportunity to contribute to regional competitiveness and productivity in the West Midlands and reduce the trend of graduate drift from the region to the South East. 43

The overall aim is to create sustainable profitable businesses and new jobs by increasing the number of students and graduates starting businesses to reduce graduate unemployment rates; and by building a culture of enterprise among students and graduates by giving them the knowledge and confidence required to start a business or secure graduate level employment. 760 students, including undergraduate, postgraduate, PhD and MBA students attended an enterprise workshop; 482 attended a boot-camp; 235 businesses were set up; 130 survived for 12 months, and 78 jobs were created.

Key findings are:

 24% of participants said they would not have started a business without BSEEN.

43 Aston: BSEEN Project, Impact Showcase, Enterprise Educators UK.

- 97% stated that the training was useful to develop the skills needed to start their business.
- 52% were still running their BSEEN business of these, 97% planned to expand their business and 12% planned to start another venture.

The BSEEN project won the NCEE HE Team Enterprise Award at the 2016 ICEE Conference and it is cited in the local economic partnership's (LEP) Strategic Economic Plan for good practice in supporting start-ups.

Business Solutions Centre at London South Bank University

The Business Solutions Centre is an innovative collaboration between the School of Business students and staff and the Research, Enterprise and Innovation team at London South Bank University.⁴⁴ The Centre is staffed by students from the School of Business who act in a consultancy capacity working on real problems posed by local businesses and organisations who contact the Centre to seek business advice and guidance. These student advisers are employed by the university and trained and supported by staff from across LSBU. The

⁴⁴ LSBU: The Business Solutions Centre, Impact Showcase, Enterprise Educators UK.





student advisers have full responsibility for operational aspects of the Centre, including meeting client SMEs and undertaking the business projects identified.

In its first year of operation the Centre has supported a total of 35 businesses. Data on the projects completed so far shows that the largest proportion (36%) has been related to marketing and social media, with other queries relating to business development (27%) and accounting (11%). Businesses have also required assistance with aspects of intellectual property, business law and financing. Feedback shows that 83% of customers were very satisfied with the service offered with 67% actually implementing the solution that was presented. All respondents reported that the solution positively impacted on their business.

Venture Matrix at Sheffield Hallam University

Venture Matrix is the largest university student consultancy project in the UK and the biggest provider of free consulting in South Yorkshire, one of the poorest and least economically productive regions of northern Europe. ⁴⁵ Venture Matrix offers high-quality supervised consultancy to business, charities and not-for-profit

organisations delivered pro bono by students and staff from every faculty. Sheffield Hallam University students carry out projects that support organisations to tackle strategic and operational issues.

Students undertake projects as part of their studies, supervised by academic staff. They operate in teams to take a brief from the client, undertake site visits, conduct in-depth research into the organisation, analyse the issues and produce advice and supporting data. They then deliver a presentation and report for their client's use. Most (81%) are small firms based in Sheffield City Region.

An economic impact study published in February 2017 showed that since 2013-14 Venture Matrix has contributed £1.7m value to the local community through more than 1,150 projects on behalf of 433 organisations and involving almost 5,000 students. Of the projects, around 500 were with charities or notfor-profit organisations. Most (93%) of clients said that Venture Matrix met, exceeded or greatly exceeded expectations, and 76% said the process of working with Venture Matrix was excellent.

⁴⁵ Outstanding Contribution to The Local Community: Venture Matrix Project, Sheffield Hallam University.

ENTERPRISE EDUCATION AND EMPLOYABILITY

Survey results from JADE alumni show that it seems to be easier for entrepreneurship alumni to find employment immediately after their graduation (78% of the entrepreneurship alumni, 66% of JADE alumni and 59% of control group alumni). They also experience fewer periods of unemployment than alumni who did not attend entrepreneurial courses.

Graduates from entrepreneurship programmes connected to the Action Plan for Entrepreneurship in Education and Training (2009–2014) were less likely to be unemployed than graduates that did not take up entrepreneurship education. The unemployment rate for entrepreneurship graduates within engineering and business management was 2.8% compared to 6.6% for graduates in the control group. Moreover, they were more likely to be in steady employment (73.6% as opposed to 60.8% in the control group). 46

More broadly, graduates from business schools in Norway with a major in entrepreneurship are between two and three times more likely to start a business than other graduates. Between 1997 and 2003, several measurements on possible correlations were undertaken. In 1997, it was found that three times more entrepreneurship education graduates started a business compared with other graduates. In later surveys (2001 and 2003), the differences were found to be smaller, but entrepreneurship majors still remain more than twice as likely to start and own a business as graduates with other majors.⁴⁷

⁴⁶ Entrepreneurship Education: A Road to Success, European Commission, 2015.

⁴⁷ Ibid

Case Studies: Skills to pay the bills

Employability and Enterprise Strategy at Newcastle University

Newcastle University's Employability and Enterprise Strategy involves embedding enterprise skills in every university experience. The University's DLHE data reveals that students engaging in enterprise activity are 3% more likely to secure graduate level outcomes. Since being launched in 2014, the University's Start Up Founderships Programme has supported four cohorts of between six and eight graduates each year with educational grants.

Between them these have:

- Started 26 businesses.
- Created 68.5 jobs.
- Turned over £6.6m.
- Raised £3.3m in external investment.

The current group of five Founders have created

48 Submission to APPG for Entrepreneurship, Association of Graduate Careers Advisory Services (AGCAS)

two jobs and provided nine internships, since September 2017.

Young Enterprise Start-Up Programme

The Young Enterprise Start-Up programme gives students aged 17-24 the opportunity to develop their employability skills and prepare for the world of work. ⁴⁹ Of the young people who take part in the programme, 92% develop at least one employability competency. The biggest increases are found in "work readiness", closely followed by "self-esteem", "resilience" and "financial capability". Also, 77% of university students also agree the business adviser they met on the programme helped them understand the world of work.

49 Submission to APPG for Entrepreneurship, Young Enterprise



RECOMMENDATIONS

THE GOVERNMENT SHOULD RECOGNISE, ENGAGE WITH AND RESPOND MORE OFTEN TO THE ENTERPRISE EDUCATION COMMUNITY, AND BACK UNIVERSITIES' SENIOR MANAGEMENT IN SUPPORTING ENTERPRISE EDUCATION.

The Call for Evidence revealed a dissatisfaction with the engagement of Government with enterprise education – particularly around major reports. For example:

- "There are several recommendations that have been made (see discussions around the 2012 Wilson Review, the 2015 Dowling review, and the Dafforn Review announced in 2017) that have not been addressed by Government. Our preference at this stage would simply be for the recommendations made in key reports that explicitly refer to enterprise and entrepreneurship education to be acknowledged and responded to. There may be good reasons why Government is not able to act on the recommendations made but, without a clear response, the reasons are not known and alternatives cannot be discussed." 50
- "The general feeling is that the Government does not offer enough clarity about what it wants universities to deliver. One example is the Government's response to the Wilson 2012 review, where Wilson's substantive and reflective recommendations⁵¹ around enterprise training for PG students and University strategies for enterprise in the curriculum were not mentioned or addressed."⁵²

According to EEUK, the senior management at universities should be government's specific audience, but a "lack of consistent Government support creates cascading issues of concern for EEUK members, which result in structural weakness for this agenda. As a result, lack of top-down commitment and support from institutional senior management creates the need for a flexible response from staff, who may have to sacrifice building infrastructure and strong foundations within the University eco-system in order to deliver annual outputs or respond to changing student numbers (demand) or budgets."53

⁵⁰ Submission to APPG for Entrepreneurship, ISBE.

⁵¹ Although it should be pointed out that some universities wern't keen on some recommendations, including being forced to work with local SMEs, rather than world-class SMEs wherever they originated.

⁵² Joint submission to APPG for Entrepreneurship, Coventry University and The University of Buckingham

⁵³ Submission to APPG for Entrepreneurship, Enterprise Educators UK (EEUK).

In response, the government should:

 "give a strong signal to senior management to consistently support and develop KE and enterprise activity."

 "support HEIs to become 'anchor institutions' within their city regions to support SMEs and form a key element of the entrepreneurial ecosystem (LEPs or city region)."

Without government spotlight, enterprise educators experience a "roller coaster" of insecurity and change that manifests itself as regular (and time consuming) re-justification of existing activities, staffing levels and accommodation needs, and at worst, as a periodic dismantling of activities and structures that support the ecosystem. Working as convenors, there is an opportunity for government to create roundtable discussions at a variety of levels (across nation states; Vice Chancellors etc.) to provide the spotlight that is needed. Organisations like EEUK, PraxisAuril, The Russell Group Enterprise & Innovation Group and the LERU Enterprise Group should be consulted and represented at the roundtables.

Enterprise and entrepreneurship must have a mandate. Through strong corporate leadership within universities, the university offer to student and graduate entrepreneurs must be strategic and co-ordinated.⁵⁴

TO SUPPORT THE ASPIRATION OF "ENTERPRISE IS FOR ALL" THE GOVERNMENT SHOULD ENSURE THE RIGHT INCENTIVES ARE IN PLACE SO ENTERPRISE EDUCATION ISN'T DELIVERED IN SILOS.

As noted in the introduction, too few university students are exposed to enterprise education. One reason for this is down to too much work being undertaken in silos within universities, or without an appreciation of the benefits of developing an effective ecosystem.

Call for Evidence submissions and additional evidence suggest that universities need a centralised approach. Experience from the sector consistently shows that providing enterprise education through bolton activities or as an optional module is significantly less effective than embedding the learning within the core curriculum. Enterprise educators take the view that this is the way to achieve students' full engagement. 55

A coordinated approach to the provision of enterprise and entrepreneurship education is needed, with appropriate oversight and strategic management. This is not the case in many universities, which suffer from overlapping and patchy provision. ⁵⁶ The centralised enterprise unit could be the business school/department, a centralised careers centre, the knowledge exchange

⁵⁴ David Godfrey and Verity Hubbard (2018) "Place, Learning and Entrepreneurialism: The Impact of Entrepreneurial Education on Regional Economies" Localis.

^{55~} (2010) "The Enterprise Educators UK manifesto for the new government of the UK", Enterprise Educators UK.

⁵⁶ Submission to APPG for Entrepreneurship, The University of Sheffield.

team, commercial services or a combination of these.

The QAA's updated guidance also recommends that enterprise education be positioned centrally within universities to ensure all students can access support.⁵⁷ A centralised enterprise education service breaks down the barriers of varying strategies, aims/objectives, targets, reporting mechanisms, and impact measures.

In the International Entrepreneurship Educators Conference concordat of 2010, concern is expressed about the silo mentality between institutions and subject-specific departments resulting in "entrenched perspectives" and "inflexibility" when dealing with an overarching subject such as enterprise. Also, from the students' perspective, accessing entrepreneurial support can be challenging when it is fragmented and inconsistent across institutions. Having a centralised approach is the best way to ensure all students know where to go to access support. 59

In 2016, the Council for Science and Technology wrote an open letter to the Prime Minister that was cited approvingly by a number of groups in their Call for Evidence submissions. ⁶⁰ This letter called for an aspiration that at least a quarter of all undergraduates participate in formal, credit-bearing entrepreneurship education at some point during their course, and for universities to consider how to incorporate entrepreneurship education in their core curriculum. If this sort of goal is to be made a reality, enterprise education can no longer be delivered in silos.

To this end, it is important that the Government doesn't excessively focus on business schools. An NCEE 2014 survey found that business schools dominate the delivery of enterprise programs, with 60% of all delivery emanating from business schools. Many great businesses are started and supported by business schools, but these successes can overshadow a wider need. We shouldn't assume business schools are the optimal location for student and graduate start-up programmes at every institution. Other models may be more suitable, for example, where start-up support is based in a careers service or in cross-university units. More student start-ups, for example, originated in the fashion sector last year than any other subject area, and we need to ensure that these nascent entrepreneurs are getting the right level of support when not based in their businesses school.

Business schools aren't always the best place to teach entrepreneurship, as

⁵⁷ Submission to APPG for Entrepreneurship, IPSE.

⁵⁸ Penaluna, A., Smith, K., Price, A. (2010) "IEEC 2010 Concordat" Enterprise Educators UK (EEUK and National Centre for Entrepreneurship.

⁵⁹ Submission to APPG for Entrepreneurship, IPSE.

⁶⁰ Council for Science and Technology (2016) "Strengthening entrepreneurship education to boost growth, jobs and productivity" Available at: https://assets.publishing.service. gov.uk/government/uploads/system/uploads/attachment_data/file/592424/Improving_entrepreneurship_education_-_cst_letter_-_more_accessible.pdf

⁶¹ Enterprise and Entrepreneurship in Higher Education, NCEE, 2010.

⁶² Submission to APPG for Entrepreneurship, ISBE.

⁶³ Submission to APPG for Entrepreneurship, Enactus UK.

it can become constrained by a disciplinary focus. The consensus is for increased multi-disciplinary approaches that are able to respond to unique requirements. ⁶⁴ Sometimes there is an ownership issue within the university that all activities associated with enterprise and entrepreneurship must be owned by the business school, to the exclusion of access to important skills and co-curricular experience by students in other faculties. ⁶⁵

Case Study: Bridging the gap

Corporate Partnerships at the University of Birmingham

Partnerships that University of Birmingham have developed, with companies such as Reckitt Benckiser, to co-design and co-develop curricular enterprise modules, have not only increased the level of involvement from employers within the undergraduate curriculum by 76% over two years (from 5 to 43), but has also aligned employers directly with bridging student skills gaps and building their talent pipeline. Reckitt Benckiser opened a multi-billion-pound Medical Science research and development centre of excellence with significant investment in graduate recruitment, and have seen a 233% increase in students from the programme of study applying for 12-month placements with them following the enterprise module.

At a time when there are questions over the proportionate nature of degree value, and the financial investments required from students into their Higher Education, it is worth noting that within Biomedical Science the enterprise module is the most popular of 16 parallel modules, with 100% year on year growth, and 96% of those students specifying wanting more modules like this in their course. The level of academic achievement has improved with 26% of students receiving a first, and 70% attaining an upper second mark.

THE GOVERNMENT SHOULD ENSURE IT DOESN'T INCENTIVISE BUSINESS START-UPS TO THE DETRIMENT OF WIDER ENTERPRISE EDUCATION.

There is an unavoidable tension between centralised guidance and local flexibility, and a bias towards incentivising and therefore encouraging what is measurable. "There is greater clarity around entrepreneurial outcomes — students starting successful businesses that contribute to economic growth — than enterprise education outcomes. This is, in part, due to the metrics and requirements that come with HEIF funding." A danger of the relative ease with which the impact of entrepreneurship education can be quantitatively measured is that it becomes the focus of universities' efforts to monitor impact.

⁶⁴ Katz, 2003; Hannon, 2007; Thorp and Goldstein, 2010, Morris et al., 2013

⁶⁵ Submission to APPG for Entrepreneurship, Enactus UK.

⁶⁶ Submission to APPG for Entrepreneurship, Association of Graduate Careers Advisory Services (AGCAS).

⁶⁷ Submission to APPG for Entrepreneurship, University of Sheffield.

Respondents call upon the Government to push for increased clarity on graduate outcomes, measuring the skills and capabilities that graduates should possess based on those called for by reputable professional bodies and accreditors: "Such guidance would ensure that higher education delivers graduates with the skills to drive forward the UK economy both through start-up and through working effectively in established organisations. It would help to address skills gaps that are recognised in industry (see, for example, IET Skills & Demand in Industry Survey 2017 and would create a positive pressure on HEIs to engage meaningfully in delivering enterprise education for all students, rather than driving a focus on entrepreneurship."

THE GOVERNMENT SHOULD ENSURE IT IS FLEXIBLE IN THE LANGUAGE IT USES AROUND ENTERPRISE EDUCATION SO UNIVERSITY STUDENTS AREN'T DETERRED FROM ENTERPRISE.

It is important not to put off students by using restrictive language around enterprise education.⁶⁹ If students aren't familiar with the terms used, they are less likely to believe it's relevant to them. In part, using terminology that students understand will increase engagement.⁷⁰

Depending upon the institution, some students are disinclined to engage in enterprise education if terms such as "entrepreneurship" or "entrepreneur" are used rather than "freelancing", "self-employment", or "starting your own business"; while some students are more engaged through social enterprise or green entrepreneurship than through entrepreneurship with a strong commercial of profit-focused motive.⁷¹

In practice, most institutions attempt to reframe and contextualise the language of enterprise to communicate to both staff and students the value of developing enterprise capabilities – e.g. in music they may talk about "future freelancing" and "self-employment", while in engineering they might frame in discussions around "innovation".⁷²

THE GOVERNMENT SHOULD OFFER CLARITY ON FUNDING, PARTICULARLY IN THE CONTEXT OF BREXIT.

In 2010, a National Council for Enterprise Education survey found universities have committed significant contributions to enterprise from their own funding, and other non-public sources.⁷³ Of the sources of funding from the public sector, HEIF is the biggest single contributor. The average amount spent per HEI in this area from HEIF was £459,432.

^{68 2017} IET skills survey, The Institution of Engineering and Technology

⁶⁹ Submission to APPG for Entrepreneurship, Enactus UK.

⁷⁰ Submission to APPG for Entrepreneurship, IPSE.

⁷¹ Submission to APPG for Entrepreneurship, ISBE

⁷² Submission to APPG for Entrepreneurship, University of Sheffield

⁷³ NGCE and ISBE (2010) "Enterprise and Entrepreneurship in Higher Education"

Many universities also previously relied on the European Regional Development Fund (ERDF) to fund enterprise education activity, but this has since been replaced by Horizon 2020, Erasmus and the European Union's Competitive and Innovation Framework (EU CIP). Most funding has the disadvantage of funding uncertainty that inhibits long-term programme planning and staff retention. There is some concern that these unsustainable mechanisms may act as a disincentive to the teaching profession and academic researchers pursuing enterprise education. In the Call for Evidence, it was described as a fragile environment of boom and bust that limits longer term planning and engagement by staff with this agenda.⁷⁴

EEUK expressed a need to ensure funding is tied to the embedding of universities' enterprise education with a comprehensive and widely accessible programme of extra-curricular activities. According to EEUK, there is a challenge to get senior management and government to commit resources and think long-term. When budgets cannot be assumed, longer term planning is inhibited which inevitably creates instability in the university ecosystem and the limits ambition of staff. Despite the difficulties in measuring activities, a longer-term perspective which builds infrastructure and supports the development of networks and an entrepreneurial ecosystem is welcomed by members.

Brexit may offer an opportunity for more funding stability: "The replacement of structural funds with the Shared Prosperity Fund is an opportunity for enterprise and entrepreneurship support – and also for linking that clearing to education across all levels." 77

THE GOVERNMENT SHOULD TAKE STEPS TO IMPROVE THE PIPELINE OF ENTERPRISE EDUCATION THROUGH PRIMARY, SECONDARY AND HIGHER EDUCATION. THIS SHOULD INCLUDE A LONGER-TERM FOCUS FOR DESTINATIONS DATA.

We need to improve the pipeline of enterprise education.⁷⁸ As John Van Reenen and his colleagues have shown,⁷⁹ the early years seem to have a huge impact upon life outcomes. The Ofsted report *Getting Ready for Work* concluded that: "The nation's economic prosperity is at risk because

⁷⁴ IEEC Workshop 2016.

^{75 (2010) &}quot;The Enterprise Educators UK manifesto for the new government of the UK", Enterprise Educators UK.

⁷⁶ Submission to APPG for Entrepreneurship, EEUK

⁷⁷ Joint submission to APPG for Entrepreneurship, Coventry University and The University of Buckingham

⁷⁸ In the University of Buckingham's submission, one if its BSc Business Enterprise (BBE) second (final) year students is quoted as follows: "I would argue that there is too much entrepreneurial support at the university level and not enough at the secondary/primary level. Students enter university knowing very little about the field and are then bombarded with information, which can often overwhelm and confuse them."

⁷⁹ For example, John Van Reenan, Lost Einsteins: who becomes an inventor in America?, CentrePiece, 2018.

the majority of England's schools fail to prioritise enterprise education and work-related learning." Only 4 of the 40 secondary schools visited by inspectors were demonstrating an effective approach to this aspect of the curriculum, despite the Government's commitment to take forward the recommendations made in Lord Young's 2014 report into these matters. The survey also found that: "Poor coordination between schools and businesses and the absence of any overarching government strategy were leaving large numbers of young people – particularly the disadvantaged – unprepared for the world of work."

Commenting on the report findings, HM Chief Inspector, Sir Michael Wilshaw, said: "The question of how well our school system is preparing young people for the world of work has never been more important. The future success and prosperity of the UK in a post-Brexit world will increasingly depend on our ability to harness home-grown talent and to encourage the creativity and innovation of our young people. That will mean making sure that pupils from all backgrounds have access to an education that prepares them well for the next stage of their lives, be that higher education, entering employment or setting up their own business."81

The APPG for Microbusinesses 2014 Report: An Education System Fit for an Entrepreneur and the Government's Enterprise for All both emphasised the need to systemically connect up the education pipeline from school to university. In its submission, Ultra Education suggests instituting Lord Young's idea of an Enterprise Passport "for young people to record and demonstrate their enterprise learning and work experience throughout their education. This could be held digitally to offer a pool of accredited enterprise schemes and resources to educators, a differentiator for employers looking for proven employability skills alongside educational qualifications in a young person's CV, and an accessible tool for Ofsted to assess the quality and level of a school's enterprise commitment."

It is beyond the scope of this report to offer recommendations on reforming education prior to university. This warrants further exploration in a dedicated study. The government should consult with the higher education sector to devise a better way of connecting up the enterprise education young people receive through schooling, further and higher education. Training programmes such as EntreComp could be used to improve the knowledge and skills of teachers who are teaching enterprise and entrepreneurship in schools.

The Government should recognise the need to identify and/or train enterprising teachers who have the right skills to teach school children enterprise and entrepreneurship in liaison with local entrepreneurs who

⁸⁰ Getting Ready for Work, Ofsted.

⁸¹ Sir Michael Wilshaw (2016) quoted in "Schools should be doing more to prepare young people for the world of work" Department for Education

 ⁸² APPG for Microbusinesses (2014) "An Education System fit for an Entrepreneur"
 & Lord Young (2014) "Enterprise for all: The relevance of enterprise in education"
 Department for Business, Innovation, and Skills.

⁸³ Submission to APPG for Entrepreneurship, Ultra Education.

would visit schools and with organisations such as Young Enterprise, the Peter Jones Foundation, 7-Billion Ideas, Ultra Education and Founders 4 Schools.

Young Enterprise calls for the adoption of "a longer-term focus for destinations data," including greater monitoring of young people's satisfaction within their chosen career path. ⁸⁴ Destinations data is currently limited to looking at young people's destinations one year after finishing Key Stage 4 or Key Stage Five. In contrast, the Government's Longitudinal Educational Outcomes (LEO) study looks at university graduates one, three and ten years after graduation. Schools should be required to publicise both their approach to preparing young people for the world of work and their longer-term destinations data to help inform parents in their school selection. Schools would consequently be encouraged to increase employer engagement, develop soft skills and prepare young people for the world of work.

THE GOVERNMENT SHOULD REFORM TEF SO UNIVERSITIES AREN'T DISCOURAGED FROM CREATING SUCCESSFUL START-UPS.

Through TEF, student completion rates are measured so HEIs place great importance of having students complete their programmes of study. In some cases, students who engage in enterprise education end up starting a successful business and may not complete their degree. This reflects badly in TEF, but if their business is creating economic growth on the back of successful enterprise education programmes this should be measured as a good outcome.

At the University of Sheffield's pilot of a Year in Self Employment option – similar to a Year in Industry but with students working on their own start-up – two of the three students who took this option during the trial year did not return to their studies, opting to focus on developing their successful business instead. The fact that this results in reporting noncompletion led to the decision not to offer Year in Self Employment more widely following this trial year.⁸⁵

THE GOVERNMENT SHOULD ACKNOWLEDGE THAT SELF-EMPLOYMENT MIGHT BE A SUITABLE ROUTE FOR SOME GRADUATES.

While not suitable for every graduate, only 2% of the self-employed report finding out about self-employment at university. This is out of kilter with reality given that the self-employed made up 15.1% of the labour force in 2017. The self-employed made up 15.1% of the labour force in 2017.

⁸⁴ Submission to APPG for Entrepreneurship, Youth Enterprise.

⁸⁵ Submission to APPG for Entrepreneurship, University of Sheffield

⁸⁶ IPSE and Kingston University (2018) Exploring the rise of self-employment in the modern economy.

⁸⁷ Trends in self-employment in the UK, Office for National Statistics.

Freelancing has grown enormously in the last decade. Much of the recent growth has been driven by the expansion of the highly skilled freelance sector.⁸⁸ This group has grown by 46% since 2008, and now accounts for almost half (46%) of all solo self-employed.⁸⁹

Research conducted by ComRes on behalf of IPSE found the majority (62%) of the self-employed thought there was no self-employment support available at university. This statistic is not reflective of the support actually available at universities, suggesting that there is a problem with student awareness of existing initiatives. As such, there should be more focus on making sure existing initiatives are more accessible and better promoted. In line with the previous recommendation, enterprise education needs to be positioned centrally within universities to ensure all students know where to go to access support.

^{88 13%} SOC1 Managers, Directors and Senior Officials (561,000); 16% SOC2 Professional Occupations (689,000); 18% SOC3 Associate Professional and Technical Occupations (787,000).

⁸⁹ IPSE and Kingston University (2018) Exploring the rise of self-employment in the modern economy.

⁹⁰ ComRes (2018) "IPSE: A survey of the self-employed exploring the issues that matter most to them."

⁹¹ Submission to APPG for Entrepreneurship, IPSE.

CONCLUSION

To meet the challenges and take advantage of the opportunities presented by globalisation, automation, and rapid technological change we will all need to be more entrepreneurial. Enterprise education has an important role to play. If we can expand access and improve quality, then the prize is a workforce that is more productive, innovative, and adaptable.

The APPG for Entrepreneurship will continue to work closely with entrepreneurs, experts, and policymakers to ensure that higher education institutions equip graduates with enterprise skills.

The APPG for Entrepreneurship would like to thank the following organisations for their contributions towards the Call for Evidence and helping ensure that enterprise education stays on the policy agenda.

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Head of Policy, Enterprise Educators UK (EEUK)

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PROFESSOR NIGEL ADAMS

Head of Enterprise and Entrepreneurship, University of Buckingham

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Director for Entrepreneurship, UCL Innovation

JAMES ATKINSON

Public Affairs and Public Relations Officer, Young Enterprise

ANDREW BACON OBE

Chief Executive Officer, Enactus UK

DR EMILY BEAUMONT

Associate Professor and Director of the Marjon Business School at Plymouth Marjon University

LIAM BOOTH-SMITH

Chief Executive, Localis

ELAINE BOYES

Executive Director, AGCAS

CATHERINE BRENTNALL

Co-Founder & MD, Ready Unlimited

PROFESSOR SIMON BROWN

Director, International Institute for Creative Entrepreneurship, UWTSD

SEAN CANTY

Senior Campaign Manager, Seven Hills

DR DABABRATA CHOWDHURY

Associate Professor in Entrepreneurship and Innovation, University of Suffolk

PHILIP CLEGG

Head of Enterprise & Entrepreneurship, The University of Huddersfield

PROFESSOR SARAH DODD

Director of Research, Hunter Centre for Entrepreneurship, University of Strathclyde

SOPHIE GAVALDA

Assistant Head Teacher, William Tyndale Primary School

IMOGEN FARHAN

Policy and External Affairs Officer, IPSE

GEORGE HADJIPAVLIS

UCL Innovation & Enterprise Student Fellow, UCL

DR CHRISTOPHER HALEY

Head of New Technology & Startup Research, Nesta

JULIAN HALL

CEO, Ultra Education

MARK HOMANS

Senior Relationship Director, Santander Universities UK

DANNY JONES

Senior Manager, Transformation and CEOs Office, Santander UK

LISA MCMULLAN

Principal Consultant, Enterprise Evolution

MAGGIE O'CARROLL

CEO, The Women's Organisation

PROFESSOR ANDREW PENALUNA

Research Director of the Centre for Creative Entrepreneurship, University of Wales Trinity Saint David

DR SARAH PREEDY

Senior Lecturer in Business and Enterprise,

Programme Leader for BSc Business and BA Leadership and Management for Business, Plymouth Marjon University

DR ALI RILEY

Enterprise Education Manager, Enterprise Academy, University of Sheffield Enterprise

ALAN SCRASE

ICURe programme Director, Business Incubation Centre Manager, SETsquared at the University of Southampton

DR KELLY SMITH

Senior Lecturer, International Centre for Transformational Entrepreneurship, Coventry University

DON SPALINGER

Director, Corporate Relationships at University of Southampton

DR ALASDAIR TAYLOR

Industry Programme Manager, The Royal Society

NAIOMI THALAYASINGAM

Senior Manager, Strategic Communications & Speeches, Santander UK



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Secretariat



The Entrepreneurs Network Thomas House 84 Eccleston Square London, SW1V 1PX