

***Expanding the Undergraduate Entrepreneurial
Perspective: An exploratory investigation into
pedagogy and practice at the University of Chester***

Constance Hancock

This thesis is submitted by Constance Hancock in accordance with the requirements of the University of Chester for the Degree of Doctor of Professional Studies in Entrepreneurship Education, 2017.

Acknowledgements

“In the realm of ideas everything depends on enthusiasm. In the real world all rests on perseverance.” – Johann Wolfgang von Goethe

The perseverance required to complete this research was not merely a product of self-motivation on my part, but a dedicated schedule of around the clock coaxing and cajoling, undertaken enthusiastically and selflessly by my best friend and soul mate Will. I am reasonably proficient at mathematics, but I couldn't begin to calculate the number of times he insisted that I pull myself together and 'stop acting like a wimp', harsh but fair in equal measure. For his down to earth approach in dealing with my frequent and escalating unreasonable demands in connection with supporting me in this endeavour, I dedicate this work, such as it is, to him. In addition, I would want to acknowledge the support and sound counsel of my esteemed academic colleagues: Ruth Ashford, Madeleine Mansfield, Neil Moore and Paul Manning; in particular, Ruth Ashford, who is quite simply, the embodiment of motivational. Maeve Marmion deserves a mention for her spirited rallying and chocolate biscuits, when all looked grim. Respect and thanks to my wonderful Faculty team who were just there for me and sensitively stopped asking, some time ago, when I would be completing my research.

I am deeply indebted to family, friends, students and colleagues who contributed their time and energy towards supporting me in the production of this work, my sincere gratitude to you all.

Mum, I finished it!

A handwritten signature in black ink, appearing to read 'C. Hancock'.

Contents

Acknowledgements	2
Contents	3
Figs & Tables	6
Abstract	7
Chapter One Introduction.....	8
1.1 Aims and Objectives.....	14
1.2 Towards a Definition of Key Terms.....	17
1.2.1 Research Definition of Entrepreneurship	17
1.2.2 Entrepreneurship Education	18
1.3 Context and Rationale for Research	22
1.4 The Emergence of Entrepreneurship in the Higher Education Environment	34
1.5 Chapter Summary	39
Chapter 2 Literature Review	40
2.1 Economic Perspectives on Entrepreneurship Education	44
2.2 Behavioural Perspectives	49
2.3 Pedagogic Perspectives	56
2.4 Reflecting on the Literature and a general scene setting for this study:	58
2.5 Summary and Gap.....	61
2.6 Chapter Summary	66
Chapter 3 Methodology.....	67
3.1 Introduction	67
3.2 Problem Definition.....	68
3.3 Research Focus.....	76
3.4 Research Philosophy	83
3.5 Research Strategy.....	84
3.5.1 Focus Group Process and Protocol	86
3.6 Research Validity and Triangulation.....	88
3.7 Data Collection	93
3.8 Data Analysis Strategy	97

3.9	Recruitment and Composition of Focus Group.....	100
3.10	Pilot Testing of Focus Group Process	105
3.11	One to One Interviews	106
3.12	Ethical Considerations.....	108
3.13	Chapter Summary	109
Chapter 4	Data Presentation and Analysis.....	111
4.1	Entrepreneurial Behaviour	112
4.2	Opportunity.....	117
4.3	Emotional Intelligence	125
4.4	Creativity / Innovation.....	129
4.5	Fostering and Motivating Entrepreneurship	131
4.6	Chapter Summary	137
Chapter 5	Discussion of the Findings.....	138
5.1	Developing an Ecosystem: Embedding Entrepreneurship Education	138
5.2	Pedagogy.....	139
5.3	Supporting Capacity Building	143
5.3.1	Simulation Software.....	145
5.3.2	Young Enterprise.....	147
5.3.3	Student Centred Delivery.....	149
5.4	Emerging Themes and Discussion:.....	155
5.5	Chapter Summary	157
Chapter 6	Conclusion and Recommendations	158
6.1	Introduction.....	159
6.2	Recommendations and Application of Findings.....	167
6.2.1	Personal Resources	170
6.2.2	Authentic, Experiential Learning.....	172
6.2.3	Pragmatic Delivery, Content and Assessment.....	174
6.2.4	Opportunities to Experiment	176
6.2.5	Team, Group and Collective Learning.....	177
6.3	New Knowledge, Research Findings and Implications for University of Chester ...	181
6.4	Key Contributions to Practice	186
6.4.1	Responding to the Gap in the Literature.....	187

6.5 Future Research	193
Chapter 7 Reflection and Closing Remarks	195
7.1 The Doctoral Journey: Reflections	196
Introduction	196
7.2 My D.Prof Journey	197
References	206
Appendix One: Transcript of Semi-structured Interview with External Stakeholder....	224
Appendix Two: Question Areas for Focus Groups and Semi-Structured Discussion.....	229
Appendix Three: Pilot Session Questionnaire	231

Figs & Tables

Figs

FIG 1 Higher Education Milestones Towards Developing Entrepreneurial Culture in HE	33
FIG 2 The Economic Role of UK Universities	48
FIG 3 Research Strategy Selection Journey	85
FIG 4 Applied Triangulation	91
FIG 5 Data Collection Process	93
FIG 6 Template Analysis Model	98
FIG 7 Model Introducing Framework From Findings	154
FIG 8 Blueprint Grouping of Potential Modifications	170
FIG 9 Concluding Framework/ Adapted EE Practice in the HE Environment	192
FIG 10 Reflection and Closing Remarks	195

Tables

Table 1 Current University of Chester Practices	9
Table 2 Attitude Knowledge and Skills	53
Table 3 Comparison between Literature and Current UoC Perspective	57
Table 4 Key themes emanating from the literature.....	64
Table 5 A Comparison of Two Institutions	74
Table 6 Key Features and Indicators of 'Fit' for Case Study Approach.....	86
Table 7 Focus Group Strategy	87
Table 8 Undergraduate Focus Groups: Respondent Demographic.....	102
Table 9 External Visiting Speakers (Demographics)	106
Table 10 Entrepreneurship Educators' (Demographics)	106
Table 11 Findings emanating from the data relating to pedagogy	143
Table 12 Undergraduate Expectations	161

Abstract

Author: **Connie Hancock**

Purpose: This work conducts an exploratory investigation into the domain of entrepreneurship in Higher Education (HE), how it is perceived, interpreted and embedded, both from a pedagogic and philosophical perspective, into a contemporary university landscape in order to cultivate entrepreneurial behaviours in undergraduate students.

It is implied in government imperatives and directives that entrepreneurship and entrepreneurs are the fiscal panacea that will lead us towards the light in the economic gloom that currently pervades. The cultivation of entrepreneurial attitudes and behaviours has been specifically linked to Higher Education by the European Commission, although scholarly research into developing an entrepreneurial landscape within the HE sector is significantly lacking. Whilst studies exploring the entrepreneurial university and transformative opportunities in response to economic pressure has been undertaken from the 90s onwards, this field and its potential to inform and impact on Higher Education continues to represent an understudied area. The purpose of this research therefore, is to consider the methodologies and strategies that can support a cultivation, integration and embedment of entrepreneurship education in a Higher Education context, specifically the University of Chester, with a view to creating a blueprint for future Entrepreneurship undergraduate Programmes.

Methodology: The approach is one that embraces an inductive and qualitative research methodology with data secured from three groups of respondents: undergraduate students, staff engaged in the delivery and support of entrepreneurial endeavour and external stakeholders contributing to an entrepreneurship agenda. Data were gathered from student participants by means of semi-structured interviews and focus groups. Data was secured from staff and external stakeholders via the mode of face-to-face semi-structured interviews. A multiple perspective methodology was employed in order to effectively provide a triangulation of perceptions on the development of an institutional entrepreneurial culture from a pragmatic perspective. The data were analysed and interpreted by way of template analysis (Stokes, Wall, 2014; Philips, Lawrence and Hardy, 2004; Hardy and Thomas, 2013).

Contribution: This work expands upon the ways in which entrepreneurship education may be understood in the context of a comparatively small university in the north-west of England and extends the thinking into how practice may be extended to maximise undergraduate entrepreneurship. Most significantly, this research offers up a conceptual blueprint in the form of a model that demonstrates how entrepreneurially orientated mind-sets and behaviours may be fostered in undergraduates within the context of University of Chester.

Keywords: Entrepreneurship, Higher Education, Pedagogy, Entrepreneurial Behaviours.

Chapter One Introduction

“We always plan too much and always think too little. We resent a call to thinking and hate unfamiliar argument that does not tally with what we already believe or would like to believe.”

Joseph Schumpeter (1947, pg. xi) As quoted in Reisman (2004)

1.1 Research Rationale

The trajectory towards this Professional Doctorate was forged in 1998 when a change of career direction meant that the author ceased lecturing in Literature to embark on an alternative teaching route related to Business Management and Small Business Development. This change reflected the energy and commitment that had been expended in the initiation and sustaining of business ventures whilst simultaneously balancing a career in academia. As a ‘doer of business’ or a practitioner of entrepreneurial endeavour, the focus is one of outcome and action orientation that is informed by experience and theory. It is this pragmatic business approach and attitude that led to the author undertaking a Professional Doctorate, as opposed to taking the PhD route to professional recognition. As a practitioner of entrepreneurship education with over twenty-five years of experience, the desire to focus on developing practical application of research findings and theoretical concerns for implementation and impact in the field, a D.Prof is deemed to be the most appropriate route.

What follows is a D.Prof case study that was undertaken in order to examine which methodologies, in relation to teaching and learning, are most effective at fostering

entrepreneurial mind-sets and behaviours in undergraduates at a smaller, post 92 university that lacks the resources the medium to larger 'red bricks' can draw upon.

Currently teaching practices at Chester reflect traditional methodologies as displayed in the table below:

TABLE 1: Current University of Chester Practices

PEDAGOGY	CURRENT UoC PRACTICE:
Individual Modular Approach	Learning outcomes demonstrated through academic criteria
Lecture	Didactic delivery of learning
Case study	Live Business Challenges
Classroom focused teaching	Tutor Centred - discussion leader
Teaching	Lecturer focused delivery
Tried and Tested Teaching	Cross Institutional formatting and structure of content, delivery methodology and assessment

Initial investigation revealed that little in the way of research had been undertaken into contextualised pedagogical strategies and techniques that best supported undergraduate students to understand and exploit their entrepreneurial capacity. Despite the surge in the number of business schools delivering entrepreneurial focused Programmes and related learning and management programmes (Mandel & Noyes 2016) the area of undergraduate entrepreneurship remains relatively under explored in terms of offering a context for the delivery of a contextualised response for the delivery of various economic imperatives and study findings. (Jones & Matlay, 2011; Rae, 2009; Ravasi et al., 2004). Research would appear to suggest that a significant proportion of the entrepreneurship teaching and learning in varied higher education environments is likely to be experiential in nature rather than research informed (Wiseman, 2014; Rae, 2009; Sullivan, 2000; Sarasvathy, 2001).

Given the changing landscape of Higher Education and the requirement to prepare students to make and respond to opportunities in a changed economic landscape, entrepreneurship education is a critical area of exploration (Gibb 2012). This is particularly true for newer universities such as Chester, finding its niche in a highly competitive market where other institutions are further ahead in terms of their responses to differentiating their offerings and embedding entrepreneurship into all of their Programmes; across the institutional landscape.

There is growing evidence in the literature that the swinging pendulum of acceptance with regard to entrepreneurship as a fully-fledged field of academic study has finally arced. Significantly the work of Gibb (1987, 2003, 2011), Hannon (2004), Rae (2010) has added substantial weight to the legitimacy of entrepreneurship education and its place in the Higher Education arena. Whilst a good deal of analysis and deliberation proliferate as to the value, objectives and pedagogical forms (Rae et al., 2010), the debates with regard to legitimacy appear to have moved on significantly in the last decade.

It is generally accepted that universities have a central role to play in empowering and equipping up and coming generations of graduates to make their mark on the business environment in terms of regional, national economic and social advances. (BIS 2013, Gibb 2011, Per Blenker 2014). The issues surrounding employability and the notion of equipping students not simply to join the ever extending queue of job hunters, but to equip them for job creation, is deemed by governments worldwide as being predominantly the responsibility of universities. (BIS 2013) Whilst Kuratko (2005) argues for the connection between entrepreneurship education and economic growth, little empirical evidence exists to support this supposed link (Jones & Matlay 2011). Yet, what remains apparent is a growth in the

demand for entrepreneurship education (De Faoite et al, 2003), growth in the provision of entrepreneurship education at all levels, mirrors the efforts to increase the supply of effective entrepreneurship education (West et al, 2009). The University of Chester is no different in this respect, but has come late to the party, gaining university status in 2005. Hence the drive to embed a contextualised entrepreneurship education that maximises the University of Chester student experience and opportunity appears more pressing than ever.

In a climate where there is heightened competition for students, a league table focus, internationalisation agenda, profound funding constraints and latterly increasing pressure to respond to the introduction of the Teaching Excellence Framework (TEF), universities are compelled to tread unexplored pathways in order to become more entrepreneurial and to cultivate a culture that is opportunity focused and experimental in nature. (Solesvik, 2014; Kirby, 2005,). In such competitive and uncertain markets, it is crucial to explore and test the conditions that permit entrepreneurship to “flourish at all levels” (Kirby, 2005). It is this very process of exploration and dialectic change in terms of the modelling, content, delivery methodology and strategising surrounding Programmes of learning that has the potential to bring about a profound transformation in the hearts and minds of students. This key issue has attracted the interest of numbers of researchers who attempt to identify the most critical elements involved in this transformation process (Morris et al., 2013; Gibb, 2011; Eckhardt, & Shane, 2003; Clark, 1998;). It is further recognised at Chester, that increased understanding in this area is critical to maximising graduate opportunities and engendering positive change in our Programmes.

Generally the literature identifies the Characteristics of an entrepreneurial mind-set as including: instinctive decision making, autonomous thought and action, opportunity making, modelling and identification, the harnessing of creative problem-solving, high level strategic thinking, networking, and self-efficacy (Rae et al, 2014). It should be emphasised that the notion of the entrepreneurial mind-set within this study is not simply connected with the desire to build a company, but upon the capability of transforming thought into action in any context towards developing any venture or initiative.

Entrepreneurship is about growth, creativity and innovation, (Wiseman 2016; Jones 2015; Neck 2012; Wilson 2008). By its very nature it is trans-disciplinary and is required to be holistic in approach,

“...entrepreneurship education should encourage students to think and behave in ways that are leadership balanced, opportunity focused, with the purpose of creating value” (Neck 2012, p24).

Evidence of the essential nature of cultivating an entrepreneurial culture within the HE sector is provided by the burgeoning number of UK government directives, journal special editions and articles focused on the issues surrounding ‘how’ this transformation may best be facilitated. A number of gaps connected with definitions, characteristics, conditions, requisites, governance and obstacles and the essential nature of a rigorous framework for cultivating such an entrepreneurially focused context exists.

This D. Prof study will commence with some introductory discussion relating to the central debates and dominant themes connected with entrepreneurship education in a Higher Education setting and deal with related issues through this narrative. This will be followed by a backward glance at the historical roots, conventional notions of 'a University' and the position in the educational environment that Higher Education has traditionally occupied. This will lead on to a consideration of the economic imperatives that have impacted on today's changed Higher Education landscape and a charting of the milestones that have led to the inclusion of Entrepreneurship as a field of study. This contrast is crucial towards establishing why entrepreneurship occupies a vital theme in relation to the Higher Education agenda of today, not only in terms of research and teaching and learning strategies, but also towards supporting a culture that encourages and values entrepreneurial endeavour. Leading on from this, and in accordance with the literature and thinking in the area, a general notion of what constitutes entrepreneurial behaviour as it is referred to in this research will be established. Identifying what constitutes entrepreneurial behaviour is a crucial step in understanding how it may be fostered. It is important to understand how such behaviours can be facilitated in the Higher Education environment and how practitioners may best respond to the calls from both government and business to embed entrepreneurial learning at every level of the HE spectrum. It is contended that entrepreneurial learning increases graduate opportunity and economic competitiveness and "creates an environment where students can flourish" (NCCE, 2008 p3). The counter argument to that is made by a number of theorists who dispute the link between entrepreneurship education and an improved motivation in university students to become entrepreneurs (Farhangmehr et al., 2016)

This work will not seek to compare the quality of entrepreneurial education and ensuing impact across a number of institutions, but will rather focus on the practice and context of one institution in order to develop a conceptual framework and blueprint for embedding entrepreneurship education. In so doing, this case study will build on the work of Jones and Matlay (2011) that considers the complexity and heterogeneity of entrepreneurship education and the relevance and importance of context.

The final section will offer recommendations for application of the findings at the University of Chester and similar institutions emerging from the findings of this work.

1.1 Aims and Objectives

“There is ...a need for re-focusing research away from the emphasis on picking successful entrepreneurs or picking winners, to identifying key issues in the learning and developmental process of entrepreneurship” (Deakins, 1996 p21-22).

This study sets out to explore pedagogy, facilitation, support and assessment in a Higher Education environment; how it may best support and foster entrepreneurial mind-sets and ultimately cultivate behaviours that nurture entrepreneurial endeavour in undergraduate students. The research respondents will be grouped thus:

1. Undergraduate students undertaking a Programme of study that leads to either a Bachelor of Arts or Bachelor of Science degree in a Business related discipline at the University of Chester.

2. Lecturers and other University staff charged with delivering, supporting and/or facilitating entrepreneurial learning, thought and action.
3. External stakeholders in the form of entrepreneurs and business leaders contributing to University activities related to entrepreneurship. This may be through delivering sessions, mentorship, support or backing.

This work and accompanying research has been undertaken in order to investigate the debates and discourse surrounding the embedding of a contextualised entrepreneurship offering at the University of Chester. Such debates include which methodologies are most efficient in the fostering of entrepreneurial thought and action, how entrepreneurship education together with the physical and human resources required are perceived by academics delivering curriculum and supporting the agenda, and the ways in which it can be embedded, both from a pedagogic and philosophical standpoint, into a contemporary university landscape in order to cultivate entrepreneurial mind-sets and behaviours. The study will investigate the thinking behind, action towards and the extent of the impact of developing teaching and learning that has at its heart the intention of developing entrepreneurial behaviours in undergraduate students and fostering a culture that has entrepreneurial emphasis and an innovation focus. The research and findings have been structured in an effort to analyse the issues surrounding how best to embed entrepreneurial thought and action in the Chester environment, and the extent to which specific pedagogical and environmental impacts are conducive to the process. More explicitly the aim of this study is to explore pedagogic strategies that have the capacity to foster entrepreneurial mind-sets in Chester undergraduates.

The objectives of this Professional Doctorate are to:

1. To critically explore the milestones in relation to the trajectory of entrepreneurship as a field of academic study in the Higher Education environment.
2. Critically reflect on current thinking in the literature related to the field of entrepreneurship development in the Higher Education sector and consider the ways it may inform practice at University of Chester.
3. Critically examine and evaluate the pedagogical strategies and techniques that may most effectively support the cultivation of entrepreneurial behaviours and mind-sets in Business and Management undergraduates at Chester Business School.
4. To identify and analyse the key entrepreneurial processes in undergraduate Business and Management students.
5. Develop a conceptual model towards embedding new approaches and to further develop entrepreneurial endeavour across the Institutional landscape at a post 1992 University such as Chester.

Objectives 2, 3, 4 and 5 of this study reflect the importance of investigating these complex questions. Objectives 2, 3 and 4, seek to offer a triangulation of the different perspectives afforded by the literature, undergraduate respondents and those respondents, academic, support and business, contributing to pedagogic content. The fifth objective will embed the findings into a model that will support the development of existing entrepreneurial education methodologies and support the introduction of fresh approaches at the University of Chester.

1.2 Towards a Definition of Key Terms

Within the literature there is no definitional agreement on the following terms related to the discourse on entrepreneurship education, but rather there are multiple debates and differing perspectives. Matlay (2005) is critical of studies that have been undertaken on entrepreneurship education, citing aspects relating to validity, comparability and generalisation as being limiting factors. Matlay (2005) argues that it is difficult to analyse progress because of the variety of key definitions applied to entrepreneurship education. In an attempt to address concerns connected with semantics, the definitions that are being applied within this work reflect the context within which it is being studied. In any case, sterile semantic debates will be eschewed in this section in favour of discussion around how the term will be understood within this case study.

1.2.1 Research Definition of Entrepreneurship

Given that previously entrepreneurship was viewed as somewhat “esoteric in nature” (Wilson, 2008) it would seem prudent for this study that a working definition is proffered from the outset with regard to the way that the term entrepreneurship is being used, applied and referred to throughout this body of work. Differences in interpretation will heavily influence the pedagogical strategies that inform teaching and learning methodologies and as a consequence student understanding and response. Through this work, reference will be made to entrepreneurship in relation to it being the process whereby new value and transformation is created by or through either: an individual, a group, a business, an environment or a community. Value may refer to a financial/monetary, cultural, community

or social benefit or a professional, personal, business or project outcome. Entrepreneurial endeavour signals a movement away from processes, strategies and/or procedures that have always been undertaken in a similar way, in favour of new ways of doing, new ways of being, different combinations, competency extension, exploration, innovation and experimentation that brings about new and added value. (see Shumpeter (1948) quote at Chapter start)

1.2.2 Entrepreneurship Education

Whilst there is much agreement in the literature that entrepreneurship education is about developing entrepreneurial capacity and mind-sets (O'Connor, 2013; Gibb, 2011; Jones, 2011), there is not a great deal of accord beyond that. Gibb (2011) contests that whilst an entrepreneurial mind-set may be experimentally, experientially, culturally acquired and honed, education is a consistent influence. Amongst other theorists, Per Blenker et al (2006) make the point that entrepreneurship or entrepreneurial behaviour can be learnt and therefore should be taught.

The definition of learning is yet another minefield, and whilst a general understanding of the term pervades, theorists and indeed practitioners reflect in their works a diversity of opinion. Complexities aside, Gibb (1995) attests to the potential changes to behaviour that deep learning may bring about, but that it is this 'potential' and not actual changes that characterise and define learning. The notion that entrepreneurial learning is associated with 'potential' change, may present a level of complexity and challenge for those seeking to measure impact

or quantify learning outcomes. Different theoretical approaches to the understanding and nature of learning abound and includes the work into behaviourism of Pavlov (1927), Lewin (1951) on group dynamics, Bandura (1986) who discusses learning in its cognitive form, Kolb's Experiential Learning Theory and associated model of experiential learning (Kolb 1984) is influential in today's HE environment and beyond and perhaps contrasting with Gibb(1995) of learning impacting on the 'potential' to change is Rae (2000) who argues that:

"When learning is applied to the concept of entrepreneurship, it is concerned with learning how to recognise and act on opportunities how to organise and manage new ventures... Entrepreneurial learning is taken to mean learning to work in entrepreneurial ways. But it is not only acquiring the functional knowing, it involves actively doing as well as understanding what it is that works and realising that one can do it." (p151)

Rae advances the argument that learning, knowing and acting are all interconnected and it is Rae's theoretical perspective that will be applied to the analysis of the qualitative data emerging from this study.

Traces of cynicism and questions surrounding whether entrepreneurship can be taught, as previously mentioned, whilst in abeyance, still exist. An increasing level of scrutiny related to the content matter, assessment, and pertinence of entrepreneurship education that is situated within a university are in evidence (Jones, 2016; Gorman et al., 1997; Young, 1997; Kourilsky and Carlson, 1997). The 'messy' and 'amorphous' nature of entrepreneurship fills

some academics with dread. Simpson (2013) uses the example of Bloom to articulate the scepticism surrounding entrepreneurship as an academic field.

“...there is one simple rule for the university’s activity: it need not concern itself with providing students with experiences that are available in a democratic society. They will have them in any event. It must provide them with experiences they cannot have there.” (p27)

For Bloom, the notion of universities embracing what graduates may encounter beyond the walls of their institutions and in so doing provide experiential learning that reflects a level of preparedness for the business landscape is not something that universities should be focusing on. Bloom argues that HE should be supplying students with experiences that are exclusive to the time spent in higher education and the opportunities that affords. This appears to be the antithesis of the real world experiences in preference to providing experimentation and practise where failure is valued for the learning it offers. Empowering students through the facilitation of an environment that allows for experimentation and practise. ERDF funded initiatives such as the Enterprise Champion Project, (2007-2015) were set up to develop and make provision for a central focus and point of co-ordination for the development of the student and graduate enterprise agenda and towards securing institutional ‘buy-in’. This project, along with other directed funding mechanisms located responsibility for entrepreneurship education within the HE environment, connecting it very firmly with student or graduate start-ups. As with similar programs of funding, it was transitory and real challenges relating to the measurement of impact. The root cause of this, Gibb (2012) argues, was a predominant focus on student start-up numbers.

For the purposes of this work a loose definition of entrepreneurship education coined and articulated by Fayolle (2007), will be utilised. Fayolle refers to entrepreneurship education as being:

“...all activities that surround the aim of fostering ‘entrepreneurial mind-sets, attitudes and skills and covers a range of aspects such as idea generation, start-up, growth and innovation.’ (Fayolle, 2007 p12)

This fluid definition permits an understanding of entrepreneurship education on these terms allows for the development of thought and action that isn’t heavily focused on initiating a new venture or simply related to business, but supports the acquisition of thought, actions, competencies, responses and the vocabulary related to dealing with uncertainty, challenge and crisis. The ability to be flexible during a period of change, remain resilient and motivated is to be entrepreneurial. Gibb (2002) proffers that ‘entrepreneurship is not solely the prerogative of business’. The argument is that entrepreneurship shouldn’t be a prerogative of academia, but rather, is pertinent to every tier of life, particularly in responding to challenge and uncertainty. The literature suggests that entrepreneurship education is about learning that targets the extension of characteristics that are embedded in thought and action when dealing with complexity of any kind.

Kuratko (2005) argues that the question of whether entrepreneurship can be taught is now obsolete and there are plenty of examples in the literature providing reasons why this field of study should be at the core of Higher Education pedagogy and curriculum (Gibb 2011, Pittaway & Cope 2007). Results surfacing from a number of recent initial studies demonstrate positive results (Matlay 2009), but studies that look at the ‘how’ in a contextualised, focused way in connection with entrepreneurship education are distinctly lacking in number.

There is a growing body of evidence from a variety of sources that entrepreneurship education is vital to the sector, particularly in these times of growing public accountability related to value (Gibb 2012, Hannon 2014, Matlay 2009). The yardstick used in the measuring of efficiency and excellence in Higher Education has changed beyond all recognition (Chell 2008, Cope 2005) and this significant feature is afforded comprehensive discussion later on in this work. It is worth noting here that the scope and field of this doctorate would not have been feasible only a few years ago. The presence of Entrepreneurship in the Higher Education landscape and its inclusion among the factors used to calculate HE excellence in the contribution to national, regional and local economy is somewhat telling and perhaps indicative of the status that governmental directives have placed on its potential towards developing worldwide economies (Gibb 2012).

1.3 Context and Rationale for Research

This section traces the roots of traditional notions of a ‘university’, what they delivered in terms of the ‘scholarly agenda’, the philosophy and context enveloping the ways in which such institutions once operated, and contrasts this with the ferociously competitive Higher Education landscape that we recognise today. The contention here is that entrepreneurial endeavour can be detected in what can be deemed or referred to as the earliest inceptions of institutions of higher level learning. Yet despite this, Entrepreneurship lacks the development trajectory and velocity of progress, exhibited by other HE disciplines.

Gone are the days when new graduates gained employment that spanned their working lives (Gibb 2009). In today’s climate students have to be equipped in the art of job creation, not

simply job hunting (Hannon 2014). Television programming features examples of entrepreneurial endeavour via reality television, competition and documentary series, outlining the lives of particular entrepreneurs who have achieved celebrity status, and television executives' commission biographical insights into lesser known entrepreneurs whose achievements have made their mark none the less. The shelves of bookshops are filled to burgeoning capacity with autobiographical and biographical tomes telling of the activities undertaken by those entrepreneurial figures who embark on a narrative trajectory of risk and resilience (Cope 2005). The Internet, more specifically social media sites: Google, LinkedIn, Twitter, Amazon, Facebook and YouTube provide compelling examples of the immense power of innovative, technological entrepreneurship, from Richlists:

(businessinsider.com/sunday-times-rich-list-2015-top-25-richest-people-uk-2016)

top tips for entrepreneurs on how to make their first million (Dunsby 2014).

The EU 2020 strategy identifies the necessity to embed entrepreneurship into education towards stimulating entrepreneurial mind-sets for 'lifelong learning and employability in a knowledge-based society', yet only limited studies exist that look at what is currently being delivered within HE institutions and whether or not it is developing undergraduates to engage in entrepreneurial thought and action. There is a distinct lack of impact measurement in connection with the efficacy of entrepreneurship education in HE and therein may lie the crux of the challenge. Matlay and Jones (2011) argue for the need to contextualise studies in the area and offer discussion on the heterogeneity of entrepreneurship education. In response to the requirement to maximise entrepreneurial learning and student opportunity at

University of Chester, this study seeks to model the literature themes and research findings to devise a model for applying the tenets of the synthesis between this output.

Entrepreneurship in a higher education setting has been beset with issues, from early challenges relating to whether or not it was an area that sat comfortably in an academic environment, to questions on delivery and assessment (Gibb 2011, Fayolle A. 2009). In addition to the debate about 'how' is the tendency to perceive entrepreneurship education as being exclusively connected to business start-up or the running of one's own business.

The demand for entrepreneurial learning is steadily escalating. Kuratko (2016) posits that an "entrepreneurial revolution has taken hold across the globe and impacted on the world of business forever."

The origins of the word 'university' are generally believed to have emanated from an institution in Bologna, founded in the 11th century. (King 2004, Musto 1991) This 'university' became widely respected in relation to the intellectual study of law. The University of Paris was the first university established in northern Europe and was founded between 1150 and 1170. It became noted for its teaching of theology, and it served as a model for other universities in northern Europe (Rüegg 2003). Paris and Bologna, whilst referred to as universities, were founded and organised adopting very different principles. (Boggs 2010) Bologna was established and run by the students themselves (Schwinges 1992) with teachers being drafted in to educate students who identified the disciplines they wished to study. The term the 'Bologna process' is still utilised throughout Europe today to refer to the process of degree specification. It was the pursuit of scholarship for scholarship sake that prompted the

establishment of an institution in Paris institution. The senior academic staff (or masters) permitted younger scholars to learn from them; in exchange the 'student' would pay for this privilege. Established in 1167, the University of Oxford, replicated the original Paris model with Cambridge University following in 1209 (Boggs 2010).

It was these early universities that established an enterprise or entrepreneurial relationship between students and academics that was, in the main, self-governing, hence a tradition of autonomy was established. This level of independence experienced by the first universities meant that they had to be self-financing and so fees were charged, and students were very much viewed as needing to be satisfied with the instruction that was on offer. (King, 2004) One can see the die being cast for the traditions in regard to organisational, structural and scholastic pursuits of the later university from this early beginning. Early incarnations of universities were effectively run as businesses, with students as customers providing the income that sustained operations (Rüegg, 2003) Generated revenue earned from scholarly activity provided the resource that enabled the existence and continuance of the institution. (King, 2004) Thus one can see entrepreneurial seeds even in the earliest inception of a university.

Education, the content and style, proffered in universities throughout England rapidly developed, it is contended, as a result of industrial developments and the growth of democracy experienced throughout the 18th century (Gillard 2011). Dyhouse (2007) argues that benefits in the long term to both the economy and the individual are not easily

demonstrated. Therefore, she argues, it is difficult to factor in to a type of economic cost-benefit analysis. Although it is reasoned, that the historical trajectory and tradition of HE reflects matters connected with industrialisation and democratisation. (King 2004, Gillard 2011) Thus one can observe a conflation between academia and economic activity.

In the eighteen and nineteen hundreds, emerging challenges relating to the expansion of industry and scientific developments prompted the government view that universities could be a way of responding and meeting these economic challenges, motivated change. (Lubenow 2000) Whilst plans to reorganise the Higher Education system had its opposers, a significant process of transformation was initiated. (Rothblatt, 1997) Newer disciplines and fields of study within the Higher Educational sphere began to emerge, but attempts and approaches towards widening access were met with cynical opposition and heavy resistance from the more established institutions. (Halsey 1995)

Building on from these early strategic movements to widen access, a Report compiled in the late 1950s called for an increase in the level of student grants available for degree programmes in both universities and colleges. The Anderson Report was accepted by the government in 1960 and Robinson (2007) identifies this as being the most important decision of the decade in connection with increasing the numbers that participated in degree level studies.

Later on in the 60s profound change was called for by a Committee on Higher Education, with a significant expansion of HE being recommended by the committee. (Sutton Report 2008) The Robbins Committee found that whilst the number of students participating in Higher

Education had more than doubled, change in relation to the proportion of working-class student numbers enrolling at university experienced little in the way of change between 1928-47 and 1961.

In short the recommendations that were contained within the Robbins Report signalled the developments that the university sector experienced in the years that followed. The Report anticipated that by 1980 most Higher Education would be provided by universities or teacher training institutions (HEFCE 2009). Scott (1988) posits two opposing perspectives in connection with the Robbins Report; the first, that it represents a view of Higher Education that is of the finest quality and liberal in its vision. This perception is contrasted with the second perspective that it reflects what he terms, a blueprint for the Higher Education system of today. Robinson (2007) suggests that the Labour government of the 60s and in particular, the Polytechnic policy that it established was significantly radical in its proposals and was extremely successful in its implementation. Essentially these policies were about vocational education as it was considered that the emphasis of universities lay with liberal arts and was not sufficiently focused or developed in relation to vocational areas (Robinson, 2007).

According to Beech and Lee (2010) the 1960s Wilson government, university expansion was a core policy, with Higher Education, under Wilson's Labour government, polytechnics were established bringing about a rise in student participation rates from 5% to 10%. Beech and Lee assert that the Labour government of the time regarded HE participation as being beneficial to all.

The Open University was also established at the time of the Wilson government to give a chance of Higher Education to those adults who had hitherto missed out on the opportunity to participate in HE (Ziegler 1993). Perhaps most significantly, it was the OU admissions policy that determined the most radical progress with the only prerequisite for undertaking degree study being the successful completion of a foundation course. (OU website) This was a profound move away from previous HE provision at other institutions. Robinson (2007) argues that whilst the 'new' universities and the Open University are often cited as being significant innovations, it was the development of local authority colleges that were '...by far the more significant'. This sector he posits, with its colleges of technology, art and commerce best anticipated the needs of HE for the twenty-first century.

During the 80s universities began to show signs of responding to the rise in unemployment by introducing courses that supported new venture creation (Kirby 2006), but this new direction for HE was short lived and the decline in such Programmes was the subject of the Dearing Inquiry into Higher Education in 1997 which recommended innovative approaches to designing courses that would motivate entrepreneurial endeavour and development (Dearing, 1997). "Political analysts and government policy-makers began to give specific consideration to the ways in which university-based capabilities and activities could contribute to social and economic development" (Molas-Gallart, 1992).

At the start of the new millennium Universities UK included the development of business and entrepreneurial endeavour in its list of 4 strategic goals for HE institutions (Universities UK, 2000) Further to this and with the objective of encouraging entrepreneurial development and the building of business relationships with universities, the British Government introduced the Higher Education Innovation Fund (HEIF). This was a form of 'third stream

funding’, so called because it represents income generated by means other than that related to teaching or research. HEIF was introduced in order to stimulate knowledge transfer to the HE environment through a reaching out to businesses and the community. This funding initiative had at its core the aim of developing entrepreneurial staff, students and graduates and boosting the economy through adding value and providing opportunities in a university setting. (Universities UK) The growth in significance of the transferral of knowledge between society and universities appears to be a vital component towards HE institutions transforming into effective, efficient businesses, staffed by entrepreneurial individuals, cultivating entrepreneurial graduates to make their mark on the economy. The escalation of importance for universities to develop entrepreneurial behaviours with regard to their own practices and pursue third stream funding, has been promoted through various government initiatives in recent years.

Universities were described as “dynamos of growth” (p4) in the White Paper, ‘The Plan for Growth’ related to Science and Innovation released in 2000. This paper viewed Higher Education as playing a key role in regional economic regeneration. The content of this Report is closely connected to the remit of entrepreneurship educators in today’s Higher Education environment.

A governmental strategy that sought to develop the UK economy into one that was not only the most enterprising in the world, but would optimise the country’s economy for starting and growing a business was introduced (Berr, 2008) In an attempt to promote the Government’s vision of increased entrepreneurial performance, a new policy framework was introduced in 2008 that included key themes relating to development via five key areas: a

culture that promotes enterprise, access to financial support, knowledge and skills, a regulatory framework and support for business innovation. The Report recognised the centrality of entrepreneurship education at all educational levels and providing inspiration for an approach that was both enterprising and promoted innovation. (BERR 2008)

Newer universities that are teaching focused, such as Chester, endeavour to meet the career aspirations of graduates in the UK's principally knowledge-based society, through an emphasis on teaching and learning quality and the quality of knowledge transfer work (Hannon, 2014). With the introduction of top tier tuition fees in 2012, pedagogical quality and innovative responses to the entrepreneurship agenda represent economic imperatives towards the sustainability of many universities (Gibb, 2012), particularly new universities like Chester.

The literature suggests that entrepreneurship increases employment, economic reward and work satisfaction, although entrepreneurial education lacks the maturity afforded by other subject disciplines in HE and rarely features in institutional strategic plans (Gibb, 2012). Yet entrepreneurship is recognised by various governments around the world as being a key driver of economic growth.

The historical route traced above sets the scene for this study. Where once universities were seats of scholarly activity with no remit to develop its academic inhabitants for economic activity, it is now an imperative. Today's Universities have a significant role to play in

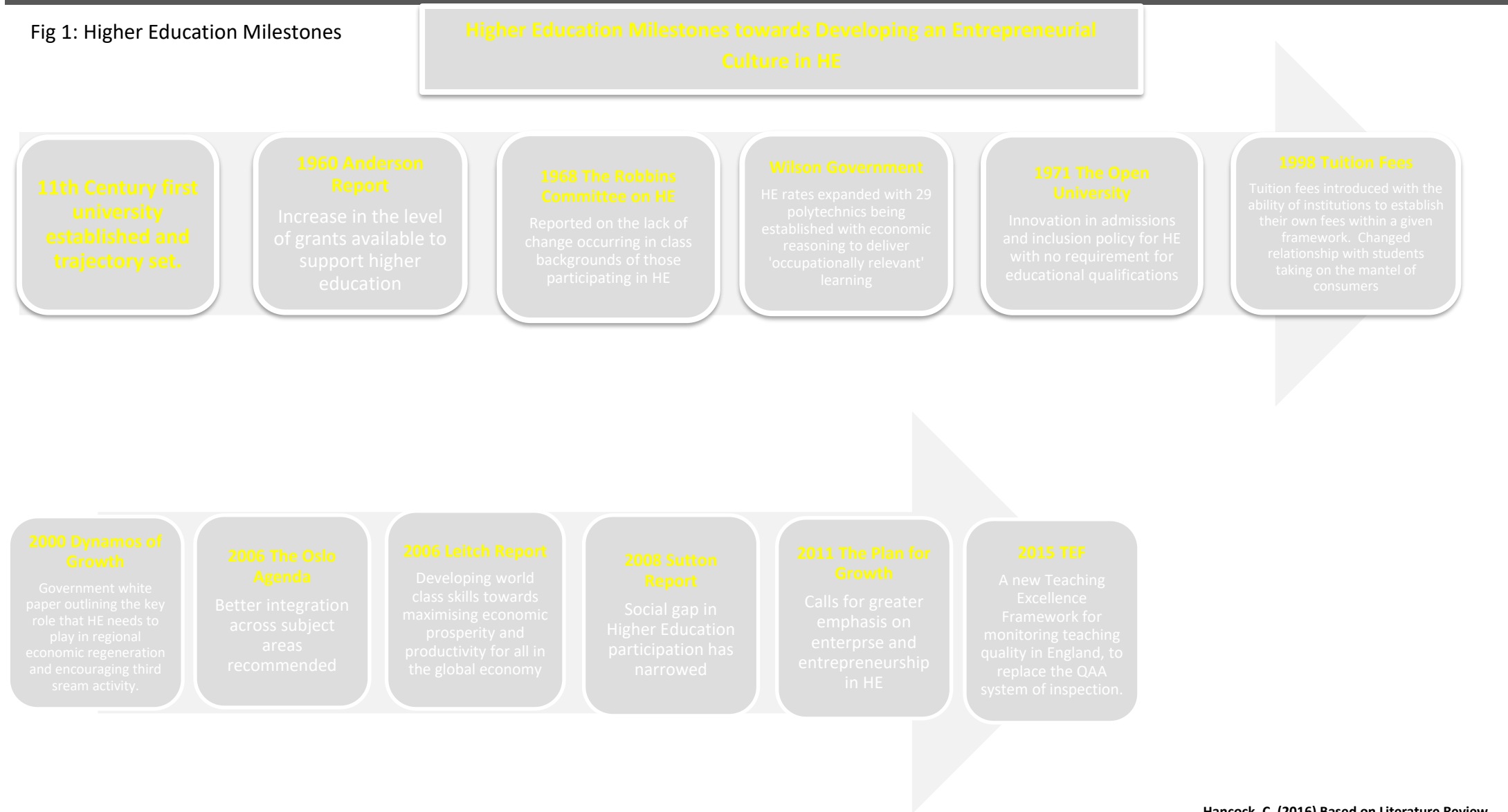
maximising and securing student opportunities, enhancing employability and ensuring quality for students. Universities, no longer hallowed places of research and the pursuit of academic truth alone, face an uncertain and challenging future with greater pressures to perform on a global stage. (NCCE 2014) Higher education's 'massification' has meant universities have come under increasing pressure to be relevant in these times of economic flux with the requirement for pedagogic activity that focuses on social mobility, economic development, technical innovation and employability. With the introduction of the Teaching Excellence Framework, the Higher Education environment will depart from the exclusive bastions of academic activity they once were.

Just as Business is challenged by the current economic climate, so too are educators confronted with a changing Higher Education sector and a market place where complex demands and uncertainty are inevitable. Educators are required to find creative ways to move the entrepreneurship agenda forward, sustain competitiveness and introduce entrepreneurial learning that offers innovative design towards withstanding a new era in Higher Education.

This study offers a way of thinking and planning for a future where entrepreneurial thought and action is most effectively fostered in undergraduate students towards successful contribution to the economic landscape. This will be achieved in accordance with the objective previously stated: through a comprehensive mapping of the literature, critical examination and evaluation of existing entrepreneurship practices and learning processes at the University of Chester. In the final section of this thesis, a model of key actions emanating

from the research will identify the ways in which the findings of this research may inform practice.

Fig 1: Higher Education Milestones



Hancock, C. (2016) Based on Literature Review

1.4 The Emergence of Entrepreneurship in the Higher Education Environment

"...everyone who can face up to decision-making can learn to be an entrepreneur and to behave entrepreneurially."

(Drucker, 1985, p65)

The field of entrepreneurship only emerged as an academic discipline in Europe in the early 90s (Twaalfhoven and Wilson, 2004). Yet entrepreneurship has been a feature of the curricula offered in Higher Education institutions across North American for in excess of sixty years, with the first course delivered in 1948 at Harvard (Katz et al 2003). There now exists a plethora of national and international literature addressing the notion of the 'Entrepreneurial University' (OECD 2000, Currie 2002, Gibb and Hannon 2006, Kirby 2006, Mandel & Noyes 2016, Kuratko 2016), this notion stretches across the spectrum of universities, from those with a traditional research focus to the newer institutions making inroads in this direction (Geiger 2006).

There are those that present persuasive evidence that Higher Education programmes with a focus on entrepreneurship have a positive effect on developing entrepreneurial behaviours, moreover that they succeed in raising awareness in respect of different career opportunities and general motivation towards instilling positive attitudes towards entrepreneurship (Anderson and Jack, 2008; Iglesias-Sánchez, P 2016). The opposite argument is offered by Farhangmehr et al (2016) who contend that evidence supporting the correlation between students developing into entrepreneurs as a result of undertaking Degree Programmes is limited.

What appears to be significant, is the notable lack of evidence of general or sustained application of the above evaluation model. It could be suggested that the mechanical way in which the notion of evaluation is correlated with physical resource rather than emotional and psychological capacity has a bearing on the practical nature of the model. In the Higher Education environment, entrepreneurship education is likely to include all activities aiming to foster entrepreneurial mind-sets, attitudes and skills and covering a range of aspects such as idea generation, start-up, growth and innovation (Fayolle, 2009). It is the blurring between psychological and economic disciplines that may provide the way forward for an innovative approach to designing and delivering an innovative Entrepreneurship Programme.

Perhaps the most interesting and discursive definition of entrepreneurship education is that offered by the Centre for Entrepreneurial Leadership and Clearing house for Entrepreneurial Education (<http://www.celcee.edu>) and reflected in the work and research of Gibb (1993). Entrepreneurial Education is defined as:

...the process of equipping students...with the concepts and skills to recognise opportunities that others have overlooked, and to have the insight, self-esteem and knowledge to act where others have hesitated (p317).

To add a little more to the complexity of definition, 'entrepreneurship' and 'enterprise' are often conflated and as Gibb (1993) indicates, the term 'entrepreneurship education' is generally referred to in America and Canada but is much less common a term throughout Europe. 'Enterprise' is more often referred to in favour of 'entrepreneurship education' in the UK with the emphasis on developing 'softer skills' and a range of personal attributes. However, 'enterprise' as a term does not necessarily reflect the notion of the setting up of a

new venture or the figure of the entrepreneur, although Gibb (2012) argues that it is substantially connected with an enterprise culture and the emerging notion thereof.

It is interesting that the soon to be launched (2016) Teaching and Excellence Framework (TEF) roots the responsibility of teaching impact firmly with the institution with no mention of what the student stakeholder may generate in terms of resources. (House of Commons Business, Innovation and Skills Committee The Teaching Excellence Framework: Assessing quality in Higher Education Third Report 2015–16)

The connection between ‘learning’ and ‘being’ with regard to entrepreneurial behaviour is key. Smilor (1997) emphasises the essential nature of learning about entrepreneurship, arguing that it is central to the entrepreneurial process:

“Effective entrepreneurs are exceptional learners. They learn from everything...They learn from other entrepreneurs. They learn from experience. They learn by doing. They learn from what works, and more importantly, from what doesn’t work.” (p19 Smilor, 1997)

This intrinsic link between learning and ‘being’, with regard to the characteristics of entrepreneurs, provides added impetus and additional important emphasis for research into entrepreneurship education. Fisher et al. in Harrison and Leitch (2008) attempt to determine the effectiveness of entrepreneurship teaching and delivery. They argue that on many entrepreneurship programmes, learning outcomes tend to consist of an unorganised listing with little basis or grounding in theory or related to a conceptual footing.

The government's paper 'The Plan for Growth' (2011) features entrepreneurship as a way of driving economic growth and recovery. The paper calls for a greater emphasis on enterprise and entrepreneurship. The need for 'flexibility and adaptability' and for graduates who possess 'enhanced skills' and have the ability to 'think on their feet and be innovative in a global economic environment' forms the emphasis of a QAA Report on enterprise and entrepreneurship education. (QAA Consultation Report 2012) The Oslo Agenda for Entrepreneurship Education in Europe (2006) stresses the need for, 'better integration across subject areas, improved practice-based pedagogical tools'. Yet despite the prominence of, and drive towards enterprise and entrepreneurship, Europe is still acknowledged to be lagging behind the USA and China (European Commission 2010). The Global Entrepreneurship Monitor (GEM2008) has identified that globally entrepreneurship education and training has grown rapidly in recent decades. GEM is an annual program of research activities launched in 1999 that provides an assessment of the national level of entrepreneurial activity, aspirations and attitudes of individuals across a wide range of countries. GEM research has revealed that as much as one-third of the differences in economic growth among nations may be due to differences in entrepreneurial activity. It is this factor that is recognised by current governments worldwide and spurs on the momentum in backing for associated learning activities. Entrepreneurship education in the UK has greatly benefited from the increased visibility that comes with government target-setting and funding, but although a significant number of universities establishing Centres for student entrepreneurship e.g. Coventry, Cambridge, Anglia Ruskin, Liverpool, Glyndwr etc., the Global Entrepreneurship Monitor (GEM) reported that the UK was at the lower end of the scale when compared to the nations studied. (Reynolds et al., 2002).

The Economist (March 17: 2012) declared that, the entrepreneurial flame is easier to put out than to light or relight and governments worldwide are determined to promote an entrepreneurial society to combat the fluctuating markets. Whilst it could be argued that the growth in Centres for Entrepreneurship attached to universities, or the increase in incubator and innovation Centres is only a reflection of the cycle of political trends, and once government funding priorities change, so will the degree and building programmes at many Higher Educational institutions, the general feeling is that this is unlikely (QAA Consultation Report 2012). It is however accepted that funding streams have often been inconsistent and short-term in the past (Hannon, 2014). Embedding entrepreneurial education as a permanent element of the university environment is more likely to occur if such activities are self-supporting, generating an income on their own and generating additional external institutional income and/or investment. The objectives of this study are to support this through critically evaluating pedagogic practices that most effectively foster entrepreneurial behaviours and mind-sets and therein facilitate the embedding of entrepreneurship teaching and learning processes at the University of Chester. A model of key actions emanating from the research towards informing entrepreneurship educational practice and embedding entrepreneurial endeavour at the University of Chester will be included in the final part of this D.Prof project.

1.5 Chapter Summary

This chapter has provided an introduction to the area within which the Professional Doctorate (D.Prof.) research and study is situated. It has established the aims and objectives of this work, outlining the choice of focus and establishing the connection with the author's current area of professional practice. The background to the subject selection is traced with an overview and rationale demonstrated in respect of the choices made and decisions taken.

A detailed trajectory is included in the chapter that demonstrates the emergence of Entrepreneurship as a discipline area and field of study within the higher education sector. Alongside this, comprehensive introduction to the case study focus institution of the University of Chester is presented.

Definitions and clarification in relation to the key terms referred to throughout the study are included within the chapter, together with exposition related to their usage throughout the work.

Topic	Coverage
INTRODUCTION TO RESEARCH	Establishing choice of focus and connection with current area of professional practice.
AIMS AND OBJECTIVES OF STUDY	Clarification of proposed aims and objectives.
CLARIFICATION OF CORE TERMS USED	Definition of key term usage throughout this work.
RESEARCH BACKGROUND	Overview and rationale for the choice of research topic.
RESEARCH FOCUS AND CONTEXT	Introduction to University of Chester as case study focus.
EMERGENCE OF ENTREPRENEURSHIP AS HE DISCIPLINE AREA	Trajectory demonstrating emergence of Entrepreneurship as a field of study in the HE sector.

Chapter 2 Literature Review

In this chapter a comprehensive examination of the literature is presented. This examination reveals the presence of three dominant perspectives and theoretical influences concerning the field of entrepreneurship:

1. Theories that take as their main concern the economic function of entrepreneurial endeavour
2. Those theories that focus on the behavioural aspect of entrepreneurship
3. Thirdly theoretical perspectives that consider ways in which entrepreneurship may be fostered through the practice of pedagogy.

This chapter reflects the dominant themes emanating from the literature review and is structured in such a way as to examine the key arguments. The analysis that follows has been broadly split into three camps or perspectives (as above) to provide a focused analysis upon the economic, behavioural and pedagogic approaches to entrepreneurship education.

“Our limited knowledge and understanding of the interaction of learning and the entrepreneurial process remains one of the most neglected areas of entrepreneurial research, and thus, understanding” (Deakins 1999, p23)

The quote by Deakins included above is interesting for a number of reasons: the recognition that at the time that this issue was articulated, little in the way of research was being conducted into the field of entrepreneurial activity in Higher Education. This can be

contrasted to today's landscape, where research into the field of entrepreneurship is growing and reflects its critical importance in economic terms (Matlay 2009). Yet despite, what can be described as a recent flurry of scholarly interest, an undercurrent of scepticism frequently punctuates the activities related to entrepreneurship and entrepreneurial endeavour in universities. (Gibb 2012)

The discourse and activities surrounding entrepreneurship have become increasingly prolific and popular. The 80s and 90s experienced a transformation in the language used to articulate those inclined to display characteristics of risk taking and opportunity seeking. Sociolinguists (Fairclough 1995, Heelas and Morris 1992) note the rapid spread and generalisation of the 'e' words during that period, entrepreneurship, enterprising, entrepreneurial to refer to those displaying astute business acumen. This change in the discourse surrounding entrepreneurship, some researchers argue, initiated a significant change in how individuals perceived themselves with regard to being 'enterprising subjects' calculating costs and benefit in relation to action (Burchell, 1993, Rose 1992). Entrepreneurship is now a feature of most Higher Educational institutions (Kuratko 2016, Iglesias-Sánchez 2016) and, as previously alluded to, there is a growing discourse and body of academic studies reviewing the practices, process, context, theories and methodologies relating to entrepreneurial endeavour. Notably, a one size fits all approach appears evident from the outputs of these studies.

Cantillon is widely acknowledged to have introduced the notion of entrepreneurship into the political economy by way of 'Essai sur la Nature du Commerce en Ge'neral', published posthumously in 1755 (Ebner, 2005, Hamilton & Harper 1994, Hebert & Link 2006). Jean Baptise Say (1767-1832) built on Cantillon's definition by adding that the entrepreneur brings together individuals in order to produce a product or service.

Beyond this, there are those who commonly acknowledge that entrepreneurship presents a certain challenge to define (Chell et al 1991), and indeed there are those that argue entrepreneurship is 'indefinable' (Hampden-Turner 2009). In the early 70s Peter Kilby expounded that defining entrepreneurship was 'like hunting a heffalump' (Kilby, 1971), still a quote frequently used today in articulating the difficulties in 'pinning down' the term. There remain no clear boundaries or borders to the subject of entrepreneurship as a field of academic study and programmes related to the area feature content as diverse as: financial accounting, franchising, family business, corporate environment to consider just a few. (Jones & Matlay 2011; Gartner 2008; Shane & Venkataraman 2000).

In progressing towards understanding the ways in which entrepreneurship can best be facilitated in the Higher Education environment it is important to reflect on the key and most influential theories relating to the field. Such theories will offer the connection between strategic and operational components in relation to the establishment of a consolidated, effective response to the imperatives.

In the following narrative an overview and consideration of the ways in which influential economic, behavioural and pedagogic theories on entrepreneurship may be integrated with a view to stimulating entrepreneurial thought and action in undergraduate students. All three of these approaches, whilst providing a range of different theoretical perspectives, expand on the understanding associated with entrepreneurial behaviour, and perhaps provide support to demonstrate that entrepreneurship is a field that is formed through the convergence of a number of other neighbouring academic disciplines. This perhaps does more to emphasise the challenges faced by the entrepreneurship educator resident in a University's Business School. What the following viewpoints serve to do, however, is to highlight the complexities of the nature of facilitating entrepreneurship as a single academic field into a Higher Education environment. The following application of a multiple theoretical approach supports the notion of embedding entrepreneurship into different contexts, different faculties through different delivery methodologies. The implication for the research agenda is significant in that strategies towards synthesising elements of delivery methodologies and pedagogic approaches taken from the disciplines of psychology, sociology and economics will be considered. It is this bringing together of disciplines in the name of entrepreneurship that will support the generation of a coherent approach and insight into the fostering of behaviours that make provision for the entrepreneurial process.

In understanding the positioning of, and activity related to, entrepreneurship in today's HE landscape, it is important to recognise how this pedagogic perception has been formed and the traditions that have assisted in the formation of the current views of entrepreneurship in

HE. Understanding what has gone before allows for a depth of understanding of the present and permits a planning for the future, hence it's inclusion in this Doctoral narrative.

2.1 Economic Perspectives on Entrepreneurship Education

“University...entrepreneurship in the UK and Europe has (is) a vital source of competitiveness and a possible stimulus for economic growth and development of a future knowledge-based economy” (BIS, 2013, p44)

In economic theories of entrepreneurship there is no emerging consensus of the entrepreneurial function and what entrepreneurship constitutes (Harper 2003). What is evident from the literature, is that entrepreneurship, as a field of study, has emanated from the field of economics (Casson, 1982). Casson defines the entrepreneurial function as being those activities concerned with the outputs associated with entrepreneurship and the interaction that the entrepreneur has with the economic environment.

Adam Smith in what is considered to be a seminal treatise on the process of creating wealth, provides insight into how one may view entrepreneurship as being ‘...the study of human actions that lead to changes in the division of labour’. (Baumol 1968) With regard to markets, there exists no one universal theory or treatment of the role that entrepreneurship plays in

the operation of the market system. It was acknowledged by economists back in the 60s that:

“...discussions of the theory of entrepreneurship have been contributed by sociologists and psychologists. This may then be no fortuitous development. The very nature of the more pressing issues relating to entrepreneurship may invite more directly the attention of the practitioners of disciplines other than theoretical economics.”

(Baumol 1968, p11)

Currently a somewhat pliable definition of entrepreneurship as change is reflected in the media, literature and the education sector. Change as in: organisational change, societal change, a change in technology. This loose definition owes much to the work of Schumpeter (1947) who characterises the function of an entrepreneur as carrying out new activities or undertaking existing activities in a new way. Interestingly, Schumpeterian notions of the entrepreneur combine with the thoughts of other theorists to present a multi-faceted picture of elusiveness. The lack of consensus is evident in the literature relating to economic portrayals of ‘the entrepreneur’, this scarlet pimpernel figure is painted in many guises by a variety of theorists:

- Schumpeter: refers to the entrepreneurs as an “heroic initiator of change and innovation” who brings about new combinations through “creative destruction” (Schumpeter 1934).
- For Baumol our elusive entrepreneur is classified as an economic leader who coordinates non-routine and “different” activities within organisations (Baumol 2002).

- Knight sees the individual who makes decisions related to “highly unpredictable outcomes” as an entrepreneur (Knight 1921)
- The allocation of, “related decisions and judgement calls” with regard to resources that are scarce (Casson 1982).
- Testing markets in relation to “speculation and instinct” (Harper 1996)
- Someone who is able to “spot a gap in the market and respond creatively” (Leibenstein 1968).

The change and upheaval in Higher Education brought about by core funding changes represents an opportunity for HE to become more efficient businesses, adjusting, changing, realigning and adapting more entrepreneurial processes (Gibb, 2007). During the course of the past twenty years or so the different governments have increasingly become more prescriptive in the ways that the HE sector is funded (Gibb 2007). Justification, if any was needed, that new methods, entrepreneurial ways of responding to competition on a global scale are critical to sustainable business and development in the sector. Whilst there appears to be a general belief that higher tuition fees will drive a more responsive system and provide students with financial power, making student choice increasingly more meaningful, government and economic pressure is on Higher Education institutions to make themselves more appealing to students and employers (HEA, 2013). It is widely acknowledged in the literature that an entrepreneurial approach to business dynamics from academic staff on all matters relating to brand marketing, customer service, value for money and performance indicators are essential in a fiercely competitive market (Gibb 2009). There is a broad range

of unknowns and complexities that serve to create challenge as well as opportunity for universities (Cope and Pittaway 2007, Pittaway and Hannon 2008). What appears dominant amongst these challenges is the delivery of a product that both attracts and sustains student recruitment and is relevant to a business landscape that is rife with uncertainty and insecurity. Notably the trend traces a general fall in the numbers applying to universities, particularly in relation to postgraduate courses and international student applications (UCAS 2017). There is a 5% in UK students, with a 7% fall in international students applying for university places (UCAS 2017)

As a comparatively new university (there have been 22 HE institutions awarded university status since Chester in 2005), the pressure to respond to the government directive to cultivate entrepreneurial capacity is particularly challenging. In common with other long established educational institutions, Chester has entrenched traditional practices, procedures and policies. It represents a challenge to move away from systems that have hitherto proved successful and have supported the sustainability of a long established organisation. The Schumpeterian notion of 'creative destruction' is of particular relevance in today's HE landscape. The ways in which an institution perceives the notion of entrepreneurial endeavour will be vital in how it responds to the economic imperatives that are all pervading in the drive towards effective commercial growth. It is demonstrated in the literature that entrepreneurship is not simply associated with programme content, delivery methodology or assessment; it is closely related to every element within the environment that provides the context for the learning, even the historical backdrop, different cultural composition, core

business objectives and stakeholders, impact on present and future entrepreneurial responses and offerings (Pittaway & Hannon 2008, Jones 2016)

Gibb (2012) points to the evidence that suggests that UK universities that were inaugurated post-1992 stand a greater likelihood of engaging with a much broader range of external partners than that of the more traditional institutions of Higher Education. An increased engagement with external stakeholders can be seen to be an important step towards establishing a programme of entrepreneurial activities that encapsulate multiple perspectives (Buckland 2006). Different contexts and scenarios present different influences and scope for entrepreneurial endeavour within the institutional environment. The economic impact of higher education is here reflected (Fig 2).

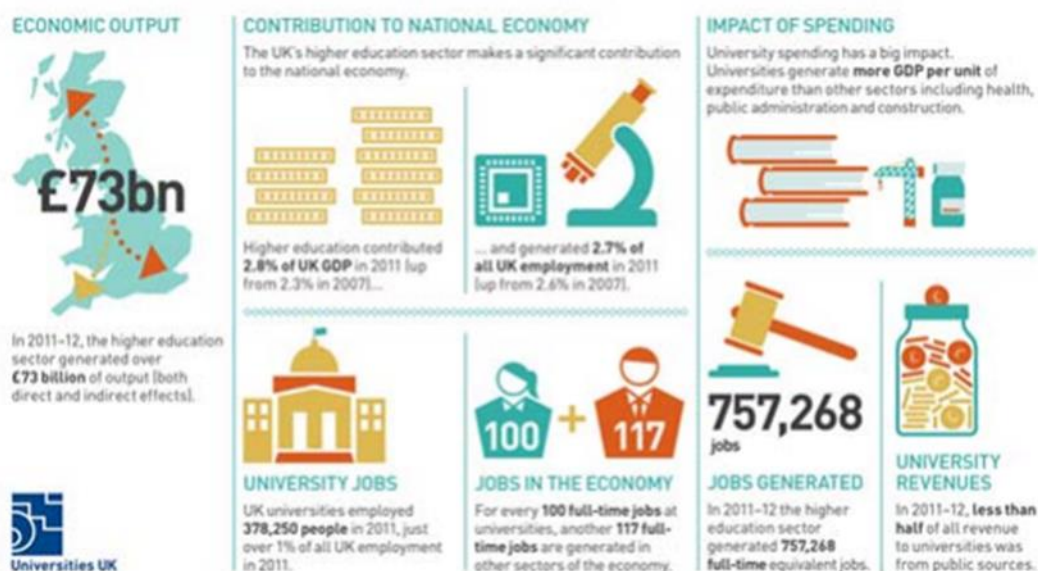


FIG 2
The economic role of UK universities (Universities UK., 2015)

2.2 Behavioural Perspectives

‘An entity learns if, through its processing of information, the range of its potential behaviours is changed.’ (Huber 1991, p89)

In the context of this study, entrepreneurial behaviour will be thought of as the undertaking of a task or the responding to an activity with a certain degree of purposefulness, as opposed to taking unthinking mechanical action, towards value adding outcomes. This perspective permits a way of exploring the field of literature related to entrepreneurship education and the ways it can foster entrepreneurial responses. Cope (2003) argues that a behavioural perspective offers a “comprehensive approach to conceptualising the nature of entrepreneurial activity” (p5).

