



FUTURE OF ENTREPRENEURSHIP:

THE ROLE UNIVERSITIES CAN PLAY IN CREATING A NEW PARADIGM IN ENTREPRENEURIAL LEARNING



FUTURE OF ENTREPRENEURSHIP:

THE ROLE UNIVERSITIES CAN PLAY IN CREATING A NEW PARADIGM IN ENTREPRENEURIAL LEARNING

CONTENTS

FOREWORD	5
STRUCTURE OF THE REPORT	7
RESEARCH QUESTIONS	8
METHODOLOGY, DATA AND TRENDS	10
THE FINDINGS	11
ENTREPRENEURSHIP & ENTREPRENEURIAL MINDSET	11
SKILLS, ATTRIBUTES AND QUALITIES	12
OPPORTUNITIES TO CREATE AN ENTREPRENEURSHIP PEDAGOGY	
FOSTERING AN ENVIRONMENT OF ENTREPRENEURSHIP	15
OVERVIEW OF NATIONAL VS INTERNATIONAL HEI ENTREPRENEURSHIP PROGRAMMES	
STUDENTS' PERCEIVED BARRIERS TO ENTREPRENEURSHIP	19
RECOMMENDATIONS	
GETTING THE BASICS RIGHT	
THE STANDOUTS	
FUTURE RESEARCH OPPORTUNITIES	24
ACKNOWLEDGEMENTS	25

FOREWORD

It has been said that the pace of change in the world today is as fast as it has ever been - and as slow as it ever will be. Unfortunately, much like military planners who devise strategies to fight the last war not the next one, higher education institutions are often guilty of developing students for the working lives their parents enjoyed, not for the ones that they are likely to face.

At Birkbeck, we want to try to do things differently. Partly this is a reflection of a more engaged and aware entrepreneurial support team, but more it reflects that Birkbeck is a different sort of institution. We have a much more diverse student body than most other institutions; diverse, not just in terms of race, gender, and background, but also in age, working experience, and ambition - yet with similar values. Our students, given their motivations in returning to study often much later in their lives than the usual one-shot of higher education at age 18, tend to be much more serious; serious about their studies, serious about their lives, and serious about making society a better place. Birkbeck reflects these attributes by focusing on seeking to educate the 'whole' person, as befits the College's mission.

This report shows what we are seeking to do, and the philosophy and values that underpin our efforts to educate people for and throughout their lives. Higher education institutions are, of course, about more than employment, but, as responsible members of society, we need to recognise the central role of work in most people's lives - both for good and for bad. Ultimately, education is a route to personal development and to enabling a better society. In my role as Executive Dean of the School of Business, Economics and Informatics, I often explore other business schools' strategies. These tend to be much the same, yet are jealously guarded and are the product of substantial efforts. However, we can observe very different outcomes across the sector. Too often institutions mistake strategy development for strategy implementation - as the people who devise the strategy are incapable of operationalising it, or they see that phase as trivial, or as something that others should do. Operationalisation is key and is usually the difficult bit. This report also demonstrates that, in addition to making it happen, people need to develop an entrepreneurial mindset. Even if one is not planning to be an entrepreneur in the foreseeable future, many employers now value intrapreneurs.

I am delighted to commend this report to you. It is an excellent analysis, with clear, valuable recommendations derived from primary research. The authors are to be congratulated. We also need to thank those, such as Santander, whose invaluable foresight and funding supports these activities.



PHILIP POWELL Executive Dean, School of Business, Economics and Informatics and Pro Vice-Master for Enterprise and Innovation Birkbeck, University of London

INTRODUCTION

WHY IS THIS IMPORTANT NOW?

The world is changing at a faster pace than we have ever seen. Technological advances, globalisation and the emergence and reality of the Fourth Industrial Revolution are contributing to unprecedented levels of volatility, complexity and uncertainty. The nature of jobs is changing, driven partly by technological factors, but also changing society, economic and environmental issues. In recent years, we have seen the rise of the "gig economy" - a move from permanent jobs to short-term contracts and freelance work. It has never been easier to start a new business as many of the barriers have lowered or been removed completely - access to funding, technology, partnerships and markets means anyone can start a business with far less capital than ever. There are now 4.2 million businesses with no employees, which represents around 16% of the workforce, with a further 33% of people working in companies with less than 10 employees.¹

Long gone are the days of leaving school or university and moving into a job for life. The average person will have 15 jobs in their lifetime; many of those will be significant changes in careers, requiring significant upskilling and reskilling. According to the 2018 World Economic Forum Future Jobs Report, "54% of the global workforce will need to be re-skilled or up-skilled in the following 5-10 years".

With this changing landscape, comes an imperative for individuals to adapt, learn and develop themselves in order to stay relevant and continue to have prosperity and growth. Yet despite this clear need, participation in adult learning is at a 20-year low.² The need for individuals to embrace a new economy of learning is far greater than for the individual. It is imperative for the global economy to cultivate "infinite learners" - the name that Reid Hoffman, Founder of LinkedIn, describes as "people who not only enjoy learning, but need to be constantly learning on the job".

Indeed, Reid Hoffman highlights that "so many of the iconic entrepreneurs I've met" have had this trait.

They're set apart not by their mastery of any given field, but the speed at which they zip up a learning curve. And Infinite Learning is practically a job requirement for scale entrepreneurs — because almost every scalable idea forces you to grapple with an emerging phenomenon. Everything around you is changing — your business, your market, your team — and you can't turn to any one expert for help — because there are no permanent experts.

It is becoming increasingly clear that this quality is not just relevant to people looking to start a business, but also people who do not want to be left behind in the world of employment. One thing that sets great entrepreneurs apart is a natural instinct for learning, especially tactical learning, often needed to solve a particular problem. It is our contention that a significant portion of the "entrepreneurial mindset" is having a bias for learning and that this is a necessity for everyone, regardless of a desire to start a business or not.

¹ https://researchbriefings.files.parliament.uk/documents/SN06152/SN06152.pdf

² https://www.learningandwork.org.uk/our-work/promoting-learning-and-skills/participation-survey/

INTRODUCTION

As the world changes ever more quickly, the need to constantly reinvent yourself becomes ever pressing. Technological disruption, particularly the rise of artificial intelligence, automation and robotics will disrupt many people's jobs. Some jobs will no longer require a human at all, however many more jobs will require significant upskilling. Technological skills are important, but play only part of the equation.

 'Human' skills such as creativity, originality and initiative, critical thinking, persuasion and negotiation will likewise retain or increase their value, as will attention to detail, resilience, flexibility and complex problem-solving.
Emotional intelligence, leadership and social influence as well as service orientation also see an outsized increase in demand relative to their current prominence.
WEF - The Future of Jobs 2018

There are significant societal shifts also happening amongst more recent generations of workers. Millennials crave a sense of purpose and want to feel engaged at work³; while this is a subjective feeling, it is relatively easy to instill. Businesses have to make workers feel like their work truly matters, and that they are working toward a worthwhile goal. In fact, this can result in a competitive advantage over the majority of businesses; only 29 percent of millennials currently feel like they are "engaged" at their jobs. As the trend continues, an obvious outcome is for more people to seek entrepreneurial activities in order to achieve the purpose they are looking for.

Later in this report, we show that many of the skills outlined above are also identified as the skills that entrepreneurs need. It can therefore be transposed that the need for an entrepreneurial mindset is advantageous for a far larger demographic than entrepreneurs.

³ https://news.gallup.com/businessjournal/195209/few-millennials-engaged-work.aspx

https://www.forbes.com/sites/larryalton/2017/06/20/how-millennials-are-reshaping-whats-important-in-corporate-culture/

STRUCTURE OF THE REPORT

In this study, we seek to uncover attitudes, access and activity with regard to entrepreneurship. Sampling the opinions of students on the Santander-sponsored entrepreneurship mentoring and facilitation programme at Birkbeck, known as Pioneer, we synthesise these with more general attitudes: those of university staff and other students in higher education, both at Birkbeck and at its neighbour University College London, as well as specific samples internationally in Canada and the USA. Additionally, we draw upon the views of entrepreneurs and wouldbe entrepreneurs, as well as those who enable, mentor, and finance entrepreneurship.

Universities are perceived as places of learning. Traditionally, they are regarded as places where certification carries an assurance of quality in terms of intellectual prowess. Universities' primary focus was on the academic learning of knowledge, however recently we have seen the increased importance on 'outcomes' for each student. That is to say, that a qualification alone is no longer enough; Higher Education Institutions (HEIs) must now support students into jobs and other routes of progress.

Whilst it is not fair to say that students are only at university to 'get a job', there is a significant connotation that studying at an HEI will lead to improved job prospects and that employment is a natural and desirable outcome following Higher Level Qualification such as a Bachelor's degree. Indeed many recently developed degrees and other qualifications are vocational and lead directly towards jobs, instead of academia or entrepreneurship. It could therefore be argued that with the increased focus on employability and becoming employed, there is a tendency to narrow down students' ambitions to fit labour market demands. Some UK universities have invested in attempting, with varying degrees of success, to nurture in some way this entrepreneurial spirit in the student community. This also begs the question, if students bring in money, and companies spinning out of higher education traditionally have been associated with academics, could this revenue and good-PR stream also be tapped for student-led companies? It has some precedent already in that students have been known to set up companies during their time at university, even companies that are thriving years after inception.

Extrapolating these facts into something new: what if entrepreneurially minded people, who even in the widened demographic modern era of university attendance would not choose to spend time in higher education, could also be attracted to affiliate themselves with entrepreneurial enabling spaces at HEIs, to help get their company off the ground and into self-sufficiency?

RESEARCH QUESTIONS

The purpose of this research was to present an alternative approach to entrepreneurship pedagogy development through an iterative journey of coownership between students, industry partners and academic course teams to enhance student satisfaction and learning outcomes.

We worked with both internal and external colleagues and partners to understand what these expectations are, and how this can be disseminated to those who are interested in entrepreneurship; how can education, whatever the level, work with industry to begin the process of vertical and horizontal thinking around entrepreneurship; to appreciate the difficulties and challenges but also the real-world possibilities of entrepreneurship and what does the future of entrepreneurship look like, specifically for London, given the social, political, cultural and economic landscape.

We sought to answer four main research questions:

- 1. What is an entrepreneur and can HEIs make them?
- 2. What do entrepreneurial students want from HEIs? Why do they attend entrepreneurship programmes?
- 3. What are HEIs offering and why?
- 4. What is not being implemented that perhaps should be?

What is an entrepreneur and can HEIs make them?

In the following pages, we explore what it is to be an entrepreneur and whether someone can have an entrepreneurial mindset whilst not categorising themselves as an entrepreneur. We identify the key skills, attributes and qualities that entrepreneurs possess and find out if can be developed in individuals.

The general feeling is that skills can be taught in a conventional HEI setting, through established curriculum and that the attributes can be learned over time. However, it should be noted that investment into innovative programmes within HEIs is needed in order to provide experiential learning opportunities for more people to develop entrepreneurial attributes and qualities.

What do entrepreneurial students want from HEIs? Why do they attend entrepreneurship programmes?

Essentially, we find that students who want to or have become involved with a business develop appropriate skills, get insight into the required mindset, and become part of an enabling network for their career aspirations. Whilst the majority of respondents agreed that the primary requirement was supporting them to develop their business idea and business execution skills, it could equally be argued that many individuals are missing out on the opportunity to develop the transferable entrepreneurial skills and mindset that is so advantageous in work, due to the goal of needing to start a business.

What are HEIs offering and why?

We find that HEIs are in general terms doing many of the right things: enabling environments, mentoring opportunities, and networking possibilities, as well as training and other activities that our interviewees thought could be most useful. The interesting thing is that there is little coherence in completeness of that offering across HEIs. Furthermore, it is rarely complete even in appearance, let alone substance or action at any one HEI we looked at.

Many of the initiatives focus on the earlier stages of entrepreneurship such as idea generation and pitching, which makes perfect sense given that the audience (primarily students) are generally at that stage in their business development, but there may be opportunities to have far longer and more widespread impact to support the execution and survival phases of business building.

What is not being implemented that perhaps should be?

One area that does not seem to be focused on, as mentioned above, is support for longer-term execution of business ideas after the initial phase and at the point where it is most needed. It is a truism that it is not business ideas that fail, but business execution. Often workshops and programmes will talk about this phase, but often as part of the early stages of business idea development where it is more difficult to apply. There seems to be potential to support more established businesses and entrepreneurs with longer-term execution, not just idea generation. The focus of this report has been the initial phase of entrepreneurship. However, it is widely known amongst entrepreneurs that, in order to be sustainable in the long run, this challenging career option needs intense training in areas related to work-life balance and stress management. This is something that has not emerged from the research, but a common issue for entrepreneurs, and therefore an area worth considering in the future.

Lastly, technological improvements in the last 20 years have drastically changed the landscape of tools that entrepreneurs can use for their business management. Again, this is something that has not featured highly in our findings, but we feel it is an area that will only grow in significance.

METHODOLOGY, DATA AND TRENDS

We applied a combination of qualitative and quantitative methodologies to uncover current thinking around entrepreneurial practices at HEIs and gather insights from a number of stakeholders about how universities can help create the future of entrepreneurship.

We carried out semi-structured interviews with individuals and companies at various stages of their journey, some who have achieved success in entrepreneurship as a high-level concept, some at the very early stages of the journey and others who continually support people with their ongoing journey.

Desk based research helped us to understand the changing nature of work and how the entrepreneurial landscape has changed, whilst template and discourse analysis was used to explore expectations people have on entrepreneurship programmes.

Two specific data collections were run over several months:

1) Person to person interviews were convened during mid-December 2018 through mid-February 2019. Interview subjects included a variety of entrepreneurs, business consultants, investors, and stakeholders, as well as university academics and students (both those involved in entrepreneurial activity, and those who are not so inclined). Interview responses were analysed for common themes, which were compiled and quantified to generate data charts and visualisations to observe trends among responses. The questions were designed to take the conversations with disparate individuals into common territory, and to therefore ensure that views drawn from the conversations were comparable with each other.

2) Extensive desk based research was carried in order to discover the type and extent of support that exists at a sample of UK and European HEIs. Following the qualitative research of current offerings being found, follow-up research was conducted with a subsection of HEIs. This included interviews with providers of entrepreneurial provision in the UK, Europe and US.

This data was once again collated and interrogated to gather deeper details of specific programmes, as well as identify trends across the offerings.



THE FINDINGS

ENTREPRENEURSHIP & ENTREPRENEURIAL MINDSET

The first major insight from our primary research, that is backed up by discourse analysis is that learning the skills and having the mindset of an entrepreneur is advantageous regardless of future destination, and that the most highly valued skills and attributes of entrepreneurs are also highly valued in the workplace. This phenomenon is in the ascendance; entrepreneurial skills will continue to grow in their value as the Fourth Industrial Revolution continues to shape the workforce of tomorrow.

If the definition of 'entrepreneur' is "someone who makes money by starting their own business, especially when this involves seeing a new opportunity and taking risks", then it follows that a convincing definition of 'entrepreneurial mindset' could be:

Someone with the behaviours and attitudes to continually improve their lives or their impact on the world, especially when this involves seeing a new opportunity and taking risks.

Individuals with an entrepreneurial mindset have many of the skills, attributes and qualities that we have identified as necessary for entrepreneurs. The difference being that they are not necessarily constrained by a need to start a business, but are certainly drawn to opportunities, innovation and new value creation. At the micro level, this could be pursuing individual opportunities to create personal value, for example through new skills acquisition, resulting in better employability outcomes.

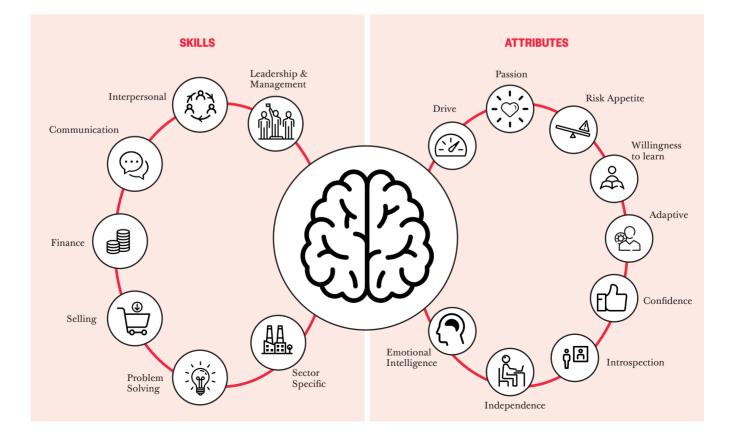
SKILLS, ATTRIBUTES AND QUALITIES

We interviewed 35 business owners, consultants, students and academics involved in entrepreneurship in the UK and in North America and collated opinions about a variety of skills and qualities thought to be possessed by entrepreneurs.

Our findings show that the responses from entrepreneurs regarding skills essential for entrepreneurs fell into 7 broad categories including communication, interpersonal, financial, leadership/ management, selling, problem solving as well as area specific knowledge. Those we interviewed generally agreed that it is possible to teach and develop these skills in a traditional academic environment.

Whilst they are often spoken about in the same breath, it is important to distinguish between management and leadership at this point. Traditionally, HEIs have successfully trained corporate managers, but struggled to train company founders (many of the most successful companies were founded by academic dropouts).

Management is easier to be taught in an academic environment, because its principles, processes and attributes can be systematically replicated. However, leadership development is closer to an art developed over the years of discipline; some people even defend it as a quality that an entrepreneur needs to be born with. Either way, a successful entrepreneur will need both management and leadership in order to succeed in a real business environment. It would be beneficial for aspiring entrepreneurs to face as many real-world situations in a safe-to-fail environment.



Entrepreneurs also share a common set of behavioural attributes with passion and drive being the most important. Contrary to the 'hardskills' summarised on the left side of the diagram above, our respondents generally stated that these attributes were not directly teachable - at least not in a conventional education setting.

A recurrent theme was that many of these attributes are innate to the individual and are very often intimately tied to the business idea (i.e. an entrepreneur is more likely to have a higher risk appetite for an idea they truly believe in). Other attributes were stated to only come with practical experience – the best (and possibly only) way to learn these was to actually try starting a business and possibly failing along the way. Universities can draw these qualities out of students; a concept of safe spaces to fail can enable this side of the nascent entrepreneur as student to be explored in the HEI context.

OPPORTUNITIES TO CREATE AN ENTREPRENEURSHIP PEDAGOGY

Some of the interviewees had the opinion that the academic framework is too rigid, which is the antithesis of entrepreneurial. Academic study, due to the theoretical nature is not very conducive to these very subjective lessons. Entrepreneurship is something that is built on the foundation of experimenting and responding to a constantly changing environment. It requires you to be comfortable with uncertainty, ambiguity and being in a constant state of flux.

Within current structures and frameworks of HEIs, it can be argued that universities are not best placed to support the growing numbers of students looking to go into business. There is, however, much to be optimistic about and it may be the case that universities can look to non-HEI organisations for guidance.

For over 10 years, professional accelerator programmes have been providing aspiring entrepreneurs with courses of learning that support their skills and knowledge acquisition. This is the kind of learning that would benefit far more people than it currently reaches. Organisations like Y Combinator, 500 Startups or Techstars have created ad-hoc training programmes designed to help the companies they invest in. There is a clear return on this investment for them; they invest in these portfolio companies, providing seed and preseed funding, as well as facilitating the programme in exchange for a share of equity in the company. Their hope is that the company goes onto succeed and they receive an exit windfall payment when the company is bought or goes public.

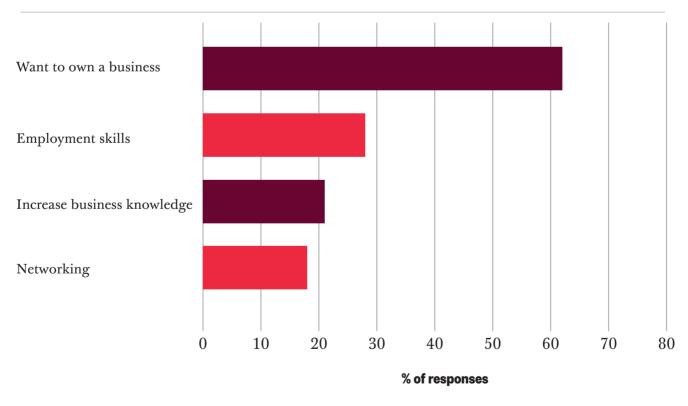
Providing a similar programme of learning for people not looking to start a company would appear to have less of a direct impact, however the lessons learned are both transferable and applicable to many non-entrepreneurial endeavours.

Businesses are starting to realise this too. There are a number of new start-ups emerging that are taking the approaches and methodologies from start-up accelerators and applying them in a different context. This paradigm shift will create a new wealth of growth potential for individuals and forward thinking companies. There is a significant opportunity for HEIs to capitalise on this movement and create a new approach to entrepreneurial learning that might unlock the door to creating scalable impact.

FOSTERING AN ENVIRONMENT OF ENTREPRENEURSHIP

Why Join an Entrepreneurship Programme?

We surveyed 210 students from Birkbeck's Santander-sponsored Pioneer entrepreneurship skills initiative, to determine what they wanted to get from the programme. Of students attending Pioneer, 60% are interested in owning their own business, while 28% and 21% want to develop an entrepreneurial skillset and business knowledge base respectively. Those attending Pioneer to network comprised 8%. These results are consistent with a smaller focus group of Pioneer students, which revealed that students were primarily looking for hands-on support to help develop their business ideas and entrepreneurial skill sets.



REASONS FOR ATTENDING PIONEER

The results of our interviews and survey suggests that entrepreneurship courses should focus on providing a hands-on experience that could be supplemented with courses to teach skills like finance and communication.

Hands-on experience was defined to include workshops, competitions, and other experiential modes where the emphasis is not on sitting and listening to talks but where practice in pitching, selling, and other important small business skills are played out in order to receive feedback on them. Ideas included a mini accelerator day, where students in groups could devise an idea and get practice developing it. There was a strong opinion that these could be independent of curricular activities, but many of those we interviewed stressed that receiving credit for activities such as these might help to legitimise them.

We conjecture that it may be possible to develop synergy between curricular and extra-curricular, based upon the fact that at Birkbeck, access to certificated modular content is accessible to other programmes upon negotiation of a suitable fee. In a situation where an industrial sponsor or a conglomerate of such sponsors was able to meet the fee criteria, it could enable synergistic access to extra-curricular entrepreneurial practitioner students. "The current academic system is based on too much theory and not enough practice, you need business plan writing practice and pitching competitions."

- Jeanne Le Roux; entrepreneur and sessional instructor at Birkbeck in the Department of Management.

OVERVIEW OF NATIONAL VS INTERNATIONAL HEI ENTREPRENEURSHIP PROGRAMMES

We compared this set of opinions with activities going on at other UK HEIs, and those in continental Europe and North America. We then considered students' perceived barriers to engaging in entrepreneurial activity, in light of this information. Some recommendations are offered, with a focus on Birkbeck, which can address the key points that are drawn together. We then define an entrepreneurial ecosystem that could be used as a model for universities acting as an enabling experiential hub.

Insights from North America – a different approach and philosophy

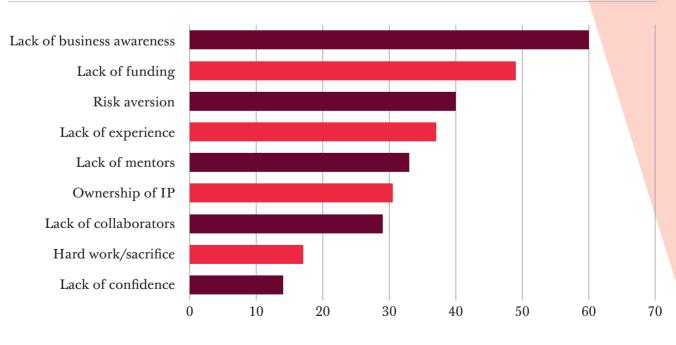
We held some interviews in Boston, New York City, and Toronto, to get perspectives on North American attitudes to entrepreneurship in HEI. This geographic sector is seen as a more mature and financially productive conduit for such innovation. The main findings were as follows:

 Innovation and entrepreneurship are treated as distinct concepts that require different developmental programmes and activities. A highly innovative student may not be entrepreneurial and vice-versa. It is important for HEIs to be clear about what they are trying to encourage, and to develop programmes to cater to this. HEIs should be sensitive to the needs of their student populace in developing programmes – i.e. science students may be better served with programmes that help them to innovate.

- HEIs are increasingly playing a supportive role in the student entrepreneurship experience without making demands such as ownership of IP or equity of the business. For example, MIT offers free of charge use of its resources and spaces to its entrepreneurial students. The belief is that students are more likely to pursue business ideas if they have full ownership and that the value generation for the HEI is intangible. The HEI also becomes a safe space to fail for a fledgling entrepreneur.
- Entrepreneurship programmes are tailored to the level of interest the student has in entrepreneurship – i.e. at MIT a beginner course is offered to explain basic concepts of business and entrepreneurship, a follow up course introduces more practical elements to more committed students; the most committed students can partake in an accelerator-like experience in the summer.
- It is very common for HEIs to offer or employ some form of technology transfer programme or consultants (e.g. CUNY I-corps; Toronto MaRS Innovation) to accelerate students and faculty innovations. Entrepreneurial spaces that offer a diverse array of resources are also common, though the cost of these resources to the student vary (i.e. Harvard Innovation Labs, or the MIT Martin Truss Centre).

STUDENTS' PERCEIVED BARRIERS TO ENTREPRENEURSHIP

We found that the major perceived barrier preventing students from entering the entrepreneurial space was a lack of business awareness. Other factors covered a broad spectrum, including lack of funding, risk aversion (a trait not usually associated with entrepreneurs), and lack of experience. Those interviewed suggested that HEIs could help to overcome these barriers by providing networking opportunities, mentorship, and incubator spaces. The theme of having a safe space to fail again came up repeatedly in this category; earlier noted as an asset, via free-to-use space at MIT in the US.



BARRIERS TO ENTREPRENEURSHIP

% of responses

"Having access to mentors is key in order to share and run ideas past them to understand what's realistic, identify potential problems and learn from other people's mistakes. They will help in understanding the journey ahead."

- Paul Edwards, Horton International.

"HEIs should provide meaningful mentorship, they must be relevant and useful and get the students to think for themselves not just relay experience. Could interview mentors beforehand to implement this and ask mentees for feedback."

- Gerard Gregg-Smith, GGS Associates.

RECOMMENDATIONS

There is a significant amount of work that could be done in order to improve the role universities can play in creating a new paradigm in entrepreneurial learning. We have structured our recommendations into three distinct categories:

- 1. Getting the Basics Right
- 2. The Standouts
- 3. Future Research Opportunities

GETTING THE BASICS RIGHT

Entrepreneur Hub

Many of the HEIs we spoke to already have a Dedicated Entrepreneurial Space (DES) where students can go to develop their entrepreneurial skills, come up with new ideas and form networks of peers looking to do similar things.

A dedicated space could take many forms and do many things, so should be a flexible, multi-use area that not only encourages people to work on their ideas, but also to learn, socialise and share their journeys. You do not have to search for long in London to come across a new co-working space. A new HEI offering could initially model itself on these hubs, and then seek to find the unique point of difference.

The hubs should also be a social space, with access to mentors, coaches and peers. We would also like to see some kind of presentation space, giving both students and outside entrepreneurs the opportunity to demo their latest ideas and do lectures and talks about the true life of an entrepreneur. Finally, it should be a creative space where experimentation is encouraged and displayed for all to see. This would add to the inspirational feel of the environment - something more like a 'studio' than a classroom or educational space. Maintenance and upkeep would be at the expense of the HEI. However, with the HEI acting as a hub, the costs may feasibly be met via industry and finance sector sponsorship. Industry sponsorship of HEI facilities and initiatives is not a new model, and is particularly applicable here.

Entrepreneur in Residence

An important centralising factor is an Entrepreneur in Residence (EIR). Most business schools have these, but the role they are expected to play in student-facing terms is the important theme that emerges from our study: their key role in this context is to provide a single point of contact, to act as the liaison to the entrepreneurial ecosystem.

Through this mode of partnership with the university, an EIR could access directly or indirectly via a specified employee intermediary, required online university amenities, relevant course materials, and employee/student contacts. In particular, an EIR would develop and add value in relationships with faculty programme mentors and relevant lecturers. There would be some reciprocity in providing access to appropriate identified content, and mutual network access opportunities. An EIR could identify and promote networking events, interface with alumni teams, reach out to industry and assist with careers fairs. An EIR would arrange specific events for under-represented groups (e.g. gender, ethnicity, life choice). An EIR could also add value to taught programmes directly by contributing to appearances via facilitation, or having leverage to invite special guests. An EIR would mentor students to maintain professional contacts they might make themselves.

Invested in making the most of student initiatives in an entrepreneurial context, an EIR can facilitate necessary soft-skills development, while promoting access to team talent, acting as a network enabler and acting in the interests of student entrepreneurs to progress nascent ideas.

As a privileged associate of the HEI for a nominal agreement in hours per week, the EIR would physically attend the HEI to directly interface with students.

Entrepreneurship Budget

An entrepreneurship budget sponsored by industry partners, with additional annual funds from the HEI via:

- student membership subscriptions
- alumni donations
- grant sponsorship (wherever available, and usually subject to competition).

This is already in part met by Santander via Pioneer; we propose that other contributors, and mechanisms of self-contribution, add power.

This budget could feasibly include the set-up and annual cost of the DES, however that cost is likely to be a large one-off cost with downstream infrastructure on-cost. Therefore it may be best set aside as an initial extraordinary item, and thence a separate area.

Entrepreneurship Board

An entrepreneurship board – comprised of students, faculty staff and outside entrepreneurs, with executive chairing by the EIR, with regular meetings in the DES. Mentoring and advisory roles from network affiliates and entrepreneurial staff (i.e. those employed/delivering sessional content at the HEI and engaged as entrepreneurs, and those teaching and researching entrepreneurship). Birkbeck ran with this type of activity for a limited period in the past (including via a part-time EIR); we observe that it is all the more relevant in the modern HEI model.

Workshops and Training

Entrepreneurship programmes (including workshops and training) should be tailored to the level of interest the student has in entrepreneurship. Starting with a beginner course to explain basic concepts of business and entrepreneurship; follow up course that introduces more practical elements to more committed students; the most committed students can partake in an accelerator-like experience.

The common knowledge, skills and behaviours of entrepreneurs can be developed into a 'toolkit' of entrepreneurial practice, which is both accessible to all (even those looking for transferable skills but not the outcome of being an entrepreneur), but offers progression for people looking to start their own business.

Some of the tools would include financial knowledge, communication/presentation skills and problem solving techniques. Additionally, there could be opportunities to practice business scenarios through role-play and other 'sand-boxed' activities, such as strategies for decision-making, how to hire and fire, how to construct investment cases and real life opportunity costs.

Lastly, as the world is moving more towards ubiquity of technology, training around how to identify and use innovative technology tools to drive efficiency, productivity and profitability would also be valuable.

THE STANDOUTS

Entrepreneur Driven Learning

There is an incredible opportunity for Birkbeck to become "The University where entrepreneurs teach the future entrepreneurs after work". As Birkbeck is predominantly attended in the evenings, a strong connection with the London start-up ecosystem would mean that real entrepreneurs could deliver training, talks, lectures and other experiences directly to students and the wider community.

This would bring contextual, real-world examples to life giving the university a unique value proposition. One example could be talks about how to 'bootstrap' your idea, so that you can work on it without the need for outside investment.

Fostering an Entrepreneurial Mindset

Many of the students on entrepreneurship programmes said they were doing it to learn how to start their own business or develop their ideas. Whilst this is very positive and is a clear motivational factor, it could be that programmes that would help foster an entrepreneurial mindset are not being taken up by significant numbers of students.

Therefore, changing the angle of marketing so that it becomes more appealing to all students, not just people looking to start a business, could mean that many more people can improve their outlook by embarking on a learning journey into entrepreneurship.

Evening Incubation

It would be interesting to review the times that normal incubators/accelerators open. As this is targeted at people that will work on their projects after work (6pm onwards) it is quite possible that not many places are open to work. If this "entrepreneurial space" was open until late night, it would probably be a good differentiation and encourage more people to use it.

Funding Access

Access to funding could be another way of adding value. Corporate sponsorship could play an interesting role here, providing one to one sessions with experts that look at students' business plans and recommend the funding options that fits their plans. The corporate sponsors could even use this opportunity as a way to design new products and create an ecosystem as Revolut or Monzo are doing with their services.

Work Shadowing and Internships

Developing a framework where Pioneer graduates could spend some time shadowing start-up founders could be another great differentiation. Instead of just working for a company, they would spend a few weeks assisting a real start-up CEO for free, which could be a significant experience for them.

Building on this idea - a vehicle scheme where students at universities could be interns at start-ups and understand how they work, either paid for by the government or sponsor. This is a scheme that was carried out in other countries such as Singapore.

FUTURE RESEARCH OPPORTUNITIES

Research into Entrepreneurial Pedagogy

During this research, we did not seek to investigate alternative, innovative or lateral ideas. As a followon and potential counterpoint to the research conducted, it would be interesting to apply innovative, creative methodologies to uncover latent ideas involving different stakeholders of the entrepreneurial ecosystem, such as experienced entrepreneurs, business angels, venture capital analysts and managers, start-up employees, etc.

One approach could be to use a Design Based Research (DBR) approach. DBR aims 'to develop theories about both the process of learning and the means designed to support that learning'⁴. Designbased research involves an education intervention for use in the real world, which is developed by means of iterations of 'design, intervention, analysis and reflection'. The iterations may then be adapted and re-tested to gather more data. The purpose of this approach is to generate new theories and frameworks for conceptualizing learning, instruction, design processes, and educational reform. The area of entrepreneurial pedagogy lends itself well to this type of study.

Further Research into Technological Entrepreneurship

Technological improvements in the last 20 years have drastically changed the landscape of tools that entrepreneurs can use for their business management. This is something that has not featured highly in our findings, but we feel it is an area that will only grow in significance. We have not explored this topic in this report but it would be a very valuable topic to cover in the future to incorporate it in Birkbeck's future corporate collaborations.

⁴ Gravemeijer & Cobb 2006





ACKNOWLEDGEMENTS

A special thank you to everyone who has contributed to the development of this report:

Lead Researcher: Renos Savva

Primary Research Team: Anwen Brown, Cam Watson and Emma Elliston

Sub-research Team: Taiana De Ruyck Soares and Zardusht Salih

Report Editor: Spencer Ayres

Designer: Ty Abiodun, Profiles Creative

We gratefully acknowledge the partnership with Santander Universities for the commissioning of this report and the excellent collaboration between Birkbeck, University of London and Santander Universities.