Bandura, prolific in the field of behavioural science, developed the concept of Self-Efficacy (Bandura, 1986) which emanated from Social Cognitive Theory. Bandura (1986) discusses how expectation with regard to performance outcome, motivation and the self-management of frustration emanating from repeated failure, determine effect and behavioural reactions.

1. Self-Efficacy: “The confidence or conviction that one has in the ability to undertake a task successfully”. (Bandura, 1986)
2. Outcome Expectancy: The estimate that in behavioural terms, one plus one will equal two i.e. a certain behaviour will lead to a certain outcome.

Bandura contends that for behavioural change, self-efficacy is the most significant prerequisite as it determines strategy and one's ability to cope with change, flux and adversity.

Bandura's theory relates to the perceptions that individuals have in connection with their capacity to successfully undertake certain actions. Such perceptions or beliefs emanate from experience, vicarious experience, verbal persuasion, and physiological and affective states. Bandura posits that self-efficacy and self-belief, fundamentally, emanate from social learning (Bandura, 1986). Ajzen (1991) identified a third critical antecedent of intention: perceived behavioural control (PBC), which concerns the perception that the target behaviour is within the decision maker's control. The connections and similarities with perceived self-efficacy are clear.

Building on this theoretical approach, Ajzen and Fishbein (2005) developed a theory to explain behaviour as the result of intentions. Their model included 'personal attitude' as the first antecedent of intention, acknowledging the profound impact of social influences. Chell (2008) points out that lives are not lived in isolation, that a social environment ensures that there is an interconnectedness emanating from a 'socially constructed framework' consisting of the rules, norms and responsibilities that constrain behaviours and activities. Actions are further inhibited by the economic, legal, political and economic systems of regulation. And yet social constructionism attempts to holistically consider how certain circumstances and stimuli produce particular responses in people and in so doing provide insights into aspects of behaviour. Chell (2008) identifies this as being 'in marked contrast' with trait theory and economic approaches.

The beliefs and attitudes of other people, argue Ajzen and Fishbein, have a commanding impact on the decision making process. Ajzen and Fishbein's theory of 'Reasoned Action' emanates from Bandura's and includes the notion of 'perceived social norms' that draws on the perception that support for actions and therefore motivation to comply is invoked. As a result, the Theory of Planned Behaviour has become prolifically applied in relation to entrepreneurial endeavour. (Ajzen, 2012). In addition, Ajzen's 'Theory of Planned Behaviour' recognises behavioural control, the origins of which are to be found in Bandura's Self-Efficacy Theory (Bandura 1986).

The literature surrounding behaviourist theory indicates that high levels of confidence profoundly influence ability to perform and Self-Efficacy Theory supports an understanding of the interrelationship between attitude, belief, intention, and behavioural output.

Saras Sarasvathy refers to entrepreneurial action as being rooted in, what she terms effectuation, a form of creative expertise (Sarasvathy 2001). Sarasvathy's theory develops and builds on that of Herbert Simon's research into human behaviour (Simon, 1993). Instead of entrepreneurial action being impeded by ambiguity, Sarasvathy and Dew (2005) argue that three discrete logics are employed by successful entrepreneurs in turning ambiguity from a 'mystery' into a 'science'. This science is referred to by Sarasvathy and Dew (2005) as a 'technology of foolishness' which reflects the notion that entrepreneurs on occasion act before they can think. (Sarasvathy and Dew, 2005). In replacing the notion calling to be ready, steady and to go, the response by entrepreneurs is sometimes simply to go, then steady

themselves, which is then, and only them, followed by a consideration of their readiness. Sarasvathy and Dew advocate making 'decisions now in terms of goals that will only be knowable later on (Sarasvathy and Dew, 2005). The 'technology of foolishness' theory incorporates five elements:

Element One. Goals are treated as hypotheses

Element Two. Intuition as reality

Element Three. Hypocrisy as a transition

Element Four. Memory as an enemy.

Element 5. Experience as a theory (Sarasvathy and Dew, 2005)

In an effort to understand entrepreneurial behaviour and its cultivation in the Higher Education environment, an exploration and focus on the cognitive processes that are utilised by the key stakeholders in the process are required. Comprehending the personal resources and the ways in which such assets can be developed, adapted and put to use in the business environment. Pedagogy and assessment that focuses on fostering and supporting the application of responses and behaviours in students to particular stimuli associated with the business environment, but in an experiential landscape appears to be advocated here.

Learning Objectives are divided into three interrelated areas according to Bloom (1956) and his ubiquitous taxonomy:

Affective - attitude

Cognitive - knowledge

Practical - actions

Attitude: This area relates to emotional intelligence and the way in which students harness both their own and the emotions of others. For the most part, in the literature it is argued that this is the most challenging area in higher education to achieve learning outcomes as according to Rae (2005), Gibb & Price (2007) experiential learning and group activities are the most effective pedagogic strategies for securing outputs.

Cognitive skills or intellectual skills are cultivated from knowledge building activities, synthesising, evaluation and recognition. In Entrepreneurship Education terms this links to a level of student engagement that perhaps isn't necessarily present in the traditional lecture format.

High level **Practical Skills** and abilities in entrepreneurial endeavour, argue Cope & Watts (2000), are most effectively developed through performance, practise and teaching and learning connected with experimentation and experiential learning.

Table 2: Attitude, Knowledge and Skills

Attitude	Knowledge	Practical Skills
Effectuation	Analysis	Pragmatic approaches
Responses to stimuli	Evaluation	Perceiving
Reception of ideas	Comprehension	Action orientation
Prioritisation	Synthesising	Application
Feeling	Thought	Undertaking
Motivation	Self-Awareness	Preparedness

Hancock, C. (2017) Based on Bloom (1956)

Experiential learning theory (ELT) as proposed and defined by Kolb (1984) refers to the process of knowledge acquisition through the conversion of experience into knowledge. Kolb posits that learning is the product of the combination of cognition and experience. The ELT model reflects four connected but opposing perspectives on the transformation of experience into learning acquisition:

Concrete experience, Abstract Conceptualisation, related to the understanding/grasping of experience

Reflective Observation and **Active Experimentation** connected with the transforming of experience.

For Kolb, it is the concrete experience that provides the basis for reflection and it is the assimilation of experience that leads to new perspectives and ways of doing. Kolb argues that this is cyclical in nature, in that further concrete experience allows for the application of new learning gained from prior activity. For the purposes of designing pedagogy connected with entrepreneurial learning, ELT is useful theoretical underpinning that when combined with the output of entrepreneurial experiential learning, supports an appropriate assessment methodology. Action orientated output generated through experience is challenging to assess, critical reflection correlates with the elements of effectuation and the developing of self-awareness. Critical reflection supports the identification of acquired learning and reflects a learner driven mode of assessment that parallels the learner centred aspect of experiential learning. The ELT model recognises that knowing how to do something cannot be referred to as learning until it is internalised through the process of applying knowledge or thinking. Performing or 'doing' is therefore important in internalising and acquiring learning.

The literature surrounding the activity of entrepreneurship displays much in the way of evidence of the borrowing from other fields, in particular psychology. The cognitive processes that induce an individual to decide to initiate a new venture continue to produce significant theoretical debate (Bygrave and Hofer, 1991). Shapero's entrepreneurial event theory is recognised as forming a key contribution to this discussion. (Shapero, 1984; Shapero & Sokol, 1982). Shapero propounds that there are three crucial precursors towards entrepreneurial intention, perceived desirability and perceived feasibility and the propensity to act. It is the presence of these pre-existing potentials that go some way to producing a feasible opportunity to become intent and thus, action (Krueger, 2009).

Gartner (1985) espoused the idea that rather than entrepreneurship being an 'event' with the suggestion of it being a one off, single episode or occurrence that this term carries with it, it should be considered as a process. This notion of entrepreneurship being a 'process' advocates the analysis of the various elements that make up the process to understand entrepreneurial decision making. Consequently, the combination of elements in the process, including personal perceptions and cognitions need to be analysed (Gartner, 1989). The decision to initiate a business in the light of Gartner's perspective requires that focused research of each of the steps in the decision making process towards new venture creation should put emphasis on individual mental cognitive processes.

Bird (1988) identifies a number of characteristics, four in all, as impacting on the intention to undertake an action. The variables as outlined by Bird are: time orientation, strategic focus, alignment and attunement. (Bird, 1988) Bird accentuates the role of intention in the field of entrepreneurial endeavour, with intention emanating from the combination of contextual factors and the individual.

From the behaviourist theoretical perspective, it is the extent to which the individual feels that they are capable of undertaking certain actions, have the capacity to manage the process and/or the likelihood of a successful outcome that support the decision to pursue entrepreneurial endeavour.

2.3 Pedagogic Perspectives

“The major objectives of enterprise education are to develop enterprising people and inculcate an attitude of self-reliance using appropriate learning processes.” (Colton 1990, p4)

Theory concerned with the pedagogic perspectives of entrepreneurship predominantly argue for the adoption of a different learning approach in order to create a collaborative model of entrepreneurship education (Gibb, 2012; Foyelle, 2009; Cope & Watts, 2000; Jones et al 2013, Fisher et al 2008). A number of theorists argue that entrepreneurs principally prefer to engage in action orientated learning, learning by doing, followed by reflection (Gibb, 2012; Cope and Watts, 2000). Indeed it has been asserted that entrepreneurial learning can only be assimilated through practice, action focused pedagogy or through direct observation. Jones et al (2013) discuss the notion of ‘absorptive capacity’ which reflects the principle that knowledge supports the recognition of the value of new information and its application in a business environment. (Minniti and Bygrave, 2001). Exploiting and developing existing entrepreneurial institutional capacities will demand innovation where pedagogical approaches are concerned. Strategies for stimulating ideas, creativity, cross fertilisation, networking and discussion as well as simulating those elements reflecting the entrepreneurial characteristics of entrepreneurial endeavour. (Gibb 2012)

There are a number of theorists (Jones 2015; Wiseman 2014; Jones and English, 2004) who assert that entrepreneurship education requires a different type of learning environment. A model that reflects an interdisciplinary approach to action orientated outputs and focuses on experiential learning that includes project based learning for problem solving and creativity is advocated by Kickul and Fayole (2007). A move away from a static, traditional classroom centred approach to learning is propounded by Higgins and Elliott (2011) who support the targeting of

“Outcomes that are specifically derived from the enactment of an activity” (p. 358)

The table below makes the comparison between the pedagogic practice emanating from the literature recommendations and the current practices at University of Chester. The first column features the framework as indicated in the literature with the addition two columns contrasting the approaches.

Table 3: Comparison between Literature and Current UoC Perspective

PEDAGOGICAL DOMAIN	CURRENT RECOMMENDED PRACTICE (taken from the research)	CHESTER PERSPECTIVE
ATTITUDE	Change in ‘contractual’ relationship dynamic between institution and student with the learner adopting an increasingly elevated role in the relationship. Motivation, expectation and responses to ideas and pedagogic content are subject to the perception of the relationship the undergraduate has with the institution. The perception of this relationship dynamic is therefore critical.	Change, particularly external change is recognised as being a major challenge for any new development in the higher education sector. Chester has specific challenges related to the speed of embedding external change in developing a strategic response in respect of entrepreneurial learning. Strategic planning for new development is complicated by the fact that different subject specialities have unique and specific needs. Those needs range from Professional, Statutory and Regulatory Bodies. An added challenge is that the enterprise concept is viewed differently by individuals and groups from different academic subject and support areas. A range of different perspectives on issues such as working with stakeholders, recognising the commercial relevance of enterprise and at another level, its contribution to innovation, imagination and creativity in curriculum design and assessment.

		Historically students have been viewed as recipients of teaching and learning as opposed to co-creators and this change in dynamic and relationship status is not currently being reflected through institutional policy.
KNOWLEDGE	Written examinations, testing and assessment of academic recall secondary to building pragmatic capability and the capacity to develop applied knowledge in a work related context towards preparation for high level economic activity.	Assessment of learning through critically reflective analysis and evaluative appraisal for personal development planning and to optimise learning impact and validate capabilities is applied. Outputs and outcomes in relation to entrepreneurial endeavour are more challenging to demonstrate and frequently incongruous to long established institutional policy and procedure. The entrepreneurship Programme Team are not given the space to be experimental at the course level and therefore could be deemed to be administrators and organisers of institutional regulation. Knowledge is tested through academic criterion which often precludes the practical output and outcomes of entrepreneurial endeavour.
PRACTICAL	Experiential learning focus with inclusion of experimental space with opportunities to practice pragmatic capacity and application of formal learning. Work based learning opportunities with acknowledgement of the value and impact of learning undertaken in different contexts external to the institution.	Curriculum design is centrally managed through a Quality unit to ensure that institutional procedures are met and rules are applied, along with other centrally required outcomes. This can result in a distortion of the curriculum to reflect institutional rules and regulations. Academic subject areas adopt methods that are perhaps not best suited to the development of the entrepreneurial student.

2.4 Reflecting on the Literature and a general scene setting for this study:

The literature associated with this field demonstrates at least three perspectives on the nature of entrepreneurial endeavour, and this study seeks to develop and build on these approaches with a view to applying an effective method that fosters entrepreneurial behaviours at University of Chester:

The first theoretical frame or lens considers the individual student and is connected to the notion of entrepreneurship as a set of human characteristics, ways of thinking (Foyelle, 2009) and being (Chell 2008), behaviours (Bandura, 1986; Ajzen, 1991; Sarasvathy, 2001) and

responses (Gibb 2012), such as risk taking (Schumpeter, 1947; McClelland, 1961), resilience and willingness to face uncertainty (Kihlstrom and Laffont, 1979), ability to exploit and discover opportunity (Shane & Ventaktaram 2000; Rae 2007). In the fostering of entrepreneurial behaviours this lens places the student firmly in the foreground with the success of pedagogy being measured on the individual's ability to think, behave and respond to particular stimuli in a certain way. Ways of developing co-created teaching and learning content and assessment in order that ways of thinking and behaving entrepreneurially can be demonstrated is key to recognising entrepreneurial output.

The second perspective emphasises a range of environmental, market and economic influences that impact upon, motivate and support entrepreneurial endeavour (Gibb, 2012; Harper, 1996). The alignment of pedagogy with authentic, business forces, the literature suggests, is an important aspect of entrepreneurship education. The literature advocates that design of teaching and learning delivery and content should immerse the students in the authentic world of entrepreneurial endeavour beyond institutional walls. Creating a knowledge and skills dynamic highway between academia, business and entrepreneurs to impact aspects of formal learning forms a strategy for aligning pedagogy and external business forces.

The third approach is connected to the ways in which the institution and its agencies function and lays emphasis on cultural and societal values. (Jones and Matlay, 2011). Given that entrepreneurial activity does not occur in isolation and is not, on its own merely a product of

a particular environment, approach or in response to certain changes (Gartner, 2008). The literature proffers the importance of the institutional landscape and the role played by all those who have an impact on the entrepreneurial journey of students. (Gibb 2012, Cope 2007). The relationship between examples of behaviour that the student observes is powerful in forming the confidence to act (Wiseman, 2014). It is evident from the literature that a modern entrepreneurship teaching and learning strategy should be reflected in an institution's mission, values and corporate plan. A signalling through institutional mission may then support direct action impacting the environment, staff development and ultimately impact on students. Findings and the recommendations advocated in the literature would represent a significant challenge for any higher education institution, but for the University of Chester change, and more specifically the speed at which change can be introduced inhibits progress. There exists at University of Chester a plethora of complications relating to context and culture. A response that is synthesised out of a cognisance of the literature in the area of entrepreneurship education and the contextual differentials that this case study is proposing to evidence from the research, is advocated.

There are those that consider entrepreneurship to be much more than creating a new venture (Mandel & Noyes 2016; Wiseman 2014; Rae 2007) and this is a view that is echoed in the definition utilised for exploration in this thesis. Within this study, entrepreneurship extends well beyond the focus of new venture start-up.

The literature explored for this research, in particular (Bandura, 1986; Ajzen 1991; Chell, 2008; Sarasvarthy 2001; Cope 2004; Foyell, 2009), illustrate that a range of behaviours can be connected under the general category of entrepreneurship and that these skills and behaviours are associated with high levels of competency in certain areas: opportunity creation and/or identification, self-efficacy, business and finance skills, confidence, resilience and persistence. In relation to pedagogy, the literature, particularly Gibb, 2012; Hannon, 2014; Matlay 2014, suggest that action orientated, experiential learning is the most likely method to secure success with regard to entrepreneurial achievement and the fostering of entrepreneurial action and mind-sets. The literature demonstrates (Kind 2004, Matlay 2009; Gillard 2014), that entrepreneurship as a field of study in HE, emanates from the economic tradition and reflects content borrowed from a number of different disciplines.

2.5 Summary and Gap

The literature clearly indicates that a shift is required for effective entrepreneurship learning, from the current emphasis in higher education Programmes of educating 'about' a discipline, to educating 'for' entrepreneurship. (Kirby, 2002; Gibb, 2012, Cope & Dew 2007; Rae 2007). What is apparent is the notion that entrepreneurship is multifaceted, both in terms of its definition and the range of elements that could potentially contribute to a higher education Programme. The gap in the literature appears to be in how a convergence of the different facets relating to educating FOR entrepreneurship can be contextualised and facilitated. Moreover, the real challenges faced within the HE sector: limited resources, league table culture, fiercely competitive domestic and international markets, changing and evolving

student cohorts are notably absent in terms of analysis in the literature. It is these critical factors that have a significant impact on entrepreneurship education at University of Chester. There is a gap between what is possible in the context of a post 1992 smaller university and the propounding of an entrepreneurship education that is effective within the hallowed walls and amongst the gleaming spires of another, and very different, HE context. Equipping undergraduates with the entrepreneurial wherewithal to be successful in the prevailing economic environment is different, according to the literature in different HE landscapes. (Gartner, 1985; Jones, 2009; Jones & Matlay, 2011) Jones and Matlay (2011) contest, attempts to homogenize education in this area:

“...will always work against such noble attempts to achieve any degree of standardisation vis-à-vis the practice of teaching entrepreneurship.” (p693)

There appears little indication within the literature of how an entrepreneurial environment or the fostering of entrepreneurial behaviours within undergraduate student cohorts may be facilitated in the face of the challenges and within the context outlined above. The elements exposed and emphasised in the literature have been drawn out and grouped into areas that correlate to themes that the literature and previous studies identify and supporting a higher education landscape in which entrepreneurship may flourish. The gap that is apparent from the literature and correlating themes is how these elements may be modelled in order to foster entrepreneurial behaviours at a post '92 university and how such institutions may deploy specific methodologies, but particularly:

- O'Shea et al (2004) who outline what is viewed as being the determinants of academic entrepreneurship activity: Organisational attributes, individual attributes of educationalists, institutional behaviour and external factors.

- Jones & Matlay (2011) who argue that it is not possible to understand the value or contribution of the dialogic relations within entrepreneurship education without considering students, institution, communities and other processes that are interacted with.

The objective of this case study research is to understand the flexible dependability, evolving nature, dynamic relationship and context of the elements addressed within the literature and emanating from the research and how they may be applied at a post 92 institution.

At the core of this study is the student, whose engagement, action, behaviour and efficacy are, according to the literature, formed, shaped and developed by the various constituent themes. Whilst the literature focuses on the definition of various aspects and definitions of entrepreneurship education, the practices and differences associated with context remain largely unexplored. This study addresses this gap for the purposes of contextualisation towards application.

This study responds to the invitation extended to contribute to the analysis and discussion proffered by Jones & Matlay (2011), developing further the reasoning that entrepreneurship education is heterogenic and can only be fully appreciated and understood when examined holistically within the context of interrelated systems.

TABLE 4. Table demonstrating the key themes emanating from the literature reviewed in Chapter Two.

DYNAMIC, FLEXIBLE LEARNING CONTENT	Cope (2003) Matlay (2009) Jones & Matlay (2011) Ajzen (2012) Neck et al (2014) Kickul & Foyelle (2007)
U/G STUDENT EFFECTUATION	Sarasvathy (2001) Cope (2003) Bandura (1986) Shapiro (2004) Krueger (2009) Goleman (2011)
ENTREPRENEURSHIP FACILITATION	Klapper & Tegtmeier (2010) Gibb (2007) Sarasvathy & Dew (2005) Ajzen & Fishbein (2005) Higgins & Elliot (2011) Minniti & Bygrave (2001)
STAKEHOLDER INPUT	Gibb (2012) Kuratko (2016) Buckland (2006) Cope & Watts (2000)
STUDENT FOCUSED LEARNING	Jones (2014) Chell (2008) Gartner (1985) Gibb (2012)
UNIVERSITY ENVIRONMENT	Jones & Matlay (2011) Gartner (2008) Shane & Venkataraman (2000) Gibb (2012) Jones et al (2013) Wiseman (2014) Jones & English (2004)

There are those theorists who posit that entrepreneurship should not be confused or solely equated with new venture creation or small business management, but rather should be connected with creativity and change and who stress the need for educational institutions to change the process of learning to facilitate within students a development of entrepreneurial capabilities (Pittaway & Hannon 2008). The literature suggests that a more immediate,

authentic connection with practice is vital (Gibb, 2005; Hannon, 2014). In addition, the literature demonstrates the crucial impact that student centredness has on the development of entrepreneurial mind-sets and behaviour Jones, 2007; Jones and Matlay, 2011 stress the importance of Entrepreneurship Education being student focused and experiential. Yet despite studies supporting these approaches as being effective educational practices in relation to undergraduate learning (Wang et al., 2013, p487) detailed contextualised studies have not been undertaken.

This investigation seeks to correlate the findings of the literature review and the data collection, with building an environment that supports entrepreneurial behaviours in undergraduate students and makes provision for the development of a landscape within which entrepreneurial endeavour can flourish. The initial questions asked as a way of leading into the semi-structured interviews undertaken in the focus groups, were taken from the literature themes.

Gaps in the literature and its significance to Practitioners

The gap in the literature relates to the heterogeneous nature of entrepreneurship and the important role that institutional cohort, environment, geographical location, culture, priorities and governance has on delivering on the entrepreneurship agenda. Various studies undertaken advocate findings that cannot be applied to all as though they formed a homogenous collection of institutions. Previous studies make recommendations towards an entrepreneurial university that are articulated in the literature as though one singular strategy or method can be deployed to produce a similar response in various contexts and Universities. Knowledge and insight of institutional practices, environments and students

afforded by an intra-university perspective are neglected. Previous research undertaken taking a micro perspective is lacking, with the vast majority of studies focused on recommendations that are not contextually grounded, arguing WHAT should be delivered as opposed to how it should be delivered with a consideration of the impact of specific context. This forms a critical gap in the literature for practitioners who balance internal procedures, external market constraints and positioning with the entrepreneurship agenda. It is the 'fit' and the heterogeneity of delivery strategy that forms the gap between what the literature is advocating and what is feasible for a particular institution. It is the 'how' in respect of the findings emanating from the various studies into entrepreneurship education that is lacking. This study will offer a perspective on equipping practitioners with an understanding of the aspects of entrepreneurship education that may be modelled in order to equip undergraduate students to respond, apply and behave in entrepreneurial ways and develop an environment that supports and motivates this

2.6 Chapter Summary

This chapter has focus on an analysis of the literature associated with and pertinent to the area of entrepreneurship education. A detailed introduction to the key literature and theorists related to this discipline was presented at the opening of the chapter. The discussion included here provided insight into the three main perspectives emerging from the literature review; that of an Economic perspective, Behavioural perspective and Pedagogic perspective.

Following a tracing of the literature and a review of the core viewpoints on the subject area, identification of the gap that was emerging in the literature was introduced and discussed. This formed the main thrust of the impetus behind what follows in the D.Prof. study.

The following chapter will outline and develop the issues connected with the apparent gap in the literature. Discussion related to the moulding of this gap into a research project is charted in what follows. The methodology and connected strategies, processes and considerations are discussed as well as the associated challenges.

Topic	Coverage
Perspectives on Entrepreneurship Introduced	Three different theoretical perspectives toward viewing the area of entrepreneurship introduced and discussed.
Discussion of Economic Perspective	Viewing entrepreneurship from the economic perspective as detailed in the literature
Discussion of Behavioural Perspective	Literature and discussion on this perspective included
Discussion of Pedagogic Perspectives	Exposition of the pedagogic perspective
Subject Literature Review	Comprehensive review of associated literature
Identification of Gap	Identification and discussion of the gap in the literature

Chapter 3 Methodology

3.1 Introduction

“A paradigm constitutes a model and its associated belief and values. In other words a paradigm is, in effect, a conceptual and structural representation of a belief system, encompassing ideas and assumptions that will ultimately shape and reshape the way a person or persons see the world.” Stokes (2011) p94

The following chapter will discuss the guiding philosophy of this study and introduce the research methodology utilised in the work. The way in which both have directed and informed the way in which data has been collected for this thesis and supported the analytical approach and the development of theoretical concerns will be outlined. In addition, the sections that follow describe the data collection approaches to and phases of this study, which consisted of focus groups and -depth one to one interviews that supported additional data collection. This section will conclude with explication of the research objectives.

3.2 Problem Definition

The Research Methodology reflects the research aims to investigate the pedagogic delivery methodologies and content that most effectively foster entrepreneurial behaviours and mind-sets in undergraduate students. The case study approach of investigation is particularly fitting for this research in that, according to Stake (1995) it supports and captures complexity. Complexity within this research arises out of two distinct ideologies; the notion that best practice in this area can be somehow captured and replicated (Volkman, 2009) versus the heterogeneity espoused by Jones and Matlay (2011). Taking into account the studies supporting the contextualised nature of entrepreneurship education and the argument in the literature, that because of its complexity, entrepreneurship is 'beset with greater levels of heterogeneity' (Jones & Matlay 2011) the case study approach would appear to be most fitting. A case study methodology permits an understanding of the balance and how that needs to be maintained between the different stakeholders. i.e. students, stakeholders and the environment or context. If, as argued by Gibb (2012), a more holistic picture of entrepreneurship education supports greater insight, exploring the elements and their

relational impact in a case study format will maximise impact. Analysing components in isolation dissipates the learning that is gleaned from the relational balance. Research undertaken in the institution that the findings are to be applied in, integrates current theoretical concepts, illuminates the contextual challenges and supports the case for a case study methodology.

The complexity and depth that is evident in the descriptive, personal unstructured quality of qualitative narratives proffered by respondents similarly correlates with the case study approach. Stake (1995) posits that qualitative research in a case study format pulls together “naturalistic, holistic, ethnographic, phenomenological, and biographic research methods” (Stake,1995,ppxi–xii). Merriam (2009) maintains that a case study methodology is ‘descriptive and heuristic’ (p46) qualities that reflect the intended outputs and aims of this research and permit a depth of analysis not afforded by other methods, for example grounded theory. Langley & Abdallah (2011) posit that case studies have contributed significantly to organisational theory and offer a common approach in analysing qualitative data. Schatzki (2005) contends that in order to understand entrepreneurship enterprise and development, research should be contextualised. Jones and Matlay (2011) offer further support of this notion by arguing that cohort, environment, geographical setting and experiences provide contextualisation. Dutta and Crossan (2005) discuss the competing themes that are emerging in the research and studies connected with entrepreneurship and Macpherson and Hope (2007) argue that the socially constructed nature of entrepreneurial endeavour and enterprise, requires a contextualisation of the actions of individuals.

Sampling Method

The method of sampling selected was that of purposeful sampling which, Patton (1990), posits is aligned with the selection of information-rich sources for areas of research. He suggests that employing this method allows for a great deal to be gleaned about key issues of central importance to the research focus. Stakeholders engaging in current Business Programmes from a range of perspectives, were selected as being potentially rich sources of information with the ability to illuminate the questions connected with this research. Respondents for interviews were recruited on the basis of the key focus and issues of this research were relevant to them and they had knowledge insight and experience pertinent to the study.

Sampling Limitations

As with any methodology there are limitations that the literature identifies:

- Purposeful sampling is prone to researcher bias, although Patton (1990) argues this judgemental, subjective component of purpose sampling is only a major disadvantage when such judgements are ill-conceived or poorly considered; that is, where judgements have not been based on clear criteria, whether a theoretical framework, expert elicitation, or some other accepted criteria. The use of the literature and theoretical framing of this study supports the balanced approach required to lessen the impact in relation to this limitation.

- The subjectivity and non-probability of respondent selection in purposive sampling could impact on the representativeness of the sample. The question arises that if different units had been selected, would the results and any generalisations have

been the same? For the purposes of this research, the respondent sampling was made on the basis of relevant experience, so if an alternative sampling was employed, the level of relevant experience and insight knowledge would have been lower and arguably less relevant to the study.

The literature has shaped the methodology employed for securing the data for this research. The evidence from previous studies, but in particular Jones & Matlay outlining the importance of context and holistic, interrelational focus, has guided the methodology of this research. The University of Chester, a northwest HEI in the United Kingdom provides the context, which the literature identifies as being crucial. Studies have found that an understanding of entrepreneurship education is inherently dependent upon the interrelated nature of the contextualised processes. In supporting knowledge and understanding of how entrepreneurial behaviours and thinking may be fostered in undergraduates and ultimately to support the implementation of findings, this project takes a case study approach.

The University of Chester: Culture, Environment and Context

The University of Chester has a student population of around 20,000 undertaking studies in the UK and in overseas partner institutions (www.chester.ac.uk). The institution has a growing reputation in the area of Work Based Learning, making provision for all students at the end of their second year to undertake a five week experiential, work based learning period. This is an opportunity for undergraduate students to apply formal and theoretical learning to practical situations. The Business School works with a variety of large businesses and

organisations both public and private sector and has built an Advisory Council that works closely with the Faculty of Business and Management and offers advice in relation to Modules, Programmes and student Employability. The University is affiliated with a number of other UK institutions that offer work Based Learning provision in order to maximise research outputs and development initiatives.

The reputation of University of Chester in work-based learning has experienced growth and represents an area that is recognised internally as contributing to student employability and therefore influencing league table positioning. The innovation that has occurred in the work based learning schedule at Chester, is significantly absent in the University's offering of entrepreneurship teaching and learning. Undergraduate students are unable to undertake an entrepreneurial experiential learning opportunity, i.e. rather than working in another organisation, a focus and planning of initiating a new venture. Major (2016) articulates the point that in terms of learning, the emphasis has been on preparing students to enter into employment. University of Chester reflects this traditional notion, but doesn't embrace the recent momentum that other universities demonstrate with regard to undergraduate entrepreneurship.

There is a perception within the University of Chester that entrepreneurship is risky with results based outcomes presenting as a challenge to measure i.e. no or negligible impact on league table positioning. In contrast to University of Chester, Coventry have established an extremely strong student entrepreneurship agenda and specialist resources such as an established Enterprise Hub where student business ideas are cultivated and nurtured. An investment in specialist staffing teams delivering core practical skills to address the key areas

of student entrepreneurial endeavour demonstrate the commitment that Coventry University has to the Entrepreneurship agenda.

In the table below a comparison is drawn between context and culture at University of Chester and that of two other universities, including Coventry. It is useful to consider the application of certain practices at institutions that have been awarded for their approach to Entrepreneurship Education. The comparative Universities have significantly more students, the mission statements articulated by institutional heads here appear to outline a less risk averse approach in the roll out of Entrepreneurship activity. It is recognised that such responses and mission statements from Senior Management are not conclusive in guaranteeing that an entrepreneurially positive culture exists. What it does indicate however, is the application of processes, structures and working practices that produce positive indicators'. It should be noted that these institutions, similar to Chester, face challenges connected to having a variety of discipline areas, but the aforementioned processes and structures embrace this diversity.

Table 5: A Comparison of Two Other Institutions

INSTITUTION	CONTEXT	CULTURE
Coventry	Students: 31,045 UK PG: 2,360 UK UG: 22,270 INT: 6,420	<p>"..by creating a culture of permission for the course team to be enterprising, the university is demonstrating to course teams that they can innovate and thus excite the student."</p> <p>Ian Dunn, Deputy Vice Chancellor for Student Experience, Coventry University Coventry's approach is predicated on devolving ownership for entrepreneurship course development to the team of practitioners responsible for the creation and operation of that course. This is a risk-based act, but one that gives access to a broad range of expertise in the teaching of entrepreneurial studies as well as embedding employability skills through what the university refers to as the 'Add+vantage scheme'. The course reporting template requires responses mapped against the entrepreneurial agenda. Thus it is the claim of this example from Coventry, that by the actions taken, and the requirement to report against entrepreneurship, the course team is working towards a more effective entrepreneurial culture.</p> <p>2012: Entrepreneurial University of the Year</p>
INSTITUTION	CONTEXT	CULTURE
Anglia Ruskin	Students: 21,605 UK PG: 2,220 UK UG: 16,075 INT: 3,305	<p>In the face of challenging multi-site delivery and a significant number of collaborative partnerships both in the UK and internationally, Anglia Ruskin has introduced a cross-University group, specifically focused on developing enterprise and entrepreneurship. Cross University working helps to support a diverse range of staff to work closely together to apply the enterprising skills and entrepreneurial mind-set to grow and develop through a variety of student and staff focused research and teaching activities. Anglia Ruskin engages with the business community offering 'enterprise for everyone, not enterprise for the elite!' "Staff and students are encouraged to become more involved in a diverse range of enterprising activities in pursuit of innovation...this included auditing knowledge transfer, exchange and support, external stakeholder engagement, internationalization and entrepreneurship education. This has helped to create a narrative to share more widely." Lesley Dobree, Deputy Vice Chancellor, Anglia Ruskin University</p> <p>2014: Entrepreneurial University of the Year</p>
INSTITUTION	CONTEXT	CULTURE
Chester	Students: 15,215 UK PG: 3,065 UK UG: 11,725 INT: 425	<p>A major challenge for Chester is the ability of the university to adopt a strategic response in respect of entrepreneurship education. Strategic planning is complicated by the number of discipline areas within the University, all exhibiting different subject specific needs. Those needs range from Professional, Statutory and</p>

		Regulatory Bodies with their legislative requirements. These needs require a differentiated response. A further complication is that the enterprise concept is viewed differently and accorded differentiated priority by managers, academics, support, students and groups. There remains a focus on a less centrally devolved management of Programme and Subject approval that is understandably risk averse, given the current HE environment and league table emphasis. Different perspectives on issues such as working with external stakeholders, learning that has a pragmatic focus, recognising the commercial relevance of entrepreneurship and at another level, its contribution to innovation and creativity in curriculum design and assessment.
--	--	--

An institutional entrepreneurial culture is cultivated by those working within the organisation, the organisational structures, informal and formal and the internal processes. However it was not within the scope of this research to investigate this perspective within the environment and culture.

Adopting an inductive case study approach, this research features data collected via semi-structured interviews through focus groups. Focus groups were conducted with undergraduate students participating in business related Programmes. Further focus groups were undertaken with staff, academic and support, involved in the delivery of the institutional entrepreneurship agenda. One-to-one interviews were carried out with visiting speakers, external to the University, but experts and leaders in the field of business and

entrepreneurship. The analysis undertaken will make provision for discursive insights into thematic issues emerging from the data (Hardy and Thomas, 2013; Hotho, 2013).

3.3 Research Focus

For reasons relating to current economic and sector imperatives to equip undergraduates with the relevant skills, knowledge and competencies to respond to career opportunities (Gibb, 2012) in the face of resource constraints, the University of Chester; the author's institution, was selected for this research. Ease of access to respondents, cultural familiarity and environmental insight decreased the element of risk associated with the research plan and process. Moreover, the real opportunity to deliver impact on the institutional entrepreneurship systems was significantly increased.

The University of Chester has a history in higher education that dates back to 1839. A University that is distinct in so far as its history belies its status as a new university, with degree awarding powers being granted in 2005 (White, 2014). There are currently over 17,000 students across four campus' and seven academic facilities, with approximately 1,410 employees working for the university (www.chester.ac.uk)

Currently undergraduate entrepreneurship modules at Chester are, for the most part, limited to Business School undergraduates. The mission of embedding such thinking and behaviour at every level within the university continues to be an ongoing aspiration and although gaining in momentum, is acknowledged by the Senior Management Team as being an ongoing challenge (Thomas in Coyle et al, 2013).

The task of developing staff; support and academic, is similarly testing for a comparatively small university (Gibb, 2012; Hannon, 2014). It is the overarching aim of this Professional Doctorate to examine the present day practises and processes of entrepreneurship education at the University of Chester. And in so doing, to understand how entrepreneurial behaviours can best be facilitated, enhanced and supported in connection with students and staff throughout the environment. It is anticipated that this examination of entrepreneurship educational practices will foster institutional development that supports growth and sustainability in an ever competitive Higher Education market. This aim was established well in advance of the research paradigm and was born out of calls for a response to the growing importance of entrepreneurship education and training. An example of the crucial nature of developing in this field is evidenced in a 2009 Report by the Global Education Initiative (GEI) of the World Economic Forum (WEF):

“...while education is one of the most important foundations for economic development, entrepreneurship is a major driver of innovation and economic growth. Entrepreneurship education plays an essential role in shaping attitudes, skills and culture...We believe entrepreneurial skills, attitudes and behaviours can be learned, and that exposure to entrepreneurship education throughout an individual’s lifelong learning path, starting from youth and continuing through adulthood into Higher Education—as well as reaching out to those economically or socially excluded—is imperative.” (WEF, p7)

This doctorate commences from the standpoint that the Higher Education environment, more specifically the University of Chester, can more effectively support the development of entrepreneurial students and meet the growing economic need. However, the literature and

a number of studies have concluded, a far-reaching change in intellectual and educational thinking and application is required (Coyle et al, 2013).

At the University of Chester, and indeed in other 'newer' post 1992 universities, the advancement of entrepreneurship as a field of academic and pragmatic exploration for both undergraduates and postgraduates is an economic necessity, a way of differentiating the brands as well as enhancing students' opportunities and employability after graduation (Hannon, 2014; Matlay 2009, Gibb, 2012). Yet Chester, like many similar institutions, grapples with the dichotomy of introducing new, innovative entrepreneurial approaches, activities and ways of 'being' and the traditional Higher Educational bureaucracy and structure (Foyelle 2009). Higher Education Institutions are at the mercy of league tables (Rae, 2007) and from 2017, will be subject to the scrutiny of the Teaching Excellence Framework. It seems that the measurement of quality and traditional notions of what HE constitutes militates against the pursuit of entrepreneurial behaviour (Matlay, 2009).

The Higher Education sector is currently league table focused, rife with uncertainty in relation to short term contracts for staff; academic and support, bereft of funding for research and weighted by competition on national and international fronts (Jones et al, 2013). In this climate, it is at best challenging to take risk and therefore undertake entrepreneurial projects, unless appropriately primed and supported to do so.

This research work is intent on supporting a more profound engagement with the changing economic conditions and real world business agenda. In addition to considering the realities faced by students and the complexities of entrepreneurship educators at University of Chester. Both stakeholders, confronted by market and institutional pressure to foster entrepreneurial mind-sets at a time when the HE sector and the economy is experiencing significant turbulence.

The literature suggests that it is a challenge to consider course content when looking to design an entrepreneurship undergraduate programme as institutions vary widely on what is included on a programme of this kind (Gibb 2012, Hannon 2014, Matlay 2009). Studies argue approaches to constructing such a programme take on a different approach in different HEIs. A wide variety of topics and modules serve to make up the typical entrepreneurship programme (Hills, 1988). A similar observation was also made by Fiet (2000), who in his collection of just 18 different entrepreneurship courses found coverage of a hundred and sixteen topics. Although Hynes (1996) is of the opinion that both the course focus and content ought to vary in accordance with the specific requirements and needs of students. Fiet (2000) passes some interesting remarks in relation to this subject: “the contents of our courses vary so much that it is difficult to detect if they even have a common purpose”. Bennett (2006) p26 suggested that the huge variation in content is as a result of the lack of a common definition of entrepreneurship and to the absence of a cohesive theoretical framework in entrepreneurship education. Although Jones and Matlay (2011) argue that heterogeneity is inherent in effective entrepreneurship Programmes in order to meet the different needs of students from different backgrounds, with different motivations, skills in different contexts.

In connection with delivery methodology, Neck et al. (2014) posit that entrepreneurship education needs to be delivered with a focus on action and taught via a “portfolio of practices”.

There are a number of reasons to be sceptical about whether or not entrepreneurship is ‘teachable’, with the responses to why, how and why not, many and varied (Fayolle & Gailly, 2013) The elements that accompany the delivery of entrepreneurship in Higher Education such as: assessing, monitoring and grading are challenging – how do we assess for entrepreneurial behaviour? If an individual is said to be truly entrepreneurial, then why attend university, why participate in what everyone else around you is doing? Is entrepreneurship a rational discourse? Neck (2014) argues that to be entrepreneurial is to be creative and ultimately to innovative, but surely this is innate, unpredictable, sudden and irrational? Research appears to suggest that entrepreneurial behaviour is “messy” and instinctive (Foyelle, 2009); can we really motivate students in this direction? According theorists, there are many challenges complexities and dilemmas in the field, if one can refer to it as being ‘a’ single field. Nevertheless this appears to be the nature and characteristic at the heart of entrepreneurship. Gibb, 2012 asserts that it is about combining and contrasting challenges, responding to challenges and questioning that which surrounds us.

Increased competitive pressures in the Higher Education sector mean that Universities and business schools are required to re-think curricula and teaching and learning methodologies. (Gibb, 2012, Matalay 2014, Hannon, 2014) This will be afforded further prominence on institutional agendas by the introduction in 2017 of the Teaching and Learning Excellence Framework (HEFCE 2015) The University of Chester, similarly to all less research intensive

institutions is under considerable pressure to engage more actively in third stream funding to augment student fee revenue. Gibbons et al (1994) discuss the importance of academics engaging to a much deeper and active level with practitioners and the practice they research.

A question regularly posed by potential students and their families attending Open Days is:

“Does this programme prepare (my son/daughter) to face the challenges of the current economic climate?” (Open Day UoC October, 2015)

As a practitioner, researcher and examiner of learning, the test is whether the teaching and other corresponding activities introduced into an entrepreneurship programme serve to appropriately reflect the realities that students will come face to face with beyond the walls of the University they are currently attending. Degree programmes featuring aims and objectives around entrepreneurship and the empowerment of undergraduates for entrepreneurial activity and enhancing said skills are comparatively new objectives for universities (Foyelle 2009), but they are consistently acknowledged as being an important objective within the Higher Education environment.

Through research into the perspectives of stakeholders in the process of Entrepreneurship Education at University of Chester, this doctorate will attempt to outline the issues and challenges faced by those confronted by the enigma of entrepreneurial teaching and learning. The research undertaken will result in a blue print in the form of a conceptual model for effectively fostering entrepreneurial behaviours in undergraduates at the University of Chester and institutions of similar standing.

The objectives of this Professional Doctorate are to:

1. To critically explore the milestones in relation to the trajectory of entrepreneurship as a field of academic study in the Higher Education environment.
2. Critically reflect on current thinking in the literature related to the field of entrepreneurship development in the Higher Education sector and consider the ways it may inform practice at University of Chester.
3. Critically examine and evaluate the pedagogical strategies and techniques that may most effectively support the cultivation of entrepreneurial behaviours and mind-sets in Business and Management undergraduates at Chester Business School.
4. To identify and analyse the key entrepreneurial processes in undergraduate Business and Management students.
5. Develop a conceptual model towards embedding new approaches and to further develop entrepreneurial endeavour across the Institutional landscape at a post 1992 University such as Chester.

Objectives 2, 3, 4 and 5 of this study reflect the importance of investigating these complex questions. Objectives 2, 3 and 4, seek to offer a triangulation of the different perspectives afforded by the literature, undergraduate respondents and those respondents, academic, support and business, contributing to pedagogic content. The fifth objective will embed the findings into a model that will support the development of existing entrepreneurial education methodologies and support the introduction of fresh approaches at the University of Chester.

3.4 Research Philosophy

Rae (2007) contends that viewing entrepreneurship as a “contextual” process that is associated with constantly evolving, learning and developing, or as he terms it, “a process of becoming” is more productive than attempting to define what is or isn’t entrepreneurial or “who an entrepreneur is”. Therefore this research will concern itself with the ‘process of becoming’ and the extent to which the institution fosters behaviours and equips undergraduates for entrepreneurial endeavour as a result of participating in Programmes at University of Chester.

This research project represents a phenomenological study that draws upon the perspective and perceptions of stakeholders involved in the process of entrepreneurship education at the University of Chester. Stakeholder experience, perceptions and related data will be collated via inductive, qualitative semi structured interviews and discussion. The literature argues that epistemologically, phenomenological methodologies emphasise the importance of personal experience and are situated within a paradigm of personal subjectivity. (Stoke& Wall 2014)

The phenomenological approach taken here, connects with, and reflects the desire to, understand and secure insight into motivation and engagement with the entrepreneurship education currently on offer at the University of Chester.

The task of mapping out what is currently on offer with regard to the entrepreneurship undergraduate agenda reflects the argument posited by Cope and Watts (2000) that *“we are still a long way from the development of sufficiently broad-based (frameworks) to illustrate the diversity of the entrepreneurial learning task with any adequacy”*(p108). This research

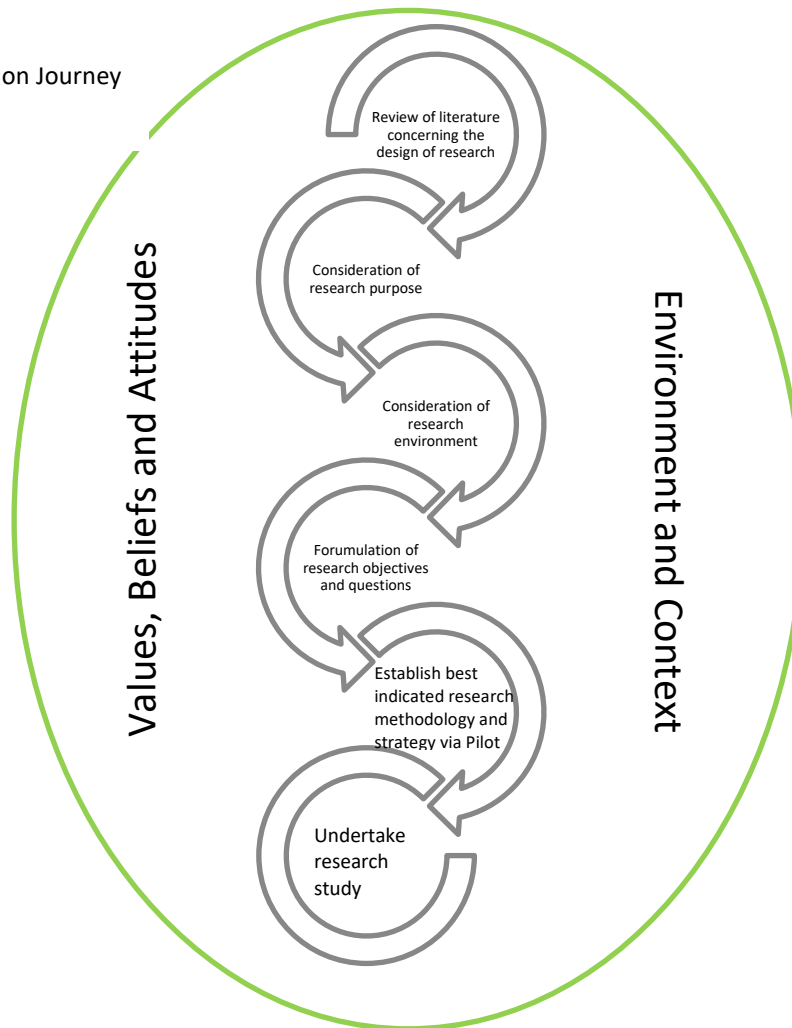
will rather, chart the current processes of entrepreneurial pedagogy; content, delivery and context, towards synthesising and developing interrelational coherence and direction for informing institutional strategy from a co-creative perspective.

It should be acknowledged here that it is likely that those undergraduate students who gave time and contributed to this study are likely to be amongst the most engaged in their student cohort and the most committed to their Entrepreneurship Programme. It would therefore follow that the responses included here may, in the main, be proffered by the largely efficacious amongst the cohorts of Business undergraduates.

3.5 Research Strategy

The research strategy has been heavily influenced by and is a product of leading researchers and theorists who have identified a number of key considerations to observe in the designing of research. It is acknowledged in the literature concerning the design of research methodology and strategy that philosophical motivations significantly impact on design. Neuman (1997) and Saunders (1997) amongst others emphasise the importance of considering and accentuating the values, beliefs of the researcher's frames of reference that impact on research design. To this end a conceptual flow chart has been included below to demonstrate the process that resulted in the selected research strategy for this thesis.

FIG 3
Research Strategy Selection Journey



Hancock, C. (2016)

Yin (2003) argues that the ability to cope with a diverse array of data emanating from interviews to artefacts is a 'unique strength' of the case study approach. (Hartley ,2004 p8) argues that a case study approach is 'heterogeneous activity' that covers a broad range of research methods and approaches from utilising single to multiple cases with individual respondents, organisations, sector field or policies (p332). It was through this component of exploration within the process of setting the research focus and modelling the research design that the most pertinent way forward for this work was adopted. Elements of 'fit' are here outlined in the table below:

Table 6: Key Features and Indicators of ‘Fit’ for Case Study Approach (based on Yin, 2003 p13-14)

Features/ Indicators	As Applicable to Research Focus
Empirical inquiry	Secure findings based on respondents’ experience and observation of experience.
Investigation of contemporary phenomenon within an authentic, real-life context	University of Chester focused case study
Useful where boundaries between phenomenon and context are unclear	Complexity in separating the research outputs from the context in which they are delivered
Valuable approach when more variables of interest than data points exist	Unforeseen outputs and variables
Indicated approach where finding and results rely upon multiple sources of evidence, with data needing to converge in a triangulating fashion	Applied triangulation, but multiple perspectives and complexity of narratives towards evidence

3.5.1 Focus Group Process and Protocol

The protocol and key steps in the focus group process are based on Walden’s (2006) four fundamental components that he argues are vital for research activity involving groups, they are: the planning of the project; the recruitment of participants; implementation of questions and the analysis phase.

TABLE 7: FOCUS GROUP STRATEGY

FOCUS GROUP COMPONENT	KEY ELEMENTS	COMMENTS
Planning	<ul style="list-style-type: none"> • Book room for pilot • Undertake pilot session • 3 x Focus Groups • Check for optimum attendance time and schedule • Book for sessions (2hr) • Refreshments planned • Establish comfort 	<ul style="list-style-type: none"> • Pilot session outcome positive but with exception of environment – change location to less formal • Re-book and re-schedule sessions if required
Recruitment	<ul style="list-style-type: none"> • Email potential respondents – select on potential to provide data for research • Send second email to give details and ask for confirmation of participation in pilot and focus groups • 8-10 participants per group 	<ul style="list-style-type: none"> • Prepare to undertake repeated email trawls for potential respondents • Ensure back-up times
Questions/ Discussion	<ul style="list-style-type: none"> • Outline protocol • Provide overview of research topic • Answer any queries • Deal with any issues • Set questions in accordance with literature recommendations • Initiate and support discussion flow • Maintain focus and group dynamics • Record discussion • Take notes 	<ul style="list-style-type: none"> • Structure questions to reflect literature, key themes and to maximise responses • Formulate clear questions and check for understanding • Ensure open-ended, thought provoking questions • Attempt to steer discussion away from ‘group speak’ • Be vigilant of dominant speakers/participants
Analysis	<ul style="list-style-type: none"> • Transcribe recordings • Re-read all notes • Sort, code, classify. 	<ul style="list-style-type: none"> • Establish value of output to ensure manageability

3.5.2 Question Structure

Question development is an iterative practice, according to Mellinger & May, 2010, the challenge is to design questions that maximise real engagement by participants, whilst at the same time, not confusing respondent, but eliciting data without leading. All questions utilised in the semi-structured interviews were tested during the pilot session and amended accordingly. Krueger, 2002 proposes that questions should be posed to respondents in a focus group in a conversational manner and this was to be tested in the pilot.

3.6 Research Validity and Triangulation

The design of the methodology and the framework for investigating the research aims, has been significantly shaped by Gibb (2009) whose influential research into entrepreneurship education over the last two decades has served to inform various governments and HE institutions across the globe. Gibb refers to the 'Triple Helix Model of Partnership' and the role that the three parties, industry, higher education and students have on the formation of a 'fit for purpose' entrepreneurship teaching and learning agenda. The significance of the three perspectives is emphasised in the work of Hannon (2014) who discusses how entrepreneurship education in a HE environment is a 'tripartite partnership' existing between Universities, the public sector and industry. This relationship, Hannon argues, is one of key importance in making a substantial contribution to social cohesion, the UK's long-term competitiveness and the economy in general. The theoretical positioning of the three stakeholders is recognisably distinct in terms of perspective, though connected with regard to interest. It is this dynamic and three-way impact model that Gibbs (2012) feels is most pertinent to the task of developing an environment in which entrepreneurship can thrive. This model is reflected in my own research paradigm and methodology design for this work. It is Gibbs' emphasis of the substantial contribution that HE, industry and students can potentially make toward establishing an entrepreneurial landscape in Higher Education that has informed the collection strategy of the research data for this study. In response to the prompt from Stokes (2011), it is worth acknowledging here that the researcher's philosophical standpoint and the significance of issues emanating from this have undoubtedly impacted on

this study. Slife and Williams (1995) posit that whilst the philosophical standpoint and ideas of the researcher largely remain hidden throughout investigative studies, they both shape and influence the practice of research.

At the heart of this work is the researcher's philosophical connection with the practice of teaching; why, what and how one teaches and the nature of that learning. As a practitioner teaching in a higher education environment the traditions and day to day realities of that environment, have the potential to suffocate new approaches and experimental perspectives on the development of innovative ways forward. However it is the author's desire to develop an environment where undergraduates are provided with teaching, learning and experiences that transform them and make provision for increased career opportunities and greater resilience in the face of uncertainty. The researcher's own experiences and background are connected with necessity focused entrepreneurship, but it is accepted that opportunity focused entrepreneurship is what is being examined here for the purpose of developing ways of thinking and behaving in undergraduates.

Maxwell (1996) discusses the assignment of subjective meanings to data and its potential to undermine findings. He considers the importance of utilising analysis to understand the perceptions and perspectives of participants in a study as opposed to imposing meaning through researcher bias. Along with Neuman (2000), Guba & Lincoln (2005), Stokes (2006), Slife and Williams recommend that it is an important part of any research to declare and make explicit "the theoretical ideas they espouse". It is pertinent therefore to make transparent the philosophical backdrop and context to this study as a way of understanding the paradigm and methodology that frames this study.

The selection of a mixed methodology that triangulated the methods by which data was collected and supported different perspectives, was to be deemed appropriate for this study as it would help to go some way in the elimination of any errors in analysis. Although Stokes and Wall (2014) acknowledge that erasing researcher influence is impossible. It is acknowledged that the researcher will utilise data that emanate primarily from an emic approach. Nicholson (2005) contrasts emic and etic research measures and posits that there is much value in the emic approach. Sandstrom (1995) argues that emic methodology and analyses, make provision for increased understanding of behaviour and provides insight and a legitimacy for viewing social reality from the perspective of the respondents. (Sandstrom, 1995 p. 178). In the case of this D.Prof study, the researcher may be able to motivate a depth of response that an outsider or etic approach may not. With regard to analysis, an emic approach may provide insight into the analytical processes, although analysts, such as Solomon (2007) outline the need to pay particular attention to acquiring of emic data as such methodology may produce results that are incomplete. Drew, 2008, perhaps offers a resolution to the overall issues outlined here, encouraging discussion between researcher and participants to allow for distinctions between them to be discovered, analysed, interpreted and predicted (Drew et al. 2008 p. 188). It is for this reason that the researcher utilised a pilot session and structured the focus group approach with care and awareness of these theoretical perspectives.

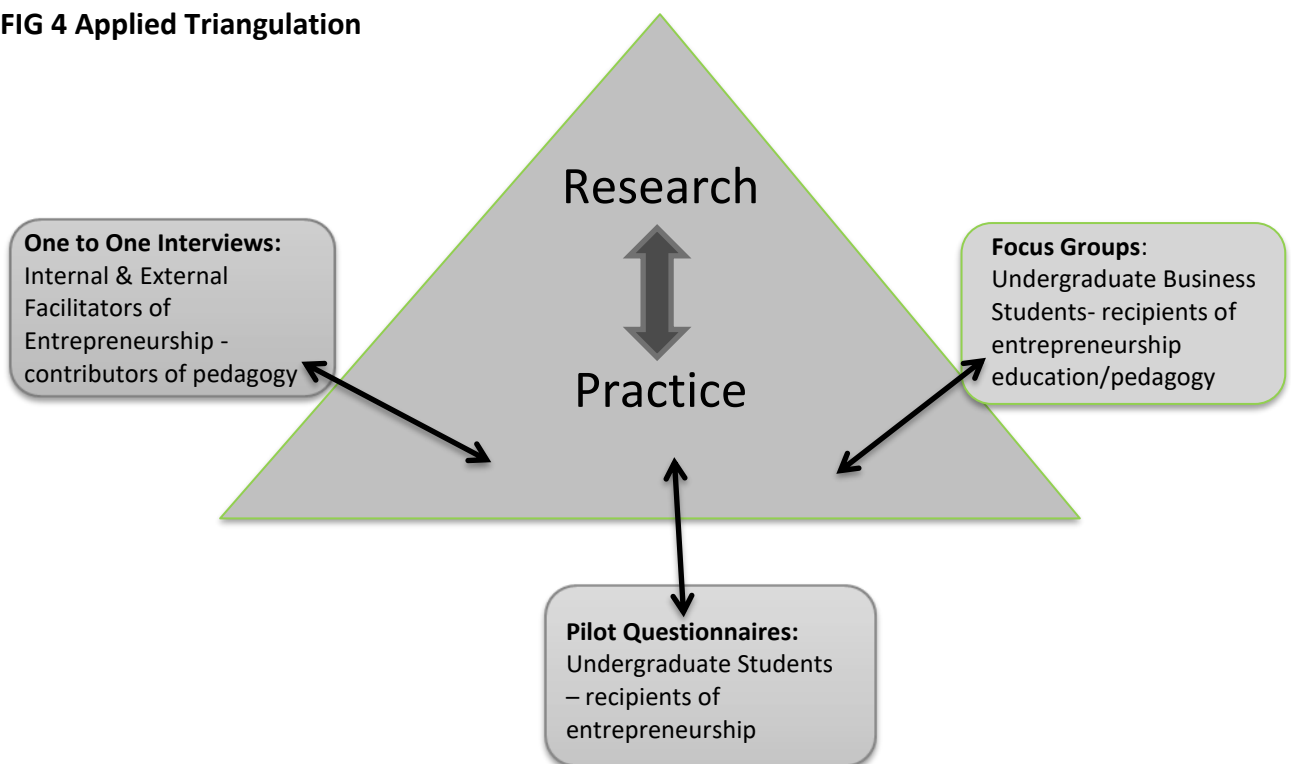
A crucial trigger for this doctoral research from an entrepreneurship educator and practitioner perspective is the importance of undertaking a piece of research whose findings would be utilised by other practitioners in the field and that will ultimately have impact. To

this end securing data that represented the perspectives, thoughts, feelings and perceptions of others was essential towards providing value and supporting impact.

Individuals, through interaction, create meanings about the world and different perspectives and subjectivities play a part in constructing the environment that one is researching. It is therefore fitting that an inductive interpretive style of research methodology is employed for this study.

Towards structuring, setting the agenda for the research and understanding the current picture of entrepreneurship education theory and practice locally, nationally and internally, initial desktop research will be undertaken. A critical review of the literature and contemporary thinking will support a frame of reference for this study.

FIG 4 Applied Triangulation



Hancock, C. (2015) Adapted from Jankowicz (2005)

A tripartite approach within the methodology will be reflected in this study. Triangulation is important for reasons of comparison and is of particular significance in securing balance where semi-structured interviews are employed (Jankowicz 2005).

Research will be undertaken to secure responses and data from:

1. Undergraduate students
2. Staff supporting entrepreneurial endeavour, both academic and support
3. External stakeholders.

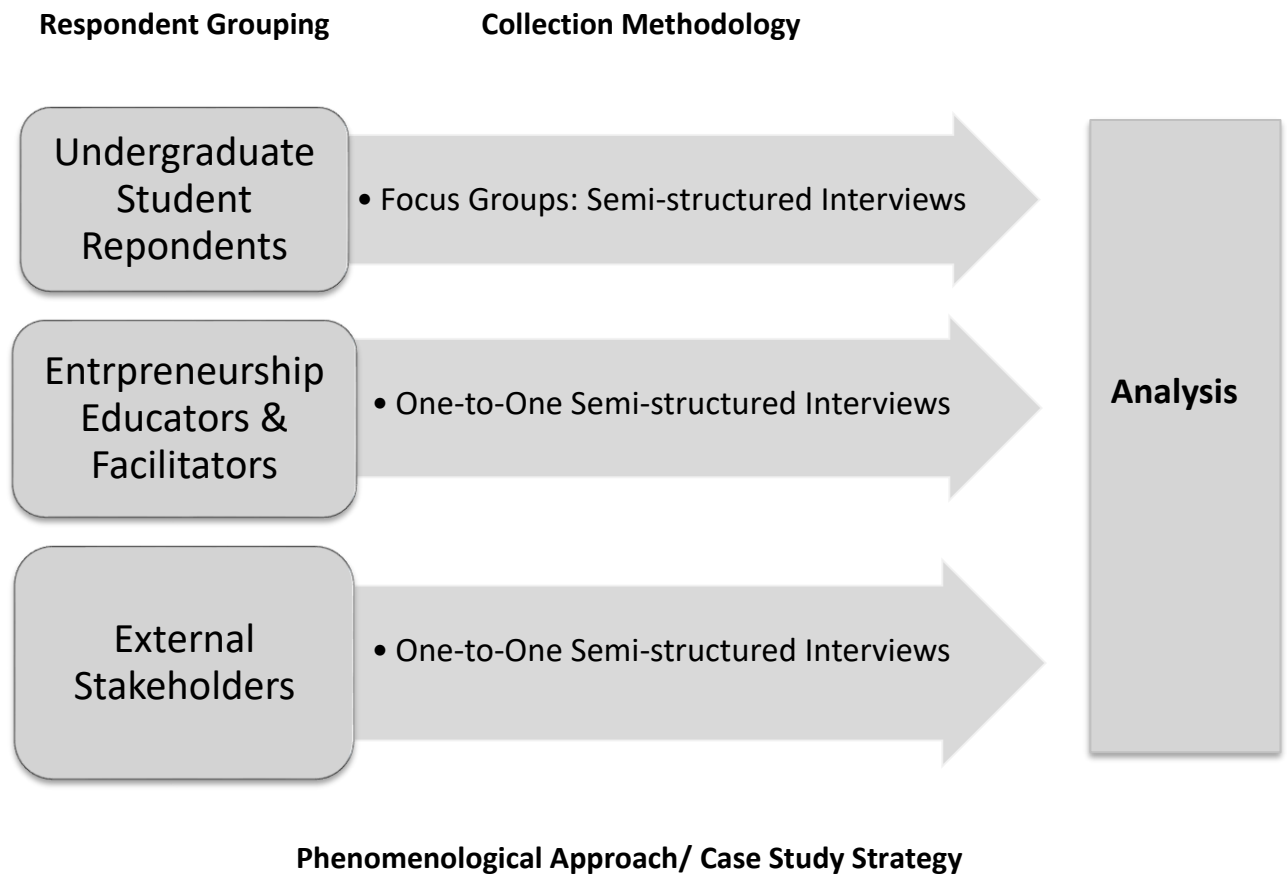
Internal staff that support entrepreneurship activity at the University of Chester may be either academic or support orientated, and it is intended that both be interviewed for this research.

The details and background relating to each respondent being recorded in table format.

In addition to internal respondents, this study will include one to one interviews with external stakeholders. The term 'external stakeholder' will be used to refer to those parties external to the institution who contribute to the outputs associated with entrepreneurship activity at the University. This group of respondents are primarily entrepreneurs, business leaders and individuals associated with business networks and communities. Generally this group of respondents are referred to as being 'Guest Speakers' who contribute programme sessions or other activities in the role of coach/mentor/speaker and/or have delivered and facilitated content connected with entrepreneurial education. Again, the demographics relating to this respondent group are recorded below. This methodology will demonstrate a multiple stakeholder and multi perspective approach to cataloguing research outcomes for this work.

3.7 Data Collection

FIG 5 Outline of Data Collection



This method will supply qualitative data in connection with the experiences, methodologies and practices of today's practitioners in a Higher Education setting. Straus & Corbin (1990) argue that qualitative research has as its overall goal the pursuit of the big picture with the aim of understanding certain behaviours and actions. A key aim of this study is to understand the behaviour and actions, student propensity to act, that emanates from particular experiences of facilitation and teaching and learning methodologies.

The semi-structure interview methodology was selected as it supports the interpretivist or phenomenological approach of investigation and supports depth of response. Easterby-Smith

et al (2002) argue that semi-structured interviews permit a probing, and draw more from the interviewee. Alongside an interpretive dimension, phenomenological research provides the basis on which to build practical theory, permitting the findings to inform and support the introduction of new strategy, methodology and actions (Stanley & Wise, 1993).

Completely structured interviews for this work were rejected as Saunders et al (2003) argue that they provide little in the way of space to explore and follow up responses. A semi-structured approach was deemed, however, to be useful in that it allows a certain degree of flexibility to the structure of an interview, and when combined with a phenomenological approach, posits Husserl (1970), are particularly effective for enabling the perceptions and experiences of respondents to be brought into focus. Husserl (1970) goes on to add that phenomenological approaches, when applied to single case studies, support the identification of particular factors together with their effects.

A number of methods for data collection may be deployed via phenomenologically-based research approach, including the ones utilised for this study: interviews, conversations and focus groups. Measor (1985) discusses the critical role that establishing a good level of empathy and rapport in achieving depth of information where the respondent has a personal stake.

- Focus group interviews will be undertaken with undergraduate students enrolled on degree programmes that incorporate some component of entrepreneurship teaching and learning. It is important for this study to secure a student perspective on the teaching and learning in order to support an understanding of the different elements of practice and to

understand which have greater impact. It is this element of the research that forms the most innovative aspect in terms of understanding the impact and most effective methodologies and practices towards effective entrepreneurship education.

- One-to-one Interviews will be carried out with internal entrepreneurship educators whose remit includes the facilitation of entrepreneurial endeavour. Interviews on a one to one basis will also be undertaken with external stakeholders, in particular, entrepreneurs and business leaders who have contributed a range of interventions in a variety of ways to the entrepreneurship agenda.

External stakeholders are asked to contribute to entrepreneurial learning on the basis that their autobiographical narratives, mentorship, feedback to students and general support will reflect practical theories towards sense making and an understanding of the life world of those that exhibit entrepreneurial characteristics, embark on new venture journeys and have practised experiential entrepreneurship. It is their enhanced level of understanding and knowledge of what Schon (1983) refers to as that which 'works' that will support this phenomenological approach. Gibb (2012) includes in his recommendations for an effective template for Higher Education the requirement that students clearly empathise with, understand and 'feel' the life world of the entrepreneur through emersion in an authentic experience.

A challenge for the methodology selected for this research is that the phenomenological approach will initially generate a significant amount of data through the focus group and one

to one interviews conducted. Gillingham (2000) discusses how the different and numerous evidence sources are core characteristics of the case study and argues (p20) that all evidence is useful to the case study researcher. In an effort to reflect this thinking, analysis will be conducted on all products of the interviews, i.e. recordings, notes and general observations at the time of undertaking the research. The difference in this study and those reviewed in the literature section of this work, is the approach employed allows for the collection of data in context. The personal experiential narratives and testimony of the respondents are both collected and located in the environment being analysed. (Denzin, 2002).

Because it is anticipated that the data emanating from interviews will be amorphous, the intention will be to undertake two phases:

First Phase:

Read through the product of the interviews in order to get a feel for what was being discussed and the responses provided, identifying the core issues and key themes within the each text. Following this, the resulting analysis will be aggregated, mapped and organised by using highlighting pens and 'post-its'.

Second Phase:

The themes and results of the first phase will be then be interrogated to understand more precisely the content of the research conducted. This process is based on the approach

recommended by Hycner (1985) where the resulting narrative is juxtaposed and comparisons are made. This will be useful in the identification of themes and interrelationships between different factors.

The research phase will be planned and structured by initially undertaking an investigation into what is currently being delivered under the 'Entrepreneurship' flag at University of Chester. This will take the form of a preliminary exploration via desktop research to investigate the modules, programmes, extracurricular activities delivered at the Institution.

A single case study of the selected institution was developed as a way of facilitating a deeper approach to study the critical elements of developing an entrepreneurial culture and in the interests of facilitating a focused understanding of the factors and the environment (Yin, 1984; Eisenhardt, 1989; Gartner and Birley, 2002).

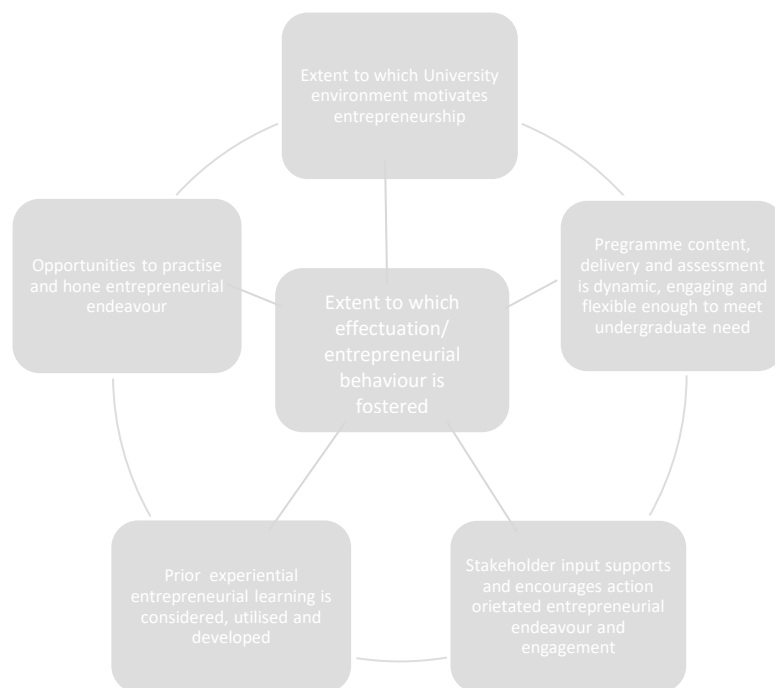
3.8 Data Analysis Strategy

The data emanating from interviews were analysed in accordance with the template analysis methodology espoused by King (2004) and Crabtree and Miller (1999). King posits that template analysis can be effectively deployed in a range of epistemological approaches, including the one adopted for this study, an interpretivist approach.

In the first instance a general template that informed interview questions and was formulated and populated with themes emanating from the literature. This template served to generate more specific themes and connections.

The themes were organised following a coding system whereby themes were organised in a hierarchy that correlated with order of reference with first order themes placed at the top. Interview output was meticulously read and re-read prior to the data being organized. It is in this way, argue Coffey and Atkinson (1996) that theory may be built from qualitative, experiential data from respondents. King (2004) asserts that it is in this systematic reviewing and movement from descriptive themes that permits the building of specific, conceptual themes. Connections within respondent data and between themes were also analysed.

The original template that would be used for coding, reflected the literature review informed themes. The themes also informed the questions that were asked:



Template Analysis Model Fig 6 Hancock, C. 2017

This first template was used to capture the key aspects of entrepreneurship education at Chester that are perceived to impact significantly on behaviours (see above) and this facilitated data analysis. The six themes were used to code the transcripts by the means of highlighting key phrases and words, whereupon each theme was input into a matrix. Nadin and Cassell (2004) refer to the benefit of utilising a matrix for undertaking detailed analysis to interpret data. The use of a matrix for containing respondent data supported an organisation of the responses, ensures that pertinent material is not missed and permits an analysis of the original and emanating themes and the connections across all themes.

The utilisation of a statistical packages e.g. SPSS to support an analysis of the data emanating from the research was eschewed in favour of using word and manual coding for the focus groups. Similarly, it had been the initial intention to utilise the qualitative analysis package NVivo for coding interview data. Following a testing period, however, this method of coding didn't prove to be useful in that the focus of the tool was too prescriptive in respect of word repetition. Brown, Taylor, Baldy, Edwards & Oppenheimer (1990) articulate the issue related to multiple synonym usage and how it potentially:

"...lead(s) to only partial retrieval of information" (p136) and they continue to posit that NVivo usage makes the interrogation of text or narrative ...more difficult"(p136) so that whilst their findings indicate that it facilitates searches for specific terms and synonym alternatives, the very different ways that respondents articulate similar ideas makes it particularly difficult to retrieve responses.

Comprehensive manual template analysis of and similarity indexing and coding between respondents' statements was undertaken in the analysis of the research data for this work. This methodology meant that analysis wasn't restricted to the interpretation of particular terminology, but rather the thinking, behaviours and key practices of the respondents. The interview dialogue was coded manually in terms of the dimensions defined in the methodology. Different coloured marker pens were used for this purpose to highlight repetition and because a manual analytical template analysis approach was undertaken, it eschewed the issues outlined above.

3.9 Recruitment and Composition of Focus Group

According to Liam puttong (2009) the principal objective of a focus group is to understand the perspectives, interpretations and meanings of a selected group to gain an understanding of a specific issue from the perspective of the participants of that group. A group is considered to be focused in the sense that it will be engaged in a directed activity.

The first step in securing participants for this study was to recruit undergraduate volunteers which was carried out via email request. The request, together with information related to the research details, was sent out to undergraduates undertaking entrepreneurship learning either as a core component of their degree Programme, or as a subsidiary element of their course. In addition, students participating in extracurricular entrepreneurship activities

within the institution were also provided with details of the study and asked whether they would like to volunteer.

Following an online and in person call for undergraduate respondents, a satisfactory response of 48 was received. A manual sampling of the willing volunteers was made with Programme spread and gender balance being emphasised in the selection process. Age of potential student respondent was a consideration as there are very few 'mature' students undertaking full-time degree Business related Programmes at Chester and so all undergraduates out of the 'traditional' banding, were selected for this research.

RESPONDENT NUMBER	PROGRAMME	LEVEL	DIRECT ENTRY LEVEL	AGE GRP	GENDER	INTERNATIONAL	STUDENT PROFILE AVERAGE CLASSIFICATION AT TIME OF DATA COLLECTION
1	BME	4		18-25	M	N	2:1
2	B	6	5	18-25	F	Y	2:2
3	B	6	5	18-25	M	Y	3
4	B	6		25-30	M	N	1
5	BME	5		18-25	M	Y	2:2
6	BME	5		18-25	M	N	2:1
7	BME	5		18-25	M	N	2:2
8	BME	5		18-25	F	N	2:1
9	BME	6		18-25	M	N	1
10	BME	5		18-25	F	N	1
11	BME	6		18-25	F	N	2:2
12	B&Sp	6		18-25	F	N	2:1
13	B&Sp	6		25-30	F	N	2:2
14	T&EM	5		18-25	F	N	2:1
15	T&EM	5		18-25	F	N	2:2
16	T&EM	4		18-25	M	N	2:2
17	B&M	5	5	18-25	F	Y	2:1
18	B&M	4		18-25	F	N	2:2
19	B&M	4	5	18-25	M	N	1
20	B&IB	5		25-30	F	N	2:2
21	B&IB	6		18-25	M	N	2:1
22	IB & Fr	4		18-25	F	N	3
23	B & Geog	6		25-30	M	N	2:2
24	B & Geog	6		25-30	F	N	2:1
25	IB & Geog	4		18-25	M	N	2:2
26	B & Maths	5		18-25	F	N	2:2
27	T	6		18-25	F	N	2:1
28	A&F	5		25-30	F	N	1
29	A&F	5		18-25	M	Y	2:2
30	A&F	6		18-25	F	Y	2:1

Table 8: Undergraduate Focus Groups: Respondent Demographic

LEGEND	
B	Business
IB	International Business
BM&E	Business Management & Entrepreneurship
A&F	Accounting & Finance
EM	Events Management
T	Tourism
Geog	Geography
F	French
Sp	Spanish
Maths	Mathematics

For the purposes of this study, a set of semi structured questions and discussion topics were utilised for gleaning data in the focus group setting. Focus groups are differentiated from the wider group interview through an emphasis on interaction to generate information, responses and research data. As opposed to putting questions to individual respondents in focus group data gathering, participants are encouraged to discuss the questions, exchange ideas and proffer comment on each other's responses. Focus groups, argues Wilkinson (2004), provide a particularly effective method for eliciting respondents' own meanings and information about differences areas of experience. It is the discussion between participants that made the focus group a pertinent methodology for this research, as undergraduates in particular frequently need the presence and encouragement of their peers to engage in discussions connected to academic matters. The hope and anticipation was that participants in the focus groups that were undertaken as part of this study, would motivate and stimulate one another to contribute to the discussion. According to Flick (2008) this methodology supports richer data. For Grønkjær et al (2011) the potential of a focus group is made explicit through the participant's interaction towards the production of insights and ultimately data that is less accessible using other data gathering methodologies. The objective was for a depth of discussion and richness of response that wouldn't be facilitated through, for example, a single respondent interview; an alternative approach that had been considered, but discounted in attempting to optimise the data emanating from group discussion. Silverman (2007) offers a number of guiding principles towards selection and asserts the importance of recognising that both discussion and the interaction between the participants in a study has the potential to offer revealing data. Kitzinger (2013) advises that the ideal size is subject to practical considerations, with Krueger & Casey (2008) identifying 8-10 as being the optimum number for a focus group. Kitzinger doesn't see any issues in working with

groups that are already familiar with each other, given that these are the networks in which people would usually discuss issues. Focus group size was a consideration, with a key consideration being that all participants felt comfortable enough to contribute to the discussions. It was therefore decided, based on Krueger & Casey's (2008) recommendations, to keep the size of the groups to a maximum of 10, whilst Kruegar (2002) argues that groups of around 6-8 is the ideal, but he argues that 10 should be the maximum number in order to establish the rapport required for gleaning responses to the research questions. In order to pursue the fluid interaction that Grønkjær et al (2011), Flick (2008) and Silverman (2007) identify as being so valuable, the respondent groups were formed, where possible to reflect the same or similar Programmes of study. Kruegar (2002) asserts that putting together respondents with similar backgrounds and experiences is preferred, in that it is conducive to a reassuring environment.

Focus group discussion was recorded and notes were taken to reflect the using a allowed the conversation to drift into other areas if they seemed relevant. The advice of Barbour and Kitzinger was followed and brief notes were taken during the course of the meeting, backed up with a recording of the discussions. In an attempt to put the questions, prompt discussion and listen, note taking was found to be particularly challenging. At the close of each focus group the researcher's contact details were distributed to provide participants with an opportunity to ask questions and/or for the researcher to address any concerns or observations. Following the focus group meetings, and in order to reflect Saunders et al, (2003) a summary with annotations was written in order to support the analysis of the data whilst the dialogue emanating from the session was fresh and still recent enough to recall

detailed nuances. This proved to be extremely useful and supported initial identification and subsequent comprehensive engage with emerging key themes.

3.10 Pilot Testing of Focus Group Process

A short pilot focus group was conducted to test the proposed format for data gathering. On completion of the test focus group a hardcopy questionnaire was distributed to undergraduates participating in the sessions. This would help to ensure that the environment was right, the questions were appropriate and the atmosphere conducive to motivating respondents to engage and provide their perceptions, thoughts, feelings and opinions. Moreover this pilot session would help to answer any questions or queries that the respondents might have and establish any further support that may be required to support the maximisation of effective data collection.

Running a pilot focus group meant that participants would be familiar with how the research process would work, comfortable with the method of securing responses and this in turn would mean that a high active rate would be ascertained. In addition, the experience of running a pilot session, permitted the author to practice recording and taking notes, whilst listening and responding.

Overall the pilot worked well, although the environment was changed as a result of feedback from focus group members. The change of venue was proposed as it was felt that the formality of a classroom was too sterile for discussion.

A range of recommendations as propounded by Silverman (2010) were adhered to during the preparation and pilot phase of the interviewing, addressing such issues as: phraseology of the questions the avoidance of leading questions, using simply worded questions, being specific and demonstrating open and closed questions.

3.11 One to One Interviews

Table 9: External Visiting Speakers (Demographics)

RESP	GENDER	AGE	LENGTH OF BUS EXP	SERIAL ENTREP	INTERNATIONAL INDUSTRIAL EXPERIENCE EXP	HE TEACHING EXP	INDUSTRY BACKGROUND	COMP POSITION
A1	M	56	34	Y	Y	N	Security	MD
B2	F	44	5	Y	Y	3 years	Healthcare	GM
C3	M	46	14	Y	Y	N	Finance	CEO
D4	M	34	10	N	Y	N	Marketing	MD
E5	M	37	6	N	Y	2 years	Marketing	MD
F6	M	23	3	Y	Y	N	Clothing	Director
G7	M	24	3	Y	Y	N	Training	MD
H8	M	50	8	N	Y	N	Utilities	COO
I9	F	27	5	N	N	N	Retail	Director
J10	M	60	36	Y	Y	7 years	Finance	CEO

Respondent	GENDER	AGE GROUP	LENGTH OF HE EXPERIENCE	AREA OF SPECIALISM	Prof Qualifications	ROLE
A*	F	45-50	12 years	Business	PGCE	Academic
B	F	35-39	2 years	Entrepreneurship	PGCE	Academic
C	M	46-50	16 years	Business	PhD PGCE	Academic
D	M	40-45	4 years	Careers	CDI	Support
E	M	35-39	6 years	International Business	PhD, PGCE	Academic
F	M	40-45	10 years	Work Based Studies	PGCE	Academic
G	F	40-45	3 years	Entrepreneurship	PGCE	Academic
H	F	30-34	2 years	Careers	CDI	Support
I	F	46-50	7 years	Human Resources	MSc (HR) CIPD	Support
J	F	40-45	12 years	Marketing	PGCE	Academic
K	F	35-39	8 years	Marketing	PGCE	Academic
L	F	40-45	9 years	Work Based Studies	PhD PGCE	Academic
M	M	46-50	15 years	Work Based Studies	PhD PGCE	Academic
N	M	40-45	6 years	Business Development	PhD	Support

Table 10: Entrepreneurship Educators' (Demographics)

*Did not participate in interviews due to extended illness, although expressed an interest and willingness to do so.

The one-to-one research methodology was utilised in this study as a means of empowering the practitioner respondents to provide data, i.e. opinions and thinking so that they may feel comfortable revealing these personal perspectives in the company of other practitioners (Cresswell, 2007). Patton (1990) suggests that the main objective of carrying out interviews for research purposes is to glean the perceptions and experiences of the respondent. Cohen et al (2006) argues that the understanding of perceptions and experiences provides the means by what a respondent prefers, thinks and feels. In essence, interviewing on an individual basis allows for the securing of data relating to knowledge, values, attitudes and beliefs. For this work, securing authentic experience and knowledge is important in understanding the impact of current and future entrepreneurship education practices.

Semi structured interviews on a purposive sample of entrepreneurship facilitators was undertaken. According to Maree (2007) purposive sampling is indicated when expert knowledge is required and insight into particular specialist areas is required. In this instance, the number of potential expert respondents was so relatively small, purposive sampling was necessary.

Whilst fourteen respondents expressed a willingness to participate in this study, their information is recorded in the table above, it was possible to only interview thirteen as long term sickness prevented respondent A from participating, although information was provided.

In total, thirteen interviews were carried out over a period of five months. It was proposed that each interview would last an hour. On average interviews took around 80 minutes and commenced with a small number of structured questions based on The University Entrepreneurial Scorecard as constructed by Coyle et al., (2015). These opening structured questions were effective in securing a 'settling in' period towards the less structured element of the one to one interview. The unstructured questions tended towards emanating from the literature review on entrepreneurship education, although respondents were invited to provide their opinions which prompted narrative of a more personal and experiential nature. This phase of the interview provided much in the way of data relating to experience of delivering entrepreneurship facilitation and pedagogy.

3.12 Ethical Considerations

The overall ethical considerations of this study, similar to any other type of research, were related to ten principles outlined by Bryaman and Bell (2007) which include the full consent of all respondents and the privacy connected with information provided as part of the data collection. The research will be carried out in such a way as to be fair and accurate and reflect accepted standards (Saunders et al, 2003).

All respondents participating in this study will be offered the opportunity to view results and comment. In the coding of data, no identifying information will be revealed.

All respondents participating in interviews have forwarded their informed consent which was secured well in advance of commencement of the research process. Each participant was provided with an information sheet detailing background to the study and a detailed outline of the research process.

3.13 Chapter Summary

This chapter has covered in detail those issues, strategies, processes and protocols correlating with the research focus and this study. The section provides an introduction to the author's frame of reference and worldview through a discussion on the research paradigm, including assumptions, values and beliefs. Further clarification of the study focus is drawn and the research task defined.

The processes and protocols of the research methods are detailed in this chapter, their operation and any anticipated challenges charted. All tasks related to the recruitment, composition and activity of conducting respondent interviews is outlined within the section, together with details relating to the piloting of the focus group strategy.

At the end of this chapter a reflection on the proposed methodology is presented and the ethical considerations examined.

The chapter that follows will detail the results of the research conducted and present the output in relation the data collection emanating from the focus groups and interviews the method of which has been detailed in this chapter.

Topic	Coverage
Introduction to the research paradigm	Discussion around author's perspectives, methods, beliefs and values.
Clarification of research focus	Details around the focus of the study and the issues this presents.
Processes and protocols	An exposition of how the processes and protocols will operate.
Data collection	Challenges outlined in connection with the collection and collation of data.
Strategy behind data analysis	The method deployed in the analysis of data collected for this study.
Ethical Considerations	Presentation of the ethics of gathering, analysing and recording participate responses.

Chapter 4 Data Presentation and Analysis

“... the sense of argument develops through the whole process of data collection, analysis and organisation. This makes qualitative writing in essence very different from quantitative writing. Qualitative writing becomes very much an unfolding story in which the writer gradually makes sense, not only of her data, but of the total experience...”

(Holliday 2007 p122)

This chapter will set out the data secured as a result of the research conducted; the interview notes and focus group dialogue. Directly following the period of interview, the notes were analysed for thematic content and subject matter evidenced within the responses. A detailed analysis of the data will be offered here, along with relevancy to the research questions posed at the start of this investigation. Where appropriate, quotations are used to reflect the nature of the perspectives of the respondents and group participant responses. The chapter is structured based on the themes emanating from an analysis of the data. Patton & Patton (2009) argue that it's not so much the quantification of concepts that illicit meaning, but the interactions and transactions together with the analysis and explication of meaning that provide core consistencies and meaning. To this end, an examination of the data commonalities was conducted with specific examples categorised and here below in this chapter afforded additional scrutiny and analysis. Through the process of manual coding, as outlined previously, it became apparent that there were indeed emerging themes and these themes and correlated analysis are covered in separate sections within this chapter.

4.1 Entrepreneurial Behaviour

An initial question relating to how one would define entrepreneurial behaviour prompted much in the way of discussion in the undergraduate focus groups, the one to one interviews of academics and external contributors. Substantial discussion around what could be understood by the term 'entrepreneurial behaviour' provoked thoughtful reflections in all contributing respondents. Without exception the responses focused upon performance related output, and all demonstrated a connection to activities primarily associated with the setting up of a business and the procurement of resources to fund new venture creation. Many of the ideas were a reflection of the definitions expressed in the literature on Entrepreneurial Education (Herron and Sapienza, 1992; Bygrave and Hofer, 1991; Gartner, 1988.) A significant proportion of the responses referred to specific characteristics connected with behaviour: making and managing opportunities, taking risks, managing self and others being persistent and resilient in the face of adversity.

"Some students find it hard when they don't get the grades they anticipate...they let disappointment permeate their attitude in class...you can see they give up at the first hurdle and require constant motivation to recover. The better students recover quickly after a setback..." (Resp E5)

"I see students who are so entrepreneurial, jump at everything, up for every opportunity..." (Resp A)

Whilst the key features of entrepreneurship could be identified by most respondents, ways of fostering them in relation to teaching and learning were recognised as challenging by educators, with some students demonstrating confusion in the understanding of how to demonstrate entrepreneurial behaviour in assessment.

"I like these classes...I don't know what I have to do to get a good grade." (Resp17)

"We seem to do a lot of things which we get assessed for and we are given a lot of information on how we are being assessed, but I don't know how to get a top mark and what that looks like. I read that I have to use lots of academic referencing, but what we're doing is tasks." (Resp10)

"Entrepreneurship teaching should be different because we want Chester entrepreneurship students to be different, to stand out, but we have to adhere to traditional modes of delivery and assessment." (Resp K)

Within the responses, the definition and identification of entrepreneurial behaviour was demonstrated to be a challenge, but then it must follow that the designing of assessment in this area is also exigent.

"Assessment is taxing for entrepreneurship as the traditional methods are ruled out – how can we assess entrepreneurship via examination, impossible; academic essay, no; traditional

academic assignment doesn't reflect the application element. I tend to adopt assessment that incorporates experiential learning and the active application of theories around entrepreneurship.” (Res G)

“Challenging to be occupying more the role of advisor in entrepreneurship classes instead of the academic...it's less about academic skills and more about instilling business acumen and that is tricky to assess against academic criteria.”

(Res F)

Within the responses received under this theme, there appears to be a conflict between that which defines **entrepreneurial behaviour**, and the criteria that defines **academic** output. The action orientation of entrepreneurship appears, in the respondents' narratives, often to be lacking fit with the traditional markers of academic assessment. There is an apparent jarring between the theoretical and applied performance elements of entrepreneurship. The literature, particularly Bandura (1986) and Cope (2003) discusses how it is the conceptualisation of the nature of entrepreneurial endeavour that perceptions and behaviours are changed. Experimentation and failure, Bandura contends, are key in building resilience. It is how experience and repeated failures are managed and the ways in which responses to key entrepreneurial stimuli impact on and motivate an individual.

Within the Entrepreneurship modules at University of Chester, a broad variety of speakers are invited to contribute to supporting the entrepreneurial endeavours of the students and support the delivery. A particular emphasis is placed on the guest speaker programme on the Business Management and Entrepreneurship Programme at University of Chester. Those

contributing in this way are selected for their specialism in relation to various areas connected to entrepreneurship.

It was notable that all of the entrepreneurs that fulfilled the role of visiting speaker on the Programme began their talks by emphasising their modest origins. When the significance of this was discussed in the post-talk interviews, a theme became evident:

"I wanted to demonstrate that anything is possible even if you have very little at the start"
(Resp B2)

"It was important for me to show them that I had once been in their place, I wanted to establish a connection with them so that they would engage with what I had to say." (Resp F6)

"My start is a big part of why I'm still doing this today." (Resp J10)

"I wanted to take the students on a journey and to do that I had to start with my beginning."
(Resp H8)

It is apparent from the interviews that the visiting entrepreneurial speakers felt it was important to tell a 'story' of an entrepreneurial journey and in so doing to begin at the beginning:

"Mainly I wanted the students to know that starting up and running a business is about persevering and working hard. I wanted them to see what had happened to me and what I had done." (Resp A1)

Roddick (2000) argues that storytelling ability is a “fabled entrepreneurial trait.” With regard to entrepreneurship education Roddick goes on to make the point that telling stories helps to develop innate skills such as confidence. Overcoming marginality and humble beginnings are common themes in the talks given and stories told by entrepreneurs (Casson 1982, Smith 2008). This ‘humble origin’ strategy supported the creation of an authentic voice; engaging them and supporting a sustained engagement. Four of the visiting entrepreneurs talk about how important this was for them. The differences occur in the reasons behind the technique:

“I wanted to ensure that I had the attention of the room. There wouldn’t be much point of coming in to spend some time with students if I wasn’t going to appeal to them and challenge their way of thinking. I know students are always skint (sic) and I wanted to show them I know what being skint(sic) is all about.” (Resp G7)

It appears from this that the speaker is keen to establish a rapport with the listening students in order to demonstrate the similarities between them. This was different for some speakers:

“I think that they (the students) wanted to hear about why I was different to the people that surrounded me and I wanted to show them why. It was because of the ambition, the aspirations that I had and my lack of acceptance for the status quo, I wanted better for myself, I felt different to those around me.” (Resp C3)

It is evident from the two contrasting responses that being entrepreneurial is less about the route taken and more about achieving the outcome. Both of these speakers secured the same objective; the students’ attention, but for different reasons and using different strategies. Fletcher (2012) asserts that “entrepreneurs will always be drawn into interesting accounts of different disasters, successes or crisis stories, because when people are recalling events,

activities and practices, narrative and storytelling become the main ‘vehicles’ through which people connect and relate to others.” Storytelling, it is posited, “re-contextualises expert knowledge for the listener to aid the imitation of business action” (Johanson, 2004) and so can be, “an effective alternative to the concise tools and methods of abstract knowledge.” (Bruner 1990).

From the focus group discussion involving the student respondent, the oral narratives of entrepreneurs’ permits access to a world that they may have only glimpsed at through readings and/or case studies. The opportunity to listen and respond to a visiting entrepreneur who weaves a narrative tale of opportunity, risk and resilience, permits an authentic engagement with the mind-set of an entrepreneur. Autobiographical oral narratives support an understanding of what it feels like to undertake an entrepreneurial journey, but to be faced by one who has undertaken the expedition is to be presented with the map and motivated to take the route oneself.

4.2 Opportunity

The pursuit of opportunity was introduced to the respondents via further questions, and again this area was opened up a little further through participant discussion, it proved to be a rich seam of information, providing detailed responses in most cases. Given that entrepreneurial endeavour is inextricably linked to the concept of opportunity by a number of theorists, Sarasvathy & Dew (2005), Shane (2003), Kruefer (2009). Shane (2003) refers to an entrepreneurial opportunity as being the condition whereby an individual is able to:

“...create a new means-end framework for recombining resources that the entrepreneur believes will yield a profit.” (p16)

It is useful to refer to Shane's(2003) description of opportunity in relation to entrepreneurial response as it is evident from this that entrepreneurial opportunities can be connected to two elements: resources and the effort extended through a combination of self-efficacy and creativity to generate value. Timmons (1989) argued that resources mattered less and entrepreneurship involved the capacity to create something regardless of the resources one has. He contended that it is not in the watching, analysing or describing of entrepreneurship that one learns, but in the ability to sense an opportunity where others only see confusion and chaos. The interviews with a number of students for this research appeared to indicate it was the process of 'creation' that was found to be extremely challenging, particularly with a student perception of a lack of resources in this area. Timmons' notion of creativity being of primary concern over resources in undertaking entrepreneurial endeavour is not articulated by the respondents in this study whose perception of a lack of resource stifled an ability to respond creatively to certain opportunities.

There were a number of perspectives and alternative views expressed in the interviews and group discussions connected to 'opportunities'. The responses to the theme of 'opportunity' could broadly be divided into four categories that I have numbered here for ease of reference:

1. Respondents who viewed opportunities as being created and moulded by the individual, with analysis, evaluation and exploitation being undertaken through the endeavour of the individual and/or group and the organisation of effort.

"It's my responsibility to make and do what I can." (Respondent {R} 5)

"When I worked within a group, I really tried to get things underway, I wanted us all to make things happen even if it didn't work out, but some didn't and that really got to me... They didn't seem to realise that the buck stops with you and you have to get things done and make things happen." (R7)

"I put myself forward for Managing Director so that I was the Leader and I could get the team to move in the right direction, this was important to me. I wanted to see what I could do" (R8)

It was evident from the responses returned in this subsection that entrepreneurship was seen to be action orientated, but more than that, it was action that was ultimately driven and controlled by oneself. In the literature, Sarasvathy & Dew (2005) offer their perspective on this notion, in that they proffer 'the technology of foolishness'; entrepreneurs simply go, as opposed to preparing themselves to go, personal resources driving them forward.

A number of responses provided by the student participants, very much referred to 'the self' as being the initiator, driver and controller of entrepreneurial endeavour. Action verbs were utilised by the respondents when discussing the activities undertaken as part of their Programme and the first person was invoked in favour of a group perspective. An outcome focus was noted in the narratives provided in this respondent grouping and a confidence in understanding what a successful outcome looks like.

Educators and external business respondents identify the challenge that opportunity seizing presented in terms of pedagogy:

"How is opportunity harvesting practised? I don't think it can be simulated in a teaching session or seminar..." (Resp M)

"Presenting opportunities to students is part of supporting opportunity recognition..."
(Resp G)

"I do expect students to follow up the opportunities that are provided for them here, but we can only go so far before they need to model those opportunities and begin formulating their own." (Resp F)

Ajzen & Fishbein (2005) argue in their study that the beliefs and actions of other people have a commanding impact on the decision to act or the responses that are supplied in relation to opportunities. Their theory of 'Reasoned Action' posits that support provided by others for

ones actions supplies the motivation to comply and act, the origins of which are too reflected in Bandura's theory of 'Self Efficacy' (1986)

2. The second response grouping was made up of those for whom opportunities were seen as pre-existing prospects that lay in wait to be discovered and it was incumbent on the individual to engage in and explore the possibilities. This second group of respondents talked about the *modelling of an opportunity, but only in terms of their pre-existence:*

"You need to make what you can of the opportunities you get here and they do give you a lot." (R6)

"It takes me a while to think about what I'm going to do... We all talked in our group, but we took ages to come to decisions... I want to be sure I don't put my name against too many things, say the competition or Boot-camp sessions because I have to think about how I'm going to do everything. But I see the opportunities are there." (R9)

"I knew I wanted to do it, we are all looking forward to it (Young Enterprise, Student Start-up) but I have a lot of the other stuff that I have on and I don't know how I will manage them all. I work out what I need to do when my tutor tells us about it." (R1)

“It would be good to take all the opportunities I see that come our way in our class, but I don’t have any free time. I like to plan and know what I’m doing ahead of doing it” (R26)

This grouping of respondents saw entrepreneurship as being an opportunity that was presented or instigated by others. Deemed an activity that one could choose to engage in, though in the end is initiated elsewhere and ‘taken up’ if the risk is deemed to be sufficiently low and the activity required to be suited to responsibility and lifestyle. Impact on other activities must also be considered low to engage. This subsection of participants did not directly associate creativity with entrepreneurial endeavour, but connected an applied approach to the creativity that may reside elsewhere. The responses provided by this grouping of participants were associated with the management of resources and the perception of capacity to initiate and make opportunities. A significant proportion of the responses provided here were predicated around a ‘but’. Barriers were perceived, rather than pathways towards an opportunity, and the ability to manage their own learning and the confidence to take ownership of the drive forwards was somewhat lacking. A rigid scheduling and planned approach to entrepreneurial learning was advocated by a small number of students to enable a prioritising of aspects of study for clarity of expectation and security of assignment preparation.

Entrepreneurship Event Theory as originated by Shapero (1984) and further developed by Krueger (2009) reflects the idea that there are three precursors to entrepreneurial endeavour: desirability, feasibility and the propensity to act. This theory argues that it is the pre-existence of these elements that cause an individual to partake of opportunity and act.

3. The third category of respondents felt that because they were engaged in business studies that opportunity recognition wasn't a requirement of their academic output. More generally within this set of responses was the association made between opportunity to engage in extra-curricular activities to improve academic performance and the decision to engage in this. Opportunity wasn't necessarily linked with or recognised as being an intrinsic part of entrepreneurial output, but more connected with improving academic undertakings.

Evident from the responses within this category was a lack of confidence in terms of opportunity making and a capacity to engage in entrepreneurial activity. This is a stance that is connected with low self-efficacy (Sarasvathy 2008). Respondents in this grouping viewed themselves as 'studying' entrepreneurship as opposed to 'practising' entrepreneurship. Their responses featured less personal pronoun usage and more frequently referred to the entrepreneurial impetus as existing elsewhere rather than residing within themselves.

"We always like to hear about what's going on at the Riverside Innovation Centre, (the tutor) tells us about the opportunities that are there, otherwise we wouldn't know."(R5)

"I took up the opportunity to improve my written work by attending some sessions in the Library run by the Learning Support team, they helped." (R30)

“A lot of us don’t have the chance to find out about what we could do as we’re doing work and a job. To find opportunity (sic) we need to have time and I don’t. Sometimes we hear from the lecturers about some good stuff and we all think they should tell us a bit more about what’s going on, but most of us can’t do any more work than we already do.” (R20)

“A few of us have visited the Incubation Centre with the tutor and it was good to see what the small businesses are doing.” (R11)

A number of respondents discussed how they felt that it was the responsibility of the university and its staff to present them with opportunities both in terms of practice and ‘real world’ prospects. Other members of the focus group were somewhat in agreement with this, but acknowledged that individual students or groups of students needed to possess an element of enthusiasm to engage in the pursuit of opportunities presented or ideas that could lead to opportunities.

4. The fourth response grouping perceived very little in relation to opportunities afforded to them throughout their programme. When participating in the group discussion they talked about course content, the teaching on the Programme and assessments, but didn’t feel that their studies or the teaching and learning on their course provided much in the way of what they considered to be opportunity. During discussion, those respondents who didn’t identify with course opportunities did reference elements of their Programme that other participants

had indicated as being opportunities such as: building networks, group-work, visiting speakers and employers etc. For this grouping, such outputs were considered only in terms of aspects of their course that they were required to participate in as opposed to opportunities. It is the recognition of opportunities and potential opportunities that was missing here. Elements of their studies reflected on by other respondent groups as presenting as potential opportunities were here perceived to be routine aspects of learning.

It was interesting to note that this grouping of responses from the undergraduate focus groups identified a lethargy to engage in others that they didn't recognise within themselves. Group activities, frequently deployed in seminar sets, particularly in the area of entrepreneurship education, were viewed by the focus group as being productive and supportive in terms of developing team building skills, practical people management abilities and entrepreneurial capacity, but were NOT alighted on as being opportunity making.

“When we were in our teams it was more interesting than going it alone and we could help each other with what needed to be done.” (R11)

4.3 Emotional Intelligence

Personal intelligence, as defined by Gartner (2008) and emotional intelligence as discussed by Goleman (2011) are concepts often associated in the literature with entrepreneurship. It is the area of multiple intelligences that, in recent years, is challenging conventional thinking.

It is recognised in the literature the role played by self-awareness towards self-efficacy, entrepreneurial endeavour and leadership (Goleman 2011, Gibb 2012, Sarasvathy 2010). Gardner (2006) discuss the significance of self-awareness and the notion of multiple intelligences that connect with the idea of intelligence, rather than being a single entity, it is connected to a range of intelligences, each being connected with particular skills, thinking and strengths. The undergraduate focus groups were asked about the extent to which their degree studies had engaged them in a variety of activities and the level to which they had developed existing skills and acquired new ones in the following areas, selected from a total of eight intelligences focused on in the literature as being connected with entrepreneurial output:

Focus group discussions covered the topics (see above) of Self-Awareness (level of recognition of mind-set, behaviours and responses), Social Awareness (the impact that one can have on others and how others can be effectively managed or led), Linguistic Awareness (covering communication, persuasion and influence) and building capacity in the area of logic (covering project leadership and planning). All are here grouped under the term, emotional intelligence.

“I’ve done a number of pitches and presentations and every time I do them I feel I’m getting better and they give me a chance to obtain some good skills that are definitely useful – well more useful than writing essays or doing exams. I think I’m getting somewhere and can hear the difference and others can see it too.” (R10)

"It is important for me to know that I can do things, believe in myself and be able to communicate and tell others what I want to do... When we were in our business teams, I needed to get everyone on my side, to like me so that there were no arguments." (R6)

"Lectures don't do this (develop self-awareness and awareness of others), I have to do this to know. Work based learning helped..." (R18)

"...I've learnt that you have to follow up what you are writing down by being able to talk about it as well. (Can you provide an example of this in your course?) "When we were writing a business plan, we then had to pitch our idea to a panel of people who knew all about business and could assess us. This was really good and helped us to see how we could improve what we said and how we said it." (R10)

"Our last lecture was on emotional intelligence and we all found it dead (sic) interesting and it made sense to me. It is important to be able to work with others properly and you need to be able to get on and understand one another." (R7)

"I have to say it was those times when we were working on our business project and doing real business things that I learnt the best (sic). When we were properly trading

and had to sell and persuade customers to buy our products, we all felt that we'd learnt lots (sic) after that" (R6)

Self-confidence in the face of overwhelming opposition argue Gibb (2014), Goleman (2014) Gardner (2014) amongst others, is directly connected with entrepreneurial capacity. To be entrepreneurial is to possess confidence and ability with regard to self-awareness, awareness of others and the aptitude to be persuasive (Goleman 2014). But is it simply a case of being confident and self-aware? Gartner (1985) makes the case for entrepreneurship as a process whereby cognition and personal perceptions converge to bring about certain behaviours and actions.

In the main, the student focus group recognised that the ability to be skilled at communicating plans, ideas and managing people and processes was connected with self-awareness and a confidence that arises from a high level of self-understanding. All those contributing to the focus group discussion concurred that the academic environment and the more traditional delivery methods i.e. lecture theatre/ didactic lecture, tutorial or seminar set didn't lend themselves well towards cultivating core entrepreneurial abilities. This issue is reflected in a number of studies within the literature. Higgins & Elliot (2011) call for a move away from what they refer to as being the stagnant, static traditional classroom in favour of outcomes specifically derived from enactment of activity. But would the notion of a move away from theoretical, formal learning modes, signal a decline in the only recent acceptance of Entrepreneurship as being a bone fide academic field of study? Jones (2015) and Wisemen

(2014) propound a different type of learning environment, but don't differentiate between formal and pragmatic base, but rather an interdisciplinary approach. An approach that focuses on experiential learning and project based problem solving.

The student respondents were able to offer a number of reasons why they felt that the academic component of their studies helped them to think about how they may set goals in this area, but that it was opportunities to practice that provided the real prospects for development. Participants in the focus group felt that activities to develop self-confidence were significant in supporting an improved engagement in entrepreneurial activities and an understanding of building capacity in areas of communication, persuasion, social intelligence, managing others and logic.

4.4 Creativity / Innovation

When discussing the notion of creativity in connection with their Degree Programme, work commitments, assignments and deadlines very quickly became the main focus of attention for the respondents. It was the volume of work that was required to be undertaken and the number of written assignment submissions that, according to the respondents, stifled a creative approach and prevented the '*space for creativity*', an important component of entrepreneurial behaviour, according to Kickul & Fayole (2007).

"I don't get the time during the intense periods of study because I need to focus on my assignments and getting the grades." (Resp 29)

"We need to have more time for thinking and being creative, but we don't get time for anything." (Resp 15)

"I'd like the security of knowing precisely what I'm going to be doing when so that I am clear about how I can manage my work. (Resp 12)"

'Intense' Programme workload, rather than providing opportunities, appeared to be perceived by the majority of the group to act as barriers to creativity and opportunity pursuit. A small number of respondents noted that they preferred the security of knowing exactly what they would be doing and that clarity was preferred to experimentation. This offered a contrast to the findings and recommendations emanating from the literature review and notions of space for creative experimentation, an important component of entrepreneurship education (Kickul & Fayolle 2007, Gibb 2007, Foyelle 2009, Penaluna et al 2012).

Multitasking and multiple responsibility was viewed as smothering creativity and stifling the desire to come up with solutions to time management and/or workload balance. The creativity in thinking and acting that Timmons (1994) amongst others contends as being fundamental to entrepreneurial behaviour was viewed as a challenge by most of the focus group respondents. Final year student participants outlined the difficulty they had in balancing the requirement to undertake research as part of their undergraduate dissertation, but failed to recognise that the idea of 'creativity' may well have been considered as a topic for their dissertation and/or other assignments.

Faculty staff and external course contributors recognised the challenge in developing creative approaches and innovative thinking in students:

“I persistently look for ways that I can encourage and motivate towards creativity in my sessions. In that sense, designing entrepreneurial learning forces me to adopt creative teaching and learning methodologies.” (Resp B)

4.5 Fostering and Motivating Entrepreneurship

With reference to pedagogy and extra-curricular activities supporting an entrepreneurial culture at the University of Chester, the undergraduate student group cited a number of examples at the Faculty level, and though narrow, they felt that their awareness supported the notion that entrepreneurship endeavours were encouraged and motivated. It is particularly noteworthy that sessions primarily student driven, with students ‘practising’ or undertaking tasks linked to entrepreneurial activities, were favoured by the undergraduates in this study. A couple of respondents identified their preference for a clear pathway of entrepreneurial learning that provided them with the security of knowing how they would be able to plan and manage their time to combine studies with other activities.

“I enjoyed working in teams like when we used the business game (business simulation package) we all felt like we were actually in control of our own business. I liked that, we all did.” (Resp 21)

“Yes, I can see that my Programme has loads (sic) of practical assessments that I can understand are designed to test my ability to ‘do’ things that would be useful for setting up a business, but I don’t think that’s what I want to do yet. I just want to follow a clear study path so that I can see and part time work around my studies” (Resp 11)

“I’ve learnt the most from group work and working as a team. It is working with others towards doing and building things that gives a feeling of how it is to run a business.”(Resp 15)

The connection between group activities and the ‘feeling’ of authentic learning is demonstrated in the student discussions and is also evident as a theme in practitioner data. In educator responses, peer learning is viewed as connecting students with a more authentic working environment, where learning to manage others is facilitated:

“...when they’re set a group task and work together it helps the students to develop skills that can’t be shown or supported in my lectures.” (Resp N)

“It must be said that I take on less of a directing role and have more of a peripheral presence in the lesson and it helps the students to develop confidence, something that is unlikely when they’re sitting listening to information presented to them.” (Resp H)

“Setting group tasks means that students compare themselves to each other, respond and jostle for the lead and learn how to deal with the others. It is interesting to observe the dynamic between those who are experimental and those who prefer the ‘security blanket’ of tutor support and group leader” (Resp E)

Responses in external speakers espoused students working together towards problem solving, and was interestingly compared to recruitment exercises utilised in the selection process:

“Giving students a task to work on together means that you can view their responses not just to the task but the process and to others. You can assess a number of skills through the working together... we use it to support company recruitment.” (Resp B2)

“...team work, a great way to get students to understand the power of persuasion and good communication skills. I’m a fan of group exercises to see new employee potential.” (Resp E5)

“I found that it was giving the class a problem to solve in groups, a problem that was real, that had really happened, was the key to getting all the class involved.” (Resp A1)

The connection between working with others towards entrepreneurial outputs is reflected in the data emanating from both guest speakers and student accounts:

"...it is important that business people of tomorrow, young people learn how to do business with others and that isn't about writing in a notebook, it is about getting out there and doing your stuff, business stuff." (Resp A1)

"I like the buzz around the pitches and how people talk about their ideas to each other. A lot of support from our friends in class and the tutor is given towards the ideas we come up with...some of them that aren't so good, can be made better" (R6)

"I haven't entered any of the competitions that have been on offer, but Lauren has and she was given support to progress her plan and idea, so I know it's (support?) there."(R29)

"One of my modules is about managing new business ventures and it's given me an insight, gave everyone a view of what it is like to get a business going and manage different parts through using a simulated virtual business." (R4)

"SimVenture, a business game we did, was good to do it together and it helped me to learn."

(R2)

With regard to evidence of an institutional culture towards entrepreneurship the focus group provided limited examples of their awareness:

"I attended a boot camp at the Riverside Innovation Centre, if I had a business idea, I know I could access support from there as they have spaces and advisors." (R7)

"I went to a meeting of the Student Enterprise Society and they had a speaker, it was good, but I have only been to one," (R19)

"I've signed up for a boot camp session, but then I realised it was during Student Development Week when I go home." (R25)

"I've seen some stories on the University site and read some articles in the student magazine about the Student Society and the guy who set up his own sports coaching business." (R25)

Confidence was a topic touched on midway through the discussion session, with the students present identifying that entrepreneurs:

"...usually have lots of confidence and can be quite arrogant..." (R30)

A number of theorists cite the importance of ensemble practice in the cultivation of entrepreneurial behaviours and mind-sets. Cope and Watts (2008) outline the importance of ensemble practice and action oriented learning that is followed up by critical reflection.

Opportunity recognition, rates lowest in student perception of being a feature of the Programme and in relation to confidence levels connected to practice and application surrounding opportunity recognition. It is demonstrated in the data that recognising opportunity is not perceived by the respondents as being an area that they have developed significantly in.

Emotional intelligence is recognised as featuring significantly in Programme content, but is associated with lower levels of confidence amongst the respondent undergraduate, although they do feel they've acquired learning in that area and have applied learning related to the key constituents.

4.6 Chapter Summary

This chapter has provided a comprehensive analysis of the data emanating from the interviews and focus groups that formed the methodology for collection in relation to this work. This key data is organised into emerging themes that correlate with the outputs of the research. Perspectives on the research methodology, data collection and method of analysis is discussed and reviewed towards the end of this chapter.

The next chapter provides comprehensive discussion of the findings as they related to this study and the themes identified and discussed here.

Topic	Coverage
Presentation of the analysis	The data emanating from the research is examined.
Organisation of the information	Information that correlates with the data analysis is organised.
Discussion of process	Process is reviewed and discussed.

Chapter 5 Discussion of the Findings

This section of the thesis will consider the findings emanating from the study, including a synopsis of what they indicate with regard to impact and future application in the Higher Education environment. This chapter will discuss and respond to the various findings emanating from the data. The findings are based on the research conducted with the three specific groups of respondents as outlined in Chapter 3, each of whom are perceived as critical stakeholders in the development of entrepreneurial student behaviours and an entrepreneurial culture at University of Chester.

5.1 Developing an Ecosystem: Embedding Entrepreneurship Education

The most pressing finding emerging from the study demonstrates variances in the extent to which the entrepreneurship agenda is embedded within the curriculum of different Programmes at the University of Chester. The challenge of determining, defining and then shaping a contextualised, institutional methodology of entrepreneurship that reflects a collaborative approach between stakeholders; academics, industry leaders and undergraduates is indicated by the varied responses to what stakeholders view entrepreneurship education to be. An example of this is provided in the data emanating from the external speakers' interviews where the consensus was that entrepreneurship higher education Programmes should have as their main concern the initiating of new ventures. On the other hand the data from entrepreneurship educators demonstrated a more holistic view

related to a behaviourist perspective. Staff respondents employed in the teaching of students talked of ensuring that students saw self-employment as a real option post-graduation, and that they were equipped with the skills that supported that made this a real option for them.

Perhaps as a consequence of the lack of a unified, clearly defined institutional reference point for entrepreneurship education, and what it constitutes; the data indicates that the design, implementation and embedding of entrepreneurship pedagogy across the institution requires a more consolidated approach. Participant responses in undergraduate focus groups, demonstrated that different disciplines delivered diverse student learning when it came to entrepreneurship. The impact of this is, according to the data, undergraduates have different experiences and as a consequence resources and opportunities are varied and have mixed results.

5.2 Pedagogy

What is clear from this study and in particular the undergraduate focus groups, is the notion that intrinsic motivation and enthusiasm are critical for Entrepreneurship Education. This is true of both student and facilitator. The desire to engage and the commitment to take responsibility and ownership for one's learning is fuelled by the educator delivering dynamic learning opportunities. The student interviews and educators' responses recorded for this study correlate with the literature (Matlay 2009, Cope 2004, Gibb 2007) and identify that fostering entrepreneurial mind-sets in students requires them to be engaged in learning through doing; learning that is predominantly action focused. Learning through experimentation, practice, feedback, response building and reflection. The pedagogical content of learning associated with entrepreneurial endeavour needs to reflect this action

orientated approach. Respondents talked about the application of classroom based learning in real situations, the opportunity to transform formal learning into practice and therefore knowledge and skills. This is reflected in the literature with Deakins asserting:

‘We do not understand how entrepreneurs learn, yet it is accepted that there is a learning experience from merely establishing a new venture...Entrepreneurship involves a learning process, an ability to cope with problems and to learn from those problems...’ (Deakins, 1999. P21)

Both the research and the literature connected with this study demonstrate that entrepreneurship educators focusing on, and charged with, developing ‘entrepreneurial behaviours and mind-sets’ in undergraduates face a range of significant challenges. At the forefront of these challenges are those that emanate from the Higher Education system itself, internal and external factors that constrain the creativity of design, delivery and assessment. Formulating integrated contextualised teaching and learning strategy and pedagogy that is aligned with learning outcomes of both Module and Programme, is reliant upon designing effective interdisciplinary pedagogic content and the selection of appropriate delivery methodologies to equip their students with entrepreneurial capacities that are relevant at a personal and organisational level. Crucial to this entrepreneurial behaviour and mind-set development is the opportunity to experiment in experiential learning. An emerging challenge therefore for entrepreneurial educationalists is the requirement for learner focused pedagogy that addresses key personal, business and societal demands. This necessitates a degree of flexibility and experimentation, an approach that is peppered with risk in a league table climate. The findings of this study indicate that this approach in an entrepreneurship context, is crucial for behavioural change and mind-set development in undergraduates

As previously demonstrated in this work, entrepreneurship education has as its objective the equipping of students with skills and capacities that are pertinent in a range of environments including both business and personal contexts: new venture start-up, decision making, leadership, management, project design and emotional intelligence. Therefore learning outcomes that are linked with an enhanced facility to be action focused and to take appropriate action, to respond in a creative way to opportunity harvesting, enhanced awareness of opportunities, resilience and tolerance, particularly in relation to risk taking should be a central feature of the teaching and learning. Such skills and behaviours, the literature and research data demonstrate, cannot be fostered through a lecture or lecturer centric based approach. The research undertaken in this study, backed up by the literature, demonstrates that pedagogical strategy related to entrepreneurship is most effective when providing undergraduate students with an opportunity to apply learning in a pragmatic sense in a pertinent environment. Rather than primarily focus on knowledge acquisition within a formal and universal framework that relies on recall through traditional academic assessment as in essay examination, support undergraduate to co-create both learning and assessment. Conventional delivery reflects traditional academic assessment that emphasises the theoretical concerns of learning 'about' rather than equipping 'for' entrepreneurial endeavour. A number of published studies, particularly Gibb (2002) Rae (2007) argue that conventional pedagogy does not respond to the needs and requirements of an entrepreneurial landscape. The literature (Gibb 2002, Hannon 2009, Rae 2007) calls for a broader context than that of the Business School and makes calls for a strong emphasis on the entrepreneurial mind-set through the creation of empathy via experiential learning.

It therefore follows that the mechanism for fostering entrepreneurial thought, empathy and action amongst undergraduates, should be one that reflects a less conventional approach. Price (2005) asserts that offering students an integrated, enterprise experience will build knowledge, attitude and skills and expose undergraduates to 'an entrepreneurial experience'; what it is like to behave entrepreneurially, be entrepreneurial, whilst exposing the student to the life world of the entrepreneur (Gibb, 2002, Cope and Pittaway, 2007). Indeed the data in this study records that students connect a value with learning that focuses on their capacity to 'do'. Undergraduate students interviewed for this study, associated value with assessed pragmatic, action orientated entrepreneurial output over written assignments that tested the ability to retain information.

The assessment of learning, as demonstrated in this study, needs to be reviewed in the light of the Entrepreneurship Agenda and should adopt as its focus an action oriented approach to reflect:

- Metrics of performance as used in the workplace in say PDRs for example
- Business assessment as used in a structured, measured and strategized approach reflected in the Balanced Scorecard approach to business performance
- Rely less on formal academic measurement of learning outcomes to assess action orientated pragmatic and entrepreneurial capacity development.

The table below indicates the practice that should be modified and an indication as to how, together with the expected impact of application.

Table 11 Findings emanating from the data relating to pedagogy

CURRENT UoC PRACTICE:	MODIFIED PRACTICE:	IMPACT
Individual Modular Approach	Embedded, horizontally, diagonally and vertically integrated, sustained, approach.	Rather than a singular module taking as its focus entrepreneurial endeavour, all modules offer embedded entrepreneurial outcomes.
Lecture	Real World experiential learning	Opportunities to practice, do, perform and experiment.
Case study	Live Business Challenges	Authentic business problem solving towards building experience and designing solutions
Classroom focused teaching	Business/work related learning	Experience building, emotional intelligence development
Teaching	Facilitation	Leadership skills development, student focused knowledge and skills building opportunity towards understanding the impact of certain actions, understand failure and the qualities of resilience.
Tried and Tested Teaching	Unplanned learning	Learning to manage the unexpected challenge, the unanticipated outcome.
Security and Clarity	Planned, timetabled structure for learning and learning outcomes that identify all entrepreneurial output.	A structure that permits anticipation of learning that charts progression and makes provision for knowledge of where students are in the entrepreneurial journey and assignments that recognises and assesses entrepreneurial endeavour.

5.3 Supporting Capacity Building

A number of staff respondents reflected that the Institutional culture did not fully support those responsible for delivering on the entrepreneurship agenda. The fostering of creative

and innovative approaches to learning required space and time for exploration. In addition it was felt by some that a culture that valued and encouraged experimentation with permitted a certain level of failure in the pursuit of innovative practise. A less risk averse environment that embodies change and provides support for initiatives that reflect the characteristics of entrepreneurship that that it expects its student population to engage with was called for.

The findings emanating from staff interviews reflect similar thinking to the students. in so far as those responsible for teaching and supporting entrepreneurship and fostering entrepreneurial mind-sets felt that they needed more in the way of educator development towards developing more action focused learning activities so that students could understand how to develop both intrinsic and extrinsic motivation. This support ranged from physical support to financial support, with backing for student ventures could be achieved through pitching and competitive activities connected with the Programme.

Senior University Teaching Fellows who already form part of an existing university network charged with pedagogic progress and innovation could forge a path towards embedding entrepreneurship in all disciplines, in all Faculties at all levels. Research Fellows could form a core part of an 'entrepreneurial institutional eco-system' that seeks to implement and embed up to the minute entrepreneurial thinking in co-created pedagogic design of content, contextualised delivery methodology and assessment of performance of and responses to entrepreneurial endeavour.

5.3.1 Simulation Software

The findings from interviews with student and staff respondents that had engaged with the business simulation software as part of the entrepreneurship programme was conclusive. It was felt by the majority of those engaging with the package that it supported an appreciation of the nature and capacity of the role of an entrepreneur. Many students discussed the extent to which they were able to 'experience' what it was like to run a business, with others describing the 'insight' they had gained. For some, engagement with the software brought about the realisation that they weren't as equipped to start a new venture as they had initially thought, prior to engaging in the learning opportunity. It should be noted that for a small number of students using the simulation technology also served to provide confirmation that for the time being at least, starting and running a business wasn't for them, but this is, for the purposes of the study, constituted a learning outcome. An aspect of the learning that was reflected in the focus group discussion was that the business simulation effectively took them through the 'experience' of new business creation. In essence, the software permitted a framing and a compacting of the start-up process thereby providing the students with a broad experiential period of exposure to business initiation and the trajectory of creation. The level of student engagement was demonstrated in the research by those charged with facilitating the learning and the ensuing unwillingness of the students to exit the classroom at the end of the session.

The responses from the students reveal that challenges presented by the simulation software, immersed the users in entrepreneurial situations within the classroom environment that they hadn't experienced in other lectures or seminars. The simulation package played an

important role in getting the students to operate effectively in situations of uncertainty and under conditions whereby decisions have to be taken and risks must be calculated. The literature discussed the challenges in connection with teaching approaches in a Higher Education context to risk and uncertainty as they rely upon emotional awareness and recognition of the factors that impact on entrepreneurial behaviours. If undergraduates have no experience of actively engaging in business building, this awareness is unlikely to develop. The simulation software provides experience of business initiation, managing and sustaining a business as well as the opportunity to experience decision making and dealing with risk. Although some of the student respondents admit to finding engaging with the technology 'very different' and the notion that it was 'user and response driven' initially daunting they were unanimous in that they perceived a benefit from taking ownership of their learning in a 'new way'. The results demonstrate that the students felt that the learning outcomes would serve to contribute to future employability after graduating.

Educators reported that the overall benefits of engaging students in an innovative approach using business simulation software to facilitate a student driven opportunity, served not only to create a sense of engagement and empowerment for the student, but supported the exploration of elements of entrepreneurship that were challenging to incorporate into traditional teaching sessions. Whilst the data from educators reflected positively in relation to utilising simulation software, the assessment of such activity proved to be a challenge, with most opting for a portfolio or reflective commentary. A lack of fit between what can be referred to as practical, student generated output and formal, traditional, academic assessment practice and procedure emanates from the data.

5.3.2 Young Enterprise

The findings in this study demonstrate that the ability for business start-up activities to be undertaken in conjunction with Young Enterprise, engender in the students feelings of autonomy and responsibility. Students who took the opportunity to engage fully with the Young Enterprise agenda, identified it as an extremely positive, 'authentic' learning experience. The responses suggest that students had the feeling of developing a real understanding of new venture creation. An entrepreneurial identity and decision making confidence appears to have emerged during the Young Enterprise work which is directly linked to the level of autonomy afforded to the undergraduates throughout the sessions.

Understanding the 'how' in relation to being entrepreneurial can only be secured, argue Minniti and Bygrave (2001) through actively engaging in a process of "learning by doing" via directly observing. Engaging in the Young Enterprise Programme as part of a degree course was viewed by the student respondents as an experiential journey throughout which they were taking charge of their development. For a number of the respondents of this study, a successful outcome, in terms of a sustainable new venture had not been secured, but this did not prevent them from valuing the experiential learning they had undertaken. This is reflected in the data with undergraduate identifying work related experiential learning activities as being valuable and engaging. These findings relate to Sarasvathy's notion of effectuation (2008) in that undergraduates are in essence required to 'go' rather than consider their preparedness (Sarasvathy and Dew, 2005). Student participation in Young Enterprise (YE) permits them an exploration of goals that they may only set following exploration and entrepreneurial experimentation in experiential activities such as the YE

Project. Undergraduate entrepreneurial learning utilising the YE methodology reflects the elements of effectuation as articulated in the Literature Review, in particular Element 5, where experience goes on to form theory that has been borne out of student experience. (Sarasvathy and Dew, 2005)

The findings indicate a focus on learning that acknowledges existing skills and supports the recognition of how these skills and capacities may be developed is important and assists in an understanding of self and increased self-awareness. Key to this is one's understanding of personal strengths and weaknesses; personal development requirements; an understanding of one's passion and motivations and how they can be channelled. What is evidenced in the respondents' narratives is that normative causal, experiential learning provides undergraduates with encounters with different stimuli and permits a reframing of lens and context. Students discuss in the data how engaging with experiential learning has supported a realignment of their aspirations and potential. It is the creative engagement with business opportunities; understanding resources and how to develop and utilise entrepreneurial networks; cultivate relationships; experience leading and managing in business; implement human resource practises; business and personal financial monitoring and control that supports learning that cannot, through formal methodologies, be delivered.

The literature, previous studies and the findings from this research indicate that visiting entrepreneurs and business leaders delivering activities in the learning environment bring a whole host of benefits and have a positive impact on the students, Miller et al. (2009) demonstrated that where invited speakers talked of the challenges they have faced and described their responses in an entrepreneurship session, the listening students were

stimulated rather than intimidated or scared by the speaker's experiences. Payne et al. (2003) were convinced that visiting speakers opened the minds of the students to a variety of perspectives that supported in a constructive, encouraging manner, altered attitudes and positive perceptions. Schmidt et al. (2008) observed that guest speakers from the world of business conveyed their experiential journeys in a way that students could value and appreciate, but from a pragmatic perspective, could apply to the real business environment. There are a number of studies that demonstrate that relationships established with entrepreneurs operating in the business community are a significant factor in cultivating a 'vibrancy' and energy in entrepreneurship pedagogy. (Chan & Anderson, 1994; Brindley & Ritchie, 2000). Not surprisingly, many successful entrepreneurs are also regarded as skilled raconteurs and storytellers, factors indicative of the importance of communication to entrepreneurial propensity. Smith (2008). Within this study however, the data indicates that there does need to be a correlation between the Programme perspective, the planned learning and assessment methodology. It is apparent from the interview responses that students need to be able to make the connection between their capacity to undertake entrepreneurial endeavour and the narratives of experience they are presented with by visiting speakers and entrepreneurs. This connects to the notion of efficacy as referred to in the literature (Bandura, 1986; Sarasvathy, 2008)

5.3.3 Student Centred Delivery

"Perhaps, not surprisingly, educators are confused as to what their role is in entrepreneurship education." Colin Jones (2001) p42

UK Government policy and output increasingly displays evidence of the essential nature of entrepreneurial endeavour. A good example of the store set by governments with regard to this was evidenced in a speech made by Cameron and broadcast by the BBC (2011):

"If you've been turning over a good idea for years - now is the time to make something of it. If you're working for a big firm but you know you could do a better job on your own - now is the time to make that leap. If you've been dreaming about starting up the next great British brand - now is the time to make it happen."

Funding that is directed towards Universities reflects the pivotal role that Higher Education and entrepreneurship educators play in the capacity building, entrepreneurial process.

It became increasingly apparent during this research, that colleagues working in the field of entrepreneurship education recognise that changes must happen in the delivery methodologies. This is particularly true of the growth in internationalisation experienced in universities and therefore the changing student population undertaking entrepreneurship courses. The exploration conducted as part of this research determines that it is a considerable challenge to embed critical reflection and design and facilitate an action focused, entrepreneurship curriculum within an environment that reflects a traditional approach to Higher Education delivery methodologies. Whilst the literature contends that is a crucial part of entrepreneurship education in HE to be able to assess one's own entrepreneurial capacity and ability (Kavanagh, 2005), the data reveals that critical reflection is a problematic area for certain students, particularly international students and therefore requires explicit exposition. Yet entrepreneurship, from the data, is referred to as an area

that students should learn through practice rather than being taught. It is the 'teaching' of entrepreneurship that provoked most discussion in the interviewing process. At best facilitation, mentorship and coaching was deemed by educators to be most relevant in supporting undergraduates to learn through practice. Both educators and undergraduates were agreed that whilst learning should be action focused, support and facilitation for this 'different' learning methodology was important.

"I think this (entrepreneurship) requires a real sea change in the way we think about and deliver our two hour slots... We need to also facilitate meaningful entrepreneurial experiences for our students outside of the classroom." (Resp L)

"A movement away from what some of my colleagues refer to as 'traditional approaches' to Higher Education, needs to happen for this (entrepreneurship education) to be comprehensively embedded into our programmes." (Resp D)

.

"I need to know what it is I need to know. I see others involved in delivering entrepreneurship and the differences in what I do are stark... Lectures are a big part of what I do and the way I structure learning"

A significant proportion of the focus group discussion dealt with what the respondents felt was a distinct lack of training and preparation to deliver what they perceived as a 'different' curriculum adopting a 'different' delivery methodology. It should be noted here that (Gibb, 2002; Pittaway and Cope, 2007) recognise that entrepreneurship education encapsulates a broad variety of practices, themes, perspectives and delivery approaches: for, about, through

and embedded; content and shape of courses: family firms, entrepreneurship, failure, business/project planning, technology and business context.

In relation to the feedback from the academic staff facilitating student engagement with the simulation package was predicated on their ability to operate in a new role, that of facilitator. The staff interviewed felt that there were particular challenges involved in adopting this new facilitation style in the classroom.

"It required stepping back and allowing the students to get on, experiment, make their own mistakes and learn through those mistakes. It was very difficult to stop myself from wading in to prevent them from making mistakes and making hasty rash decisions. It was fairly frustrating to watch them without steering them towards deeper consideration of the issues, possible consequences of rapid decision making." (Resp M)

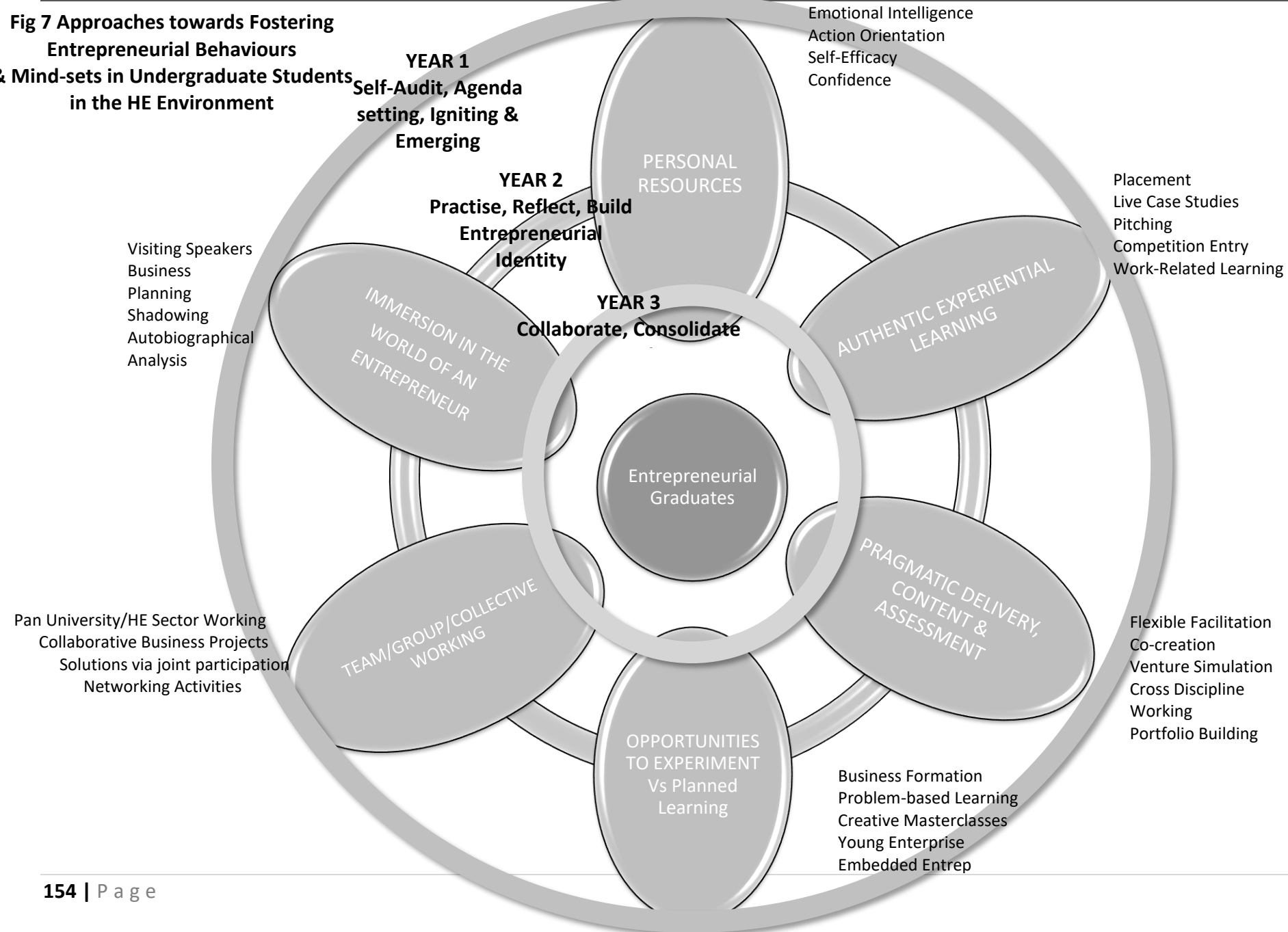
The differences in the role of the lecturer in a class engaging with business simulation was a theme running throughout the interview narratives with staff. Academic members of staff revealed they *felt uncomfortable with a feeling of being redundant*. It was those respondents newer to the Higher Education environment that felt more comfortable operating in the position of observer or in the position of business consultant. Most educators' responses demonstrated the perception of a different dynamic in an effective entrepreneurship session with the emphasis on a *more learning centric methodology*.

There is much in the way of support from this study and the literature that Universities can do much to foster entrepreneurial behaviours, but the opposing argument then is that

Universities must consider that they can also significantly constrain undergraduate entrepreneurship. To motivate the desirability (Bandura 1986) and feasibility (Gibb 2014) of entrepreneurship, Higher Education institutions need to offer a programme of practice designed to build confidence and motivation in the area of self-employment and entrepreneurship.

A reflection of the findings of this study and the contribution to informing new entrepreneurship education practice at the University of Chester are captured in the model (found below) and articulated in the narrative accompanying it. This model integrates findings from the literature and the research data to inform a contextualised methodology for fostering entrepreneurial behaviours in undergraduates at Chester.

Fig 7 Approaches towards Fostering Entrepreneurial Behaviours & Mind-sets in Undergraduate Students in the HE Environment



5.4 Emerging Themes and Discussion:

Immersing Students in Authentic Experiential Learning Activities is key to permitting students to explore their capacity to make things happen. The literature (Matlay 2009, Gibb 2012, Penaluna et al 2012, Hannon 2014) combined with an analysis of the responses provided by participants in this study, indicate that a practical approach providing authenticity and 'real world' experiences towards preparing students for undertaking entrepreneurial activity, effectively engages students. Undergraduate respondents talk about understanding how their entrepreneurship studies apply in reality. The opportunity to apply theoretical learning in a practical setting is crucial to experimentation and confidence building.

Pragmatic delivery, content and assessment of learning is important for the entrepreneurship student to understand how their learning can be applied in multiple situations with practical emphasis. This approach establishes the value of the learning. By including live problem-based teaching and live business case studies presented by businesses looking for entrepreneurial solutions.

Students should be provided with opportunities to experiment with business simulation business packages in a risk free environment to permit an exploration of initiating a new venture.

The practise of entrepreneurial group endeavour extends the opportunity for undergraduates to become familiar with the challenges of working with others towards business creation or project management.

In order to understand the life world of the entrepreneur, sessions that allow students to engage with entrepreneurs through workshops, masterclasses or interviews with business owners should be

facilitated. This strategy support insight and knowledge in relation to the entrepreneurial journey, opportunity creation, persistence and resilience, creativity and tolerance of risk.

Emerging from the findings was a tension between the experimental nature of entrepreneurial endeavour and the desire of undergraduates to have scheduled, planned learning. What emerged from the respondent interviews was desire to have a certain amount of structure within their teaching and learning. The respondents articulated this by expressing a desire for 'clarity and security'. So whilst the literature acknowledge the messy and amorphous nature of entrepreneurship education and the important focus of student-centredness, with the majority of student respondents expressing the need to drive their own entrepreneurial endeavour forward, evident in the responses was the desire to participate in learning that was structured, planned and prepared for. Emerging from the research was evidence that undergraduates have an expectation of a planned, timetabled structured framework of delivery. Alain Foyelle (2009) argues that it is only undergraduates with enquiring minds who are looking for more than a set of vocational parameters and guidelines from their course should study entrepreneurship. Yet the appeal of pursuing a mapped route through the entrepreneurial learning offered at Chester was expressed by a number of respondents. It is clear from the literature that control is related to knowing what is going to happen next, but entrepreneurs often work in unpredictable environments that are inherently uncontrollable. Thus, Jones (2007) advocates the need for students to know how they would react in unpredictable situations. The finding from this case study indicate that some undergraduates at Chester appear to fear unpredictability and moreover favour a structured approach to entrepreneurship education. It is this marked contrast between literature and institutional context that demonstrates the gap in the literature and the importance for practitioners on recognising the widely different perspectives on entrepreneurship education and what THEIR students need this has been integrated within the model in the

The first theoretical frame or lens within the literature considers the individual and is connected to the notion of entrepreneurship as a set of human characteristics, ways of

thinking (Foyelle, 2009) and being (Chell 2008), behaviours (Bandura, 1986; Ajzen, 1991; Sarasvathy, 2001) and responses (Gibb 2012), such as risk taking (Schumpeter, 1947; McClelland, 1961), resilience and willingness to face uncertainty (Kihlstrom and Laffont, 1979), ability to exploit and discover opportunity (Shane & Ventaktaram 2000; Rae 2007).

This is reflected in the model as the personal resources that the undergraduate brings to the higher education environment that are developed as a result of the combined components of: entrepreneurship (action orientation), education (pedagogy) and the environment.

The second element within the literature emphasises a range of pedagogical, environmental, market and economic influences that impact upon, motivate and support entrepreneurial endeavour (Gibb, 2012; Harper, 1996)

This is included in the model above through the inclusion of experimental and experiential opportunities to engage with external economic influences and entrepreneurial practise.

The third approach is connected to the ways in which the institution and its agencies function and lays emphasis on cultural and societal values. (Eckhardt and Shane 2003). Given that entrepreneurial activity does not occur in isolation and is not, on its own merely a product of a particular environment, approach or in response to certain changes. This is emphasised in the model by the inclusion of collaboration, both from an internal and external perspective.

5.5 Chapter Summary

This section has presented a detailed discussion of the findings as they relate to this D.Prof research study. An overview of the results, their implications in regard to pedagogical

practice; why and how are discussed and reviewed. A consideration of the literature is correlated with the findings of the study and applied to the implications for entrepreneurship education at University of Chester.

In the final section of the chapter, a blueprint model, based on an integration of the literature findings and results emanating from the research is presented and discussed.

The next chapter will apply the findings to form recommendations for the practice of entrepreneurship education at the University of Chester or similar institutions. Key contributions to pedagogical practice will be reviewed and the study concluded.

Topic	Coverage
Detailed discussion of findings	Overview of the results of the study and what the finding are.
Findings related to Pedagogy	The implications of pedagogical findings on practice.
Findings related to Literature	Consideration of how the findings relate to the literature reviewed for this study.
Introduction of model	Emergence of blueprint model connected with research results and findings

Chapter 6 Conclusion and Recommendations

In pursuit of knowledge, every day something is acquired; In pursuit of wisdom, every day something is dropped.

Lao Tzu, cited in Weick (2007) p219

This Chapter, as stated in aim number seven of this thesis, will seek to rationalise the findings emerging from this research and make recommendations towards the process of making provision for their application at University of Chester. In total there are six recommendations, correlating with the Blueprint Model that incorporates the findings emanating from both the literature and respondent data in this study.

6.1 Introduction

So in the adopting of new ways of doing or being, old ways have to be relinquished. In the Higher Education setting this is not so easy, particularly at University of Chester where traditions form the backbone of policies and procedures, delivery methodologies and course content. In the league table focused world of Higher Education, risk aversion is understandable, but change is inevitable for survival. This study has demonstrated it is critical that students are equipped with the mind-set, skills and knowledge to successfully prepare for uncertainty and a resilient approach to entrepreneurial endeavour. In so doing a pedagogic approach that: motivates self-awareness to recognise their own strengths and weaknesses is needed in order to make opportunities.

The findings related to this study suggest that particular action orientated pedagogic content and delivery methodologies can cultivate opportunities and create the context for higher-level entrepreneurial learning outcomes. It is this critical or higher-level learning, contends Cope (2003) that has the power to bring about “fundamental change” by transforming the

“underlying assumptions and values that guide one’s actions” (Mezirow, 1991) and creates the conditions for a shift in mind-set. (Applebaum and Goransson, 1997).

What has become more evident during the course of this study is that employability is of critical concern, not simply to various governments, but to all stakeholders in the Higher Education process. An action orientated entrepreneurial mind-set is perceived by the educators participating in this research, as being key to the employability agenda as well as being of crucial value in a broader personal context. What is evident from the findings emanating out of this study is that the expectations of undergraduate students’ are shifting and these expectations include changes in:

Table 12: Undergraduate Expectations

PEDAGOGICAL DOMAIN	MODIFIED PRACTICE BASED ON RESEARCH FINDINGS
ATTITUDE	Predominantly action orientated activities that are student driven, centred and focused with greater learner responsibility. Learning led by a multifunctional practitioner adopting different roles in connection with context. Teaching, fostering, facilitation, learning seen as active practice that is inherent with the emergence and identity of the undergraduate's entrepreneurial personality; relationship with others and learning itself.
KNOWLEDGE	Assessment of learning through critically reflective analysis and evaluative appraisal for personal development planning and to optimise learning impact and validate entrepreneurial capabilities. Outputs and outcomes are more tangible in relation to entrepreneurial endeavour, but continue to be measurable with the governance of pedagogic practices and processes remaining with the institution. The literature argues for an academic measurement of practical outcomes (Hannon 2009), but this research suggests that students 'work-related entrepreneurial outputs' cannot be measure using the usual academic scale. Practical performance criteria is required to understand learning acquired through pragmatic entrepreneurial endeavour.
PRACTICAL	Knowing and doing need to be intrinsically connected in order to build resilience in times of uncertainty and unpredictable conditions. The combination of undertaking experiential learning should be coupled with a practical and academic framework of support to strengthen the learning. Student respondents expressed the desire to engage in a structured, secure schedule of study, but the literature (Penaluna et al., 2012) advocates a freedom and significant student centredness that was not found in the data from this research. Assessment should reflect the pragmatic aspect of this learning rather than emphasising the academic articulation of experience.

Respondents contributing to this research agreed that the inclusion of generic or 'softer' skills such as learning to learn, team building and a focus on developing communication proficiency were important features of a Higher Education Entrepreneurship Programme.

The pursuit of self-actualisation (Maslow, 1962) or the route to effectuation (Read et al., 2011) and the practise of maximising one's potential through self-drive, self-awareness, social intelligence and creativity in a variety of contexts, requires that entrepreneurship education embraces pedagogic techniques that extend beyond traditional HE single discipline content, classroom or lecture theatre environments. The findings emanating from this work indicate that a Higher Educational Programme should make provision for support and development towards entrepreneurial knowledge, thinking and action in correlation with Bloom's Taxonomy, relevant to business, personal or social application. Moreover, what emerges from the narrative provided by the respondents is the desire to 'feel' and be recognised as being entrepreneurial through the practice of entrepreneurship. This research indicates that effective entrepreneurial pedagogy is more likely to be teaching and learning that fosters and nurtures what it is like to be an entrepreneur, to be entrepreneurial and to be immersed in the practice of entrepreneurial endeavour. This very much correlates with the literature and theoretical perspectives connected with Bloom's taxonomy that connects feeling and thinking with activity focused learning. By far the most detailed narratives of the entrepreneurial learning experience came from student respondents who had experienced setting up a business or engaged in activity associated with taking responsibility for decision making and business action. This pedagogic technique involves not just simply bringing entrepreneurs into the higher education environment, but exposing undergraduates to the life world of entrepreneurs, young entrepreneurs in particular. Identification and empathy is mentioned in the data by external respondents as being key to providing insight in regard to thinking and feeling like an entrepreneur and connecting at an emotional level. The literature similarly reflects this notion (Jones & Matlay 2011, Kirby, 2004). Marton and Saljo (1984) outline two distinctive levels of and approaches to learning; that of surface and deep learning. According

to Craik and Lockhart (1982) learning processed at a deep level is more likely to be memorable and applied than shallow learning. Ramsden (2004) and Cherney (2008) argue that deeper levels and approaches in teaching and learning are linked with engagement on an emotional level and quality learning outcomes. Cherney (2008) goes on to suggest that resources reflecting active learning have greater impact on memory because of the 'doing' and aspect. If, as Ramsden (2004) asserts, the primary goal of Higher Education is to foster learning that is deep and lasting so that undergraduates transform their perception of the world, then effective entrepreneurship pedagogy is critical. Conversely, surface learning is associated with low level cognitive skills and activities and focuses on memorising information as opposed to engagement in creative, deeper learning of an entrepreneurial nature. Both the data and the literature demonstrate that delivery methodology, course content and modes of assessment can and should support a deep approach to teaching and learning commensurate with working conceptually.

Educationalist respondents in this study felt that for pedagogy to have any impact in the area of securing entrepreneurial outcomes and outputs, courses should include exposure to experiential learning. Sound responses and argument is made in this study by all stakeholders that experiential learning opportunities generate prospects for students to build a frame of reference, gain exposure to business networks, gain increased knowledge of self and demonstrate an action orientation. What emerges from the data is a picture of change within the role of the academic within an Entrepreneurship Programme. The academic as chief controller and purveyor of knowledge is a disappearing concept, with entrepreneurship educators operating as facilitators within a student centred environment. This change is

acknowledged by respondents within the data, together with an expression of nervousness at the transferral of control to student focused activities with lecturers adopting more of a facilitation role. The notion of students playing a key role in the construction of pedagogy and acquisition of their learning reflects an entrepreneurial dimension to the Higher Education environment. Undergraduates co-creating or co-constructing Programme content is a vital step towards what Sarasvathy (2014) refers to as effectuation.

This mode of Programme delivery inevitably will create significant challenges for both practitioners and institutions, as the notion of experimentation and change that is incremental tends to require a tolerance of risk. Strategies involving learning that takes place outside of the learning environment is less controllable and apt to unpredictability and therefore will always reflect an element of risk. Risk is not a concept that is easy to accommodate within Higher Education, particularly smaller institutions like University of Chester whose dependency upon league table position is of vital concern is the sustaining of core business. The evidence from both this research and the literature review suggests that student-led, co-created, experiential learning is of high value in encouraging deep learning (Biggs and Tang, 2007). External business experts, leaders and employers are vital for providing work based learning opportunities, but so too are they pivotal in delivering internal masterclasses. The data demonstrates narratives that refer to the differences between pragmatic and academic learning, with learning most readily attached with the action sessions with visiting business specialists. External business stake holders include in their responses to this research the importance that they associate with providing 'authentic' learning connected with their entrepreneurial journey. Involving employers in delivery and

assessment of undergraduate entrepreneurial projects develops a mutual understanding of student capacity and, for the undergraduates, an awareness of the requirements of business landscape and a general enhancement of employability.

The recommendations and responses to the findings of this research are based around the literature and in particular the notion of The Effectuation Cycle, a concept emanating from the work of psychologist Sarasvathy (2014) in which the notion of a set of heuristics is proffered as a way of thinking about and undertaking entrepreneurial endeavour towards establishing economic activity. Respondents contributing to this Doctoral research felt the issue of confidence to act was a significant factor in supporting a successful outcome. Practice together with space to experiment, according to Rae (2007), supports the confidence to act. The symbiotic relationship between acting and understanding why one acted in a certain way, builds and instils confidence connected with entrepreneurial outputs, which only action orientated pedagogy can promote.

The model of pedagogy that is proposed as a result of this study reflects the action orientated approach to entrepreneurship education evident in the theoretical approaches outlined previously in this chapter and acknowledges the heuristics (problem solving approach) and experiential learning that underpins the speculative, self-led actions that are taken to secure a desired outcome. The findings demonstrate that building effective entrepreneurship education should embed opportunities to practice and experiment towards building knowledge of self and confidence in the decision making processes involved. Actions emanating from the application of decisions and periods of critical, analytical reflection should punctuate pedagogy associated with entrepreneurship education. The understanding

of why a particular imperative was pursued and the impact that following a certain route had on the overall output, offers a way of thinking and reflecting upon actions. In the adoption of new strategies and methodologies, so do we have to let go of those practises that are no longer useful, relevant or effective. This may be referred to as the 'crackerjack' theory after the cabbage game spawned by the popular children's programme that ran from the 50's through to the 80's. It is through the divesting of that which has become less relevant to today's fast paced global economy that entrepreneurship educators can acquire a new, germane skill set, thereby essentially replicating the creative destruction that Schumpeter refers to. Furthermore provision that delivers added value and increased opportunity to undergraduates operate predominant pull factors for potential students in the highly competitive market in which the University of Chester operates.

The notion of the Triple Helix model espoused in recent literature and conferences (NCEE 2014 & 2015) connects innovation and economic impact and development with a greater emphasis on the role of universities and the way they interact with business and governments. Teaching, internal stakeholders, research and engagement with business and society beyond the walls of academia are crucial towards creating a synergistic dynamic towards the cultivation of a Higher Education environment that fosters entrepreneurial behaviours.

This thesis has presented research that demonstrates particular delivery methodologies, pedagogic techniques and assessment typologies that are situated in and connect to real-world business issues present positive pedagogical examples. The research demonstrates that the utilisation of such authentic examples serves to appeal to the students with the outcome

that they are more likely to engage and this increased participation will result in an increase in positive entrepreneurial learning outcomes.

6.2 Recommendations and Application of Findings

“...We need to both widen and deepen our understanding of how ...new technologies and pedagogical tools can be an integral part of the way Higher Education is delivered...”

European Commission Report to the European Commission (2014): New modes of learning and teaching in Higher Education

The University of Chester appeals to numbers of international students for reasons relating to the City's history, Higher Educational convention and firmly established traditions of lecture programmes and tutorials. International students have a traditional view of a UK university and what it offers and this becomes part of the expected norm for such students. Entrepreneurship education requires responding to challenges in innovative ways, the literature and research data endorse experimentation and a 'new way' of teaching that reflects an entrepreneurial approach in order to reflect the very characteristics of mind-set and behaviours that are being fostered (Gibb, 2012; Cope 2008) there is a clear and pressing need in these times of uncertainty for entrepreneurial responses from institutional staff of all levels (Hannon, 2014; Foyelle, 2009; Matlay, 2009). Academic staff are called upon by their institutions to display entrepreneurial skills, knowledge and responses that were never previously prerequisites for pursuing a career within the world of academia (Gibb, 2012). Frank Knight (1921) suggests that the ways in which individuals deal with uncertainty, in

particular risk taking, is rewarded through profit. In applying this principal to the Higher Education or business environment in an intreprenurial mode, perhaps one can substitute the notion 'professional recognition' for the use of the term 'profit'. Knight (1921) argues that it is in an uncertain world that entrepreneurs take risks where risk relates to the distribution of outcomes through a combination of theoretical, experiential and statistical deduction and calculation (Kern 1988). In this sense, the function of entrepreneurial endeavour or entrepreneurship is to take calculated risk. Understanding the level of impact that success or failure would bring about is crucial to the risk taking process. In an environment such as University of Chester, where the gatekeepers of such levels of decision making and risk management tend to sit within the Senior Management Team, the calculation of risk by other, less senior academic members of staff is an extremely challenging exercise given their limited strategic overview and lack of any devolvement of managerial function.

The findings of this research have demonstrated how visiting business leaders delivering sessions provide positive role models for students. Visiting speakers are able to shed light in a very personal way, on practical experiences and stimulate productive discussion on topical issues, with different perspectives, motivating new ways of thinking. External contributors from the business world, it is demonstrated through this study, have the potential to stimulate student interest in the thinking, behaviour and responses that are the crux of entrepreneurial endeavour. In addition, visiting speakers can help to synthesise the theoretical element with the practical action orientated outputs of entrepreneurship. External speakers, the research demonstrates, can support the introduction of topics and

discussion that can evoke interest and enthusiasm, helping to breathe an air of authenticity into subject of discussion and induce life.

Given the value added to learning by engaging stakeholders in the delivery and facilitation of learning, it would seem to be prudent to employ this strategy across all elements of curriculum design and delivery.

A pragmatic hypothesis and one that is established as a result of studies undertaken in other entrepreneurship related research of the HE environment, is that the students' contribution to their programme and its curriculum is that of co-creators. Each student brings their experiences, values, observations and understandings to create a rich environment in which to nurture their entrepreneurial aspirations. The contention is that the engagement and investment in learning for entrepreneurship is greater given the practical nature of the assessment and the ways of thinking and acting that those students are being called upon to demonstrate. Therein, perhaps, lies some of the main challenges to introducing this genre of Programme; action orientated learning is labour and therefore financially intensive. In the same way that entrepreneurs explore creative activity, innovative behaviours and respond to opportunities, students are expected to engage in and essentially create ways forward and thereby their own journey through the programme. It is their responses that are deemed so essential towards understanding the tools, techniques and methodologies for developing teaching and learning strategies in this field and applying them at the University of Chester.

What follows is a series of recommendations for effectively developing an entrepreneurship education blueprint emanating from a convergence of the research and literature connected with this study. They have been categorised thus:

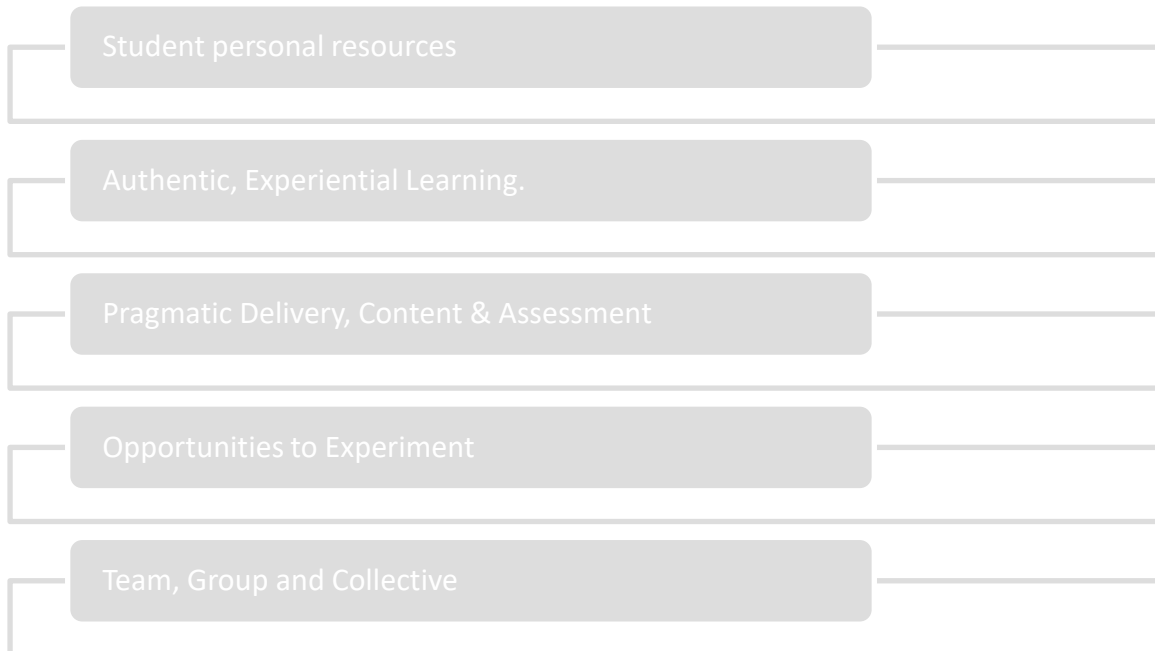


FIG 8 BLUEPRINT GROUPING OF POTENTIAL MODIFICATIONS RELATING TO FINDINGS Hancock, C. (2017)

6.2.1 Personal Resources

High quality interactive, student driven pedagogical methodologies that focus on undergraduate students not only as learners but also as a resource in their own learning journey motivates and fosters entrepreneurial behaviour, the research and literature suggest. Jones and Matlay (2011) emphasise the individual nature of the entrepreneurial journey and Cope and Watts (2000) posit the notion that effective entrepreneurship education requires that students develop into reflective practitioners. Critical, self-review and reflective practice is a personal practice that takes into account experiences inside and outside of the higher

education sphere. So does it necessitate the reframing of a student's learning experiences prior to attending university (Brookfield, 1995). The value of an individual student's experiences of learning, both formal and informal, have an impact on the attitude and behaviour of an undergraduate and therein lies the key to engagement in entrepreneurship education (Kolb 2014, Jones, 2006). Empowering students to identify, recognise and demonstrate prior experiential learning and connect it with undergraduate entrepreneurial activities puts the student at the heart of their learning, and gives them a responsibility towards developing core behaviours and a 'can do' mind-set. Jones (2010) outlines the inherent uniqueness of critical reflection, with Kolb suggesting that experiential learning is 'context specific'.

This study demonstrates that it should be recognised that students whether post or undergraduate, have existing skills and strengths. With regard to entrepreneurship teaching and learning, this is of crucial importance when designing curriculum and delivery methodology. A characteristic of all programmes at undergraduate level at Chester is the immutable curricula populated with fixed components of learning with overarching learning outcomes. Openings in the schedule should provide productive spaces for students to populate with their own entrepreneurial thoughts, responses and actions. It represents an annual academic challenge to map out an entrepreneurial learning journey for a new cohort that we know very little about. We learn about our students as we become familiar with their experiences, previous learning and understanding and there should be room in the schedule to reflect new knowledge and insight. The emerging business landscape, it can be argued, places greater emphasis on the individual to make their mark, whether in their own venture

or that of another employer. A space within academic programmes for practising self-reliance towards skills acquisition and needs analysis is therefore a positive move in this regard. Burgoyne and Hodgson (1983) recognise the importance of action focused learning, learning by doing or experiential learning which they discuss as leading to a gradual or tacit change in one's orientation or attitude. Marsick and Watkins (1990) argue that deep learning is experienced based, non-routine and tacit.

6.2.2 Authentic, Experiential Learning

"The essence of entrepreneurship education...must (be to) reflect reality"

Solomon, 2007, p. 174

This study demonstrates that immersing students in authentic experiential learning activities is vital in securing engagement and making provision for an exploration of entrepreneurial capacity. However, the notion of authenticity is based on events, occurrences and complex situations that would typically take place in a work related environment and therefore allow for practical application of competencies and knowledge that professionals or entrepreneurs would apply when they address comparable business situations. The literature and the data related to this study testify to the important benefits of such authentic learning activities (Gibb 2012, Jones 2007, Jones & Matlay 2011). Respondents record how motivated this makes them feel and the desire to engage and achieve through this methodology. A Business start-up

Cumming and Maxwell, 1999, note that authenticity is a subjective phenomenon and as such it is just as crucial that undergraduates perceive learning to be as authentic as educators do. It should be understood that in the context of Entrepreneurship Education, authenticity correlates 'real' entrepreneurship endeavour with pedagogic activity. Raffo et al, 2000 emphasise that learning is at its most effective and most likely to transform behaviours when it reflects authenticity. Whilst the term authenticity is rarely mentioned in the literature, although it is alighted on by Jones, 2007, the value of a real-life focus in EE is implicit (Kirby, 2004; Rae, 2007; Gibb, 2007; Cope, 2000).

As previously discussed, the literature demonstrates that innovative, action orientated pedagogy can be regarded as one of the important elements that assist students in acquiring explicit practical knowledge, it is not the only way of accumulating entrepreneurial 'know-how'. Skills connected to developing networking skills and human capital work based experiential learning and business experience that focuses on developing work-related pragmatic skills, supports this area of learning. Providing opportunities for students to shadow entrepreneurs and business leaders, providing opportunities to 'test' classroom based learning acquisition by actual engagement in the business start-up process, offer action orientated experiential learning and the opportunity to ascertain feasibility and self-efficacy. Of the students interviewed for this research, only a small percentage had previous or current experience of start-up, yet a large proportion of the students participating in this study perceived experiential learning as being of great value in their learning journey. Students need to practice entrepreneurship, they're not simply learners, which is suggestive of a certain level of passivity, they are doers, action initiators, key elements of what it is to be entrepreneurial. It is, after all, not the examining or assessment of entrepreneurship

education that characterises learning acquisition, but the application, the undertaking, of the knowledge and information that has been acquired. One who 'Undertakes' was at the very heart of French economist Jean Baptiste-Say's early notion of an entrepreneur, and it is this idea of practising what it is to be entrepreneurial that generates knowledge, understanding, experience of being entrepreneurial.

6.2.3 Pragmatic Delivery, Content and Assessment

An embedded, flexible approach to University wide entrepreneurship education in the light of the findings of this study is advocated. In the push to embed entrepreneurship education within non-business disciplines the recognition that particular subject fields such as Fine Art, Technology, Engineering, Animal Sciences are likely to produce graduates who have a high likelihood of becoming self-employed or starting up a new venture. There is much in the way of governmental policy support for the embedding of entrepreneurship across the Higher Education environment, covering all disciplines and areas lines and levels (Davies, 2002; Dearing, 1997). In his Report Lambert (2007) particularly emphasised the essential nature of developing entrepreneurial capacity, but understanding HOW this may happen at Chester is not the same as seeing how it has been developed at other higher education institutions.

We know that graduates exiting the Higher Education environment face unprecedented levels of uncertainty (Gibb, 1993) bleak unemployment levels and a fluctuating economic environment characterised by insecurity. Restructuring and developing modules of learning that are on the learning agenda for all students, university wide, will develop the capacity for

students to offer an entrepreneurial response to tomorrow's economic challenges. It is difficult to anticipate the specialist skills that will be required in the global future that lies ahead, what is certain is the mobility, flexibility and entrepreneurial behaviour that will be essential in equipping individuals to respond to the demands of the future. A cross fertilisation approach to embedding entrepreneurship at Chester is advocated by entrepreneurship educator respondents in this project. A methodology that permits a convergence of a multiplicity of approaches, techniques, skills and thinking. A general re-thinking and re-structuring in how modules are delivered and where they 'live' in terms of Faculty is a crucial element of this flexible approach to equipping students with the necessary skills, particularly those less able to respond to the needs of a changing business landscape and shifting society. A university wide suite of modules that operates across departments, faculties and centres featuring multi-disciplinary teaching with regard to managing risk, creating and modelling opportunities would offer a route into introducing entrepreneurial thought and action to those students outside of the Business School.

Hannon et al (2007) highlight the linkage between an institution's own teaching and learning strategy and underpinning philosophies of entrepreneurship education. Some HEIs are teaching-led, some research-led with differing teaching and learning agendas and on that basis, it is emphasised that 'one size does not fit all'. As a teaching focused institution, it is crucial that entrepreneurship education strategy is demonstrated for the forthcoming TEF.

Integrating the flexibility to incorporate current key market information and research into pedagogic content is crucial towards building a Programme that supports the acquisition in undergraduates of an overview of current business trends and 'business building'.

6.2.4 Opportunities to Experiment

Both Educator and Student respondents expressed the benefits of experimentation, but discussed how little this opportunity occurred in the academic environment. Experimentation should be, the literature argues rooted in experiential learning and thus is closely connected to trying and testing concepts, business models, business development, markets, prices and a range of other 'real life' activities (Rae 2007). This notion of experimentation runs against the tightly controlled, tutor-led sessions at Chester, where the focus is on concrete learning outcomes and targeting 'successful' objectives.

For entrepreneurship educators, experimentation should mean a move away from processes and /or procedures that have always been undertaken in a similar way, in favour of new ways of doing, designing, delivering and assessing, new ways of being, different combinations, competency extension, exploration, innovation and experimentation that brings about new and added value for undergraduate students.

A number of respondents enthusiastically discussed opportunities to experiment with business simulation business packages and the freedom they feel when undertaking an exploration of initiating a new venture and engaging in business dynamics. It appears that it is when the lecturer adopts the role of guide or facilitator that undergraduates feel at their most free to experiment.

The literature argues that a learning environment where experimentation, testing and failure is valued for the learning it offers is crucial for confidence building and development of entrepreneurial skills and abilities (Rae 2007). Empowering students through the facilitation of an environment that allows for experimentation and practise at the University of Chester, could support to a greater level, entrepreneurial behaviours and mind-sets in our students.

Student participation in Young Enterprise (YE), simulation packages as entrepreneurship competitions provides students with exposure to a mechanism whereby they can experiment and build experience towards developing skills that cannot be honed in a formal classroom or lecture theatre environment.

6.2.5 Team, Group and Collective Learning

It was evident from the data in this research that project based, action orientated, group focused learning activities are preferred by undergraduates and the literature (Burke, 2011) offers support for this method of learning as being an effective means of understanding and contributing to confidence levels and the ability to act. The practise of entrepreneurial group endeavour extends the opportunity for undergraduates to become familiar with the challenges of working with others towards business creation or project management.

The notion of collective learning should also extend to the notion of co-operative learning between not only teams of entrepreneurship students, but involve entrepreneurs, business leaders, community groups and academics working alongside to present learning opportunities that are maximised utilising this methodology. A joined up approach and the input of various stakeholders in delivering entrepreneurial teaching and learning can provide significant overall results and have a 'profound effect on the overall objectives' (Penaluna et al., 2012). Pittaway and Hannon (2008) argue that the broad concept of stakeholder engagement is important for the sustainability of entrepreneurship education. Respondents to this investigation reflected positively on the extent of their motivation and engagement in relation to: guest lectures, student group projects, team placements, group outreach and mentoring). Whilst the main trajectory conductors will be academics and students, internal and external stakeholders need to be involved in the steering so that everyone benefits from the journey. A joint formulation between stakeholders of challenges, questions and issues using experience, knowledge and specific expertise in the consideration of responses, behaviours, options and potential solutions offers higher level 'deep' learning.

6.3.6 Immersion in the World of an Entrepreneur

In responding to the accountability metrics mentioned earlier in this work, a key focus is the growing responsibility that universities have with regard to employability, University of Chester is no different in this regard. Greater opportunities for student acquisition of tacit learning experiences alongside entrepreneurial skills development and student owned learning creates the environment for the cultivation of entrepreneurial behaviours and mind-set (Gibb 2012). Co-operative learning that incorporates learning from different perspectives,

stakeholders and voices promotes the building of what Rae et al (2010) refer to as an 'enterprise culture'. This methodology challenges current teaching and learning practices; it removes the focus of delivery away from educators who become facilitators, challenging their hitherto leading role in the pedagogic relationship with students. Co-operative learning demands a different type of learning environment and a review in the way we think about the culture of Higher Education. The research data from this study suggests that it secures interest, engagement and deep, memorable learning for undergraduates. Visiting entrepreneurs providing insight in the form of a bildungsroman or entrepreneurial narrative journey; the challenges faced, decisions made and consequences faced secure a glimpse of the lifeworld of the entrepreneur and promotes implicit and tacit entrepreneurial learning. Rae (2004) discusses how the implicit, intuitive, tacit supports the emergence of practical theory, whereas, he argues that academic theory relates to and pursues that which is provable; is *abstract, generalised and explicit*. Accounts of entrepreneurial journeys undertaken, provided by visiting entrepreneurs provide a frame of reference for undergraduates, with respondents reporting their interest and empathy with entrepreneurial narratives.

Visiting entrepreneurs representing a range of sectors, different life stages with a variety of career experience; opportunity focused and necessity focused entrepreneurs; serial entrepreneurs to start-up entrepreneurs, support and illustrate practical theories related to entrepreneurship (Penaluna et al, 2012; Rae 2007). It is this type of pedagogy that according to undergraduates at University of Chester, connect on a personal level and permit an identification of personal learning objectives, identification of aspirational targets, self-

development; identification and modelling of opportunities associated with business and start-up.

This style of teaching and learning directly responds to the respondents desire to have a driving influence in their own learning. The literature, combined with an analysis of the responses provided by participants in this study, it is apparent that a practical approach providing authenticity and 'real world' insight prepares students for undertaking entrepreneurial activity and effectively serves to manage expectation. Undergraduate respondents talk about understanding how their entrepreneurship studies apply in reality.

Pragmatic delivery, content and assessment of learning is important for the entrepreneurship students to understand how their learning can be applied in multiple situations with practical emphasis. This approach establishes the value of the learning. By including live problem-based teaching and live business case studies presented by businesses looking for entrepreneurial solutions.

In order to understand the life world of the entrepreneur, sessions that allow students to engage with entrepreneurs through workshops, masterclasses or interviews with business owners should be facilitated. The research for this study indicates that this strategy supports insight and knowledge in relation to the entrepreneurial journey, opportunity creation, persistence and resilience, creativity and tolerance of risk.

6.3 New Knowledge, Research Findings and the Implications for University of Chester

This study has demonstrated the need to establish a unified University of Chester Institutional definition of entrepreneurship education in the context of Higher Education:

This should be undertaken in consultation with all stakeholders and the precise understanding of the concept should be reflected in the Institution's mission statement and embedded in the very core of University of Chester operations. It should further be echoed in all key institutional documentation e.g. recruitment materials, marketing etc. Macro and micro, cross institutional dialogue that reflects a consolidated definition is an important tool for sharing and implementing entrepreneurial techniques and strategies whether toward curriculum-based advancements or extra-curricular developments on the entrepreneurship agenda.

A central finding of this explorative study was the extent to which some colleagues, academic and support, require development in order to: deliver on the entrepreneurship agenda, support students' entrepreneurial endeavour and recognise key opportunities for themselves and students. Incentivising, acknowledging and rewarding staff who capacity build with regard to entrepreneurial outputs is an important statement. In common with the recommendations previously alluded to in this chapter in respect of adopting student assessment methods that take as their focus 'performance' as opposed to academic articulation of that performance, so too should staff's performance be related to innovative output. Currently the institutional Professional Development Process rewards the capacity to follow procedures and reflects only traditional, planned, academic criteria. There is

currently no space in the PDR procedure to reward and acknowledge innovative teaching and assessment. A recommendation here, would be one related to the ways in which a creative approach to one's pedagogic output is recorded and acknowledged. This would serve to:

- Promote entrepreneurship as being a vital strand of the Institutions activities
- Elicits cross institutional working, collaborations and a 'joined up' approach to developing curriculum that is interdisciplinary
- Thoroughly embed and foster entrepreneurial endeavour in both staff and student output.
- Enables staff to build commitment to the Institutional entrepreneurial agenda and contribute to the various aspects of policy and procedure that maintain objectives providing the students with security and clarity for entrepreneurial outputs.

Senior University Teaching Fellows at University of Chester SUTFs, (each Faculty has one to leader on matters of teaching and learning) to be assigned key implementation responsibilities in connection with embedding entrepreneurship across the curricula and discipline ranges. SUTFs will lead the entrepreneurship agenda in their respective areas and represent their discipline area, advising on innovative pedagogic methodologies for design, delivery and assessment.

The literature indicates that the students' understanding of how they are assessed and what they are assessed on and the standards and criteria they are assessed against is unclear. (Race 2007) is critical of the modes of assessment employed, particularly that which is connected to experiential learning. The objective of assessment within the entrepreneurship education is related to the extent to which students have acquired entrepreneurial capacities and the

ability to apply them. The research demonstrated that students require security and clarity by which to measure their entrepreneurial endeavour. The design of methodologies to assess entrepreneurial outcomes should reflect the pragmatic, action orientated content that has been advocated here, that is it should:

- Permit the opportunity to learn from failure or mistakes
- Whilst giving more autonomy and greater ownership to undergraduates to provide the security and clarity that their entrepreneurial outputs will be assessed with clarity.
- All students to practice entrepreneurship in an action orientated mode
- Employer or specialist involvement in the assessment of assignments
- Reflect a journey of improvement
- Display a commitment to improvement
- Demonstrates clear target setting
- Assessment that involves the undertaking of pragmatic activity

Research Fellows to lead an 'Entrepreneurship Eco-system' (see model) within the institution towards executing strategies for fostering entrepreneurial behaviours and mind-sets into pedagogic offerings and outputs. The role of Research Fellow should be linked to ensuring that research and study findings have direct value to and are cascaded within the institution where they are employed.

The establishment of closer recorded bonds with industry, the media, external agencies and community groups who will motivate and support the cultivation of entrepreneurial activity. This recommendation covers a number of elements all of which are related to the cultivation of relationships with industry and entrepreneurs, professional bodies, social enterprise agencies, alumni and the media. Building an activity interface will increase the level of meaningful entrepreneurial engagement in activities. In addition such linkages will provide a

keen focus on business and the creation of a valuable and authentic, experiential learning experience. Maxwell (1984) refers to this type of philosophy as being “...the pursuit of wisdom” as opposed to “...the philosophy of knowledge”. Engaging with entrepreneurs and entrepreneurial agencies according to the findings of this study builds and adds value to the academic pedagogy and overall student experience. This recommendation reflects the notion that all entrepreneurship education at the University of Chester should reside within an experiential focused domain.

The research data from this study reflects the concern that academic and support staff have with regard to undergraduate attendance and engagement there is a clear and pressing need to stimulate students to participate in deep, meaningful learning. Clearly indicated within this study is the notion that today’s University of Chester business students want to undertake courses that are student focused, challenging, engaging and equip them with the know-HOW they will need long after they leave University of Chester. The new knowledge emanating from this research relates to the security and clarity that the students gain from knowing that this experiential learning will be acknowledged and assessed through appropriate methodologies. The literature demonstrates the connection between student driven learning, deep learning and transformational change (Cope, 2003; Gibb 2012). Mezirow, 1991 posits that transformational learning evokes an “enhanced level of awareness of ... one’s own beliefs and feelings” and evokes, moreover he suggests that it develops, “...profound changes in self...cognitive, emotional, somatic and unconscious dimensions.” (p177)

An approach that is student-centred offers a strategy towards increasing student engagement with the potential for positive outcomes, related to performance and student experience. It reflects the 'homogeneity' called for in the literature by Jones and Matlay (2011). This permits a tailoring and differentiation in accordance with student need and aspiration. This was particularly demonstrated in the data pertaining to simulation software and business formation through Young Enterprise, where both students and staff experienced relevant, but individualised learning. Undergraduate respondents perceived experiential, authentic, student driven business activities to be engaging, with academic staff reporting that they found them to be a valuable resource, particularly effective in stimulating the elements of entrepreneurial learning that proved to be problematic in a more traditional lecture or seminar focused session. The data here, appears to support the notion that undergraduates have different requirements to those that have gone before them, requirements that require addressing if they are to become effective learners. Technology may be partly responsible for this, the research suggests this, but it is reported in the interviews for this exploration that undergraduates display certain characteristics related to shorter attention spans, with educators reporting attention capturing to be more difficult than ever. If technology is the cause of challenges of this kind, then the evidence produced by this study would suggest that technology could also provide an effective response to combat attention deficiency and serve to capture the interest and attention of learners who may otherwise be disengaged.

6.4 Study Limitations

Possibly a further consideration of the limitations of this research is the fact that entrepreneurship education is at a comparatively early stage of development at the University of Chester; the academic year 2011 – 2012 was the inaugural of the Business

Management and Entrepreneurship Programme. Experience within the teaching and supporting of this discipline is therefore limited for the staff respondents in this study. This Programme represents the first undergraduate degree Programme at Chester to specifically deliver teaching and learning that addresses the need identified in recent years' governmental papers outlining the need for students' career choices to be broadened in terms of the options available to them post-graduation. It should be noted that all staff at the University of Chester participate in development that would ensure that respondents in this study are able to make comparisons within their own practice to those more established and experienced programmes and staff in other institutions.

6.5 Key Contributions to Practice

It is acknowledged here and in the literature (Davidsson 2008) that it is a challenge for any form of academic research to deliver a developed solution to a practical issue and research conducted into entrepreneurship education is no exception. However, because of the framing context and methodology of this D.Prof., the contributions to practice are clear and listed in the sections that follow.

This work responds to a significant gap in the literature by **contextualising** entrepreneurship education themes emanating from the literature and synthesising them with results from this research in order to maximise and foster entrepreneurial behaviour in undergraduates at a small, post '92 university.

6.5.1 Responding to the Gap in the Literature

Whilst research conducted into entrepreneurship education over the last decade is relatively buoyant, it is undertaken without firm focus on the landscape within which the findings may be applied. Recent calls by theorists emphasise the heterogeneity of entrepreneurship education.

“...specific (EE) educational practices ...are context and institution specific.”

(Jones & Matlay 2011, p8)

6.4.2 *The Knowledge Gap Bridged: A Blueprint Model for Fostering Entrepreneurial Behaviours in Undergraduates at UoC*

The gap in the knowledge identified from this study related to the tension that was evident in the data emerging from the student respondents. Whilst the majority preferred student centred entrepreneurial learning, referred to in the literature as being amorphous and messy (Jones, 2016; Gorman et al., 1997; Young, 1997; Kourilsky and Carlson, 1997), a number of respondents expressed a preference for scheduled, planned learning. These respondents talked about their need for a ‘knowingness’ that was afforded to them by the clarity and security offered by a more comprehensive, detailed lecture delivery and assessment schedule. Although the majority of student respondents articulated preference to drive their own entrepreneurial endeavour forward, evident in some of the responses, was the desire to participate in learning that was structured, planned and prepared for. Foyelle (2009) posits that it is only undergraduates with enquiring minds who are looking for more than a set of vocational parameters and guidelines from their course should study entrepreneurship. This is a response that eschews the pragmatic necessity of recruitment for institutions such as Chester whose students present with a diverse skillset. Contextual nuances and variances in how to deliver on the entrepreneurship agenda in different HE settings is a significant gap in the literature. This study has identified that delivery at Chester to Chester students, correlating with institutional need and economic requirement is different to delivery at a large metropolitan institution.

The data from this case study indicate that there are those undergraduates at Chester who appear to fear experimentation and unpredictability favouring a clearly structured predictability approach to entrepreneurship facilitation. There is an expectation from some

of the cohort taking entrepreneurship at Chester University that the University will provide the security and clarity of a scheduled plan of learning and assessment that won't be deviated from in any great way. It is this differential between literature and institutional context that forms a point of difference with the literature. This research has informed a model that will act as a blueprint for the facilitation of entrepreneurship education towards more effective fostering of entrepreneurial behaviours and an approach to building an environment that will be relevant to the contextual imperatives of the University of Chester. This gap in knowledge has been integrated within the blueprint model by utilising the starting point in the first year on Programme for students to undertake a self-review to assess personal resources and learning need.

This study applies the literature and contextualises the themes, contributing practical solutions towards fostering entrepreneurial behaviours in University of Chester undergraduates. Although the case study methodology considers one institution, the findings and recommendations contribute a blueprint model that may be utilised in Universities of similar size and nature. The model demonstrates the key components that form the basis of delivering EE towards maximising entrepreneurial outputs in similar institutional environments.

Application of New Knowledge and Contribution to Chester

The new knowledge resulting from this research will contribute to a number of aspects relating to entrepreneurship education at University of Chester, demonstrated in the final version of the blueprint model on page 193, they are:

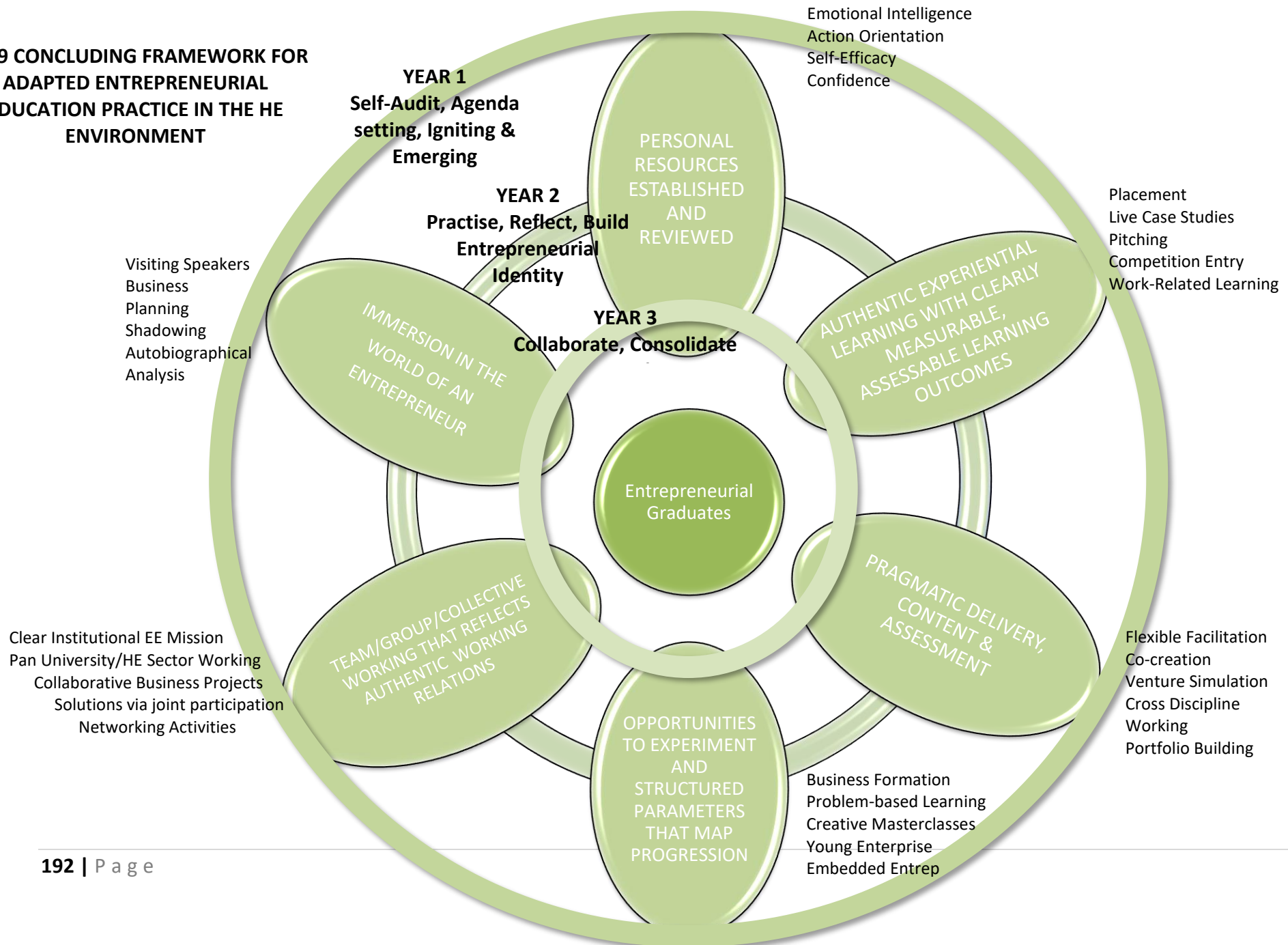
- A clearly articulated and embedded entrepreneurship institutional mission and strategy to enable all stakeholders to work towards the same objectives and utilise the same vocabulary to express institutional direction.
- A demonstration of how UoC can encourage a process of co-creation with undergraduate entrepreneurship students at UoC
- A plan whereby entrepreneurship undergraduates can chart their progress and correlate them with the institutional objectives
- Undergraduates, existing and potential can witness the commitment that the University has toward developing their entrepreneurial potential through establishing a journey of consistent self-review and professional development.
- An institutional wide plan for fostering an entrepreneurial environment
- A tool for entrepreneurship facilitators at UoC to support the management of expectation in their student cohorts by providing a clearly signpost route through their studies.
- A blueprint to inform all internal and external stakeholders of the entrepreneurial opportunities that exist and how they may engage at UoC.
- A model that is able to inform the recruitment and staff development processes at UoC

The notion that entrepreneurship education is a dynamic and continuous learning process (Reuber and Fischer, 1993) indicate that productive avenues for future research would include revisiting respondents' perceptions perhaps examining the effectiveness of entrepreneurship education from the perspective of application post HE and assessing the degree to which particular types of entrepreneurial thinking and skills-sets have been

augmented as a result of participating in a degree programme. Such research would also serve as a means to highlight the most effective pedagogical approaches, potentially assisting those entrepreneurship educators and facilitators of entrepreneurial behaviours and endeavour within the Higher Education environment to deliver programmes that have been informed by this study. It may, in addition to this, evoke an increased awareness of the central role played by entrepreneurship towards equipping undergraduates with the skills required to become job creators beyond the Higher Education environment.

It is understood that the recommendations made in this work would not be relevant for all Higher Education institutions, with issues relating to Institutional priorities and mission, regional economic landscape, priorities and characteristics, research focus and alumni engagement.

**FIG 9 CONCLUDING FRAMEWORK FOR
ADAPTED ENTREPRENEURIAL
EDUCATION PRACTICE IN THE HE
ENVIRONMENT**



6.4.3 D.Prof Objectives Matrix

The objectives of this Professional Doctorate were to:

1.	To critically explore the milestones in relation to the trajectory of entrepreneurship as a field of academic study in the Higher Education environment.
	This has been undertaken and is outlined on pp 17-37 and summarised through FIG 1 which represents a unique collation of the key milestones of the emergence of entrepreneurship education in the HE sector.
2.	Critically reflect on current thinking in the literature related to the field of entrepreneurship development in the Higher Education sector and consider the ways it may inform practice at University of Chester.
	This objective is comprehensively covered in the Literature Review Chapter where a range of sources are considered together with a contextual appraisal.
3.	Critically examine and evaluate the pedagogical strategies and techniques that may most effectively support the cultivation of entrepreneurial behaviours and mind-sets in Business and Management undergraduates at Chester Business School.
	This objective is covered significantly throughout the work, but a major review and evaluation is handled in Chapter 5.
4.	To identify and analyse what the respondents feel are the key entrepreneurial themes that have most impact on undergraduate students at University of Chester.
	This is documented in Chapter 5 and modelled for application in Chapter 6.
5.	Develop a conceptual model towards embedding new approaches and to further develop entrepreneurial endeavour across the Institutional landscape at a post 1992 University such as Chester.
	This Blueprint Model is presented

6.5 Future Research

Emanating from my research and experience as an entrepreneurship educator and my current role as Manager, I have an increased insight into how the findings and recommendations indicated by this research can be applied through a process of

The intention is to cascade the findings of this research internally through Departmental and Programme Leader meetings, ensuring that the important findings reach the operational members of staff in order for them to consider how they can pragmatically apply them to

secure positive student entrepreneurial outputs. As part of this internal cascading it will be crucial to ensure that Management and Governance groups have access to the research findings in order that they are embedded into Institutional strategy.

Potential or subsequent research could undertake further study into tracking the progress of the students on programme and post programme exit, in an effort to chart the journey following graduation.

It is not the intention to generalise the findings of the research presented here, however it is acknowledged, in the vein of similar research undertakings, there are limitations. The focus on one HEI notwithstanding, this research has uncovered some extremely valuable insights into entrepreneurship education at a specific genre of institution. The ways in which the limited resources may be utilised to cultivate certain attitudes and behaviours in undergraduates, in addition to which delivery methodologies are likely to stimulate entrepreneurial responses in undergraduates and the types of assessment that best support students towards demonstrating entrepreneurial thought and action. Such insights are worthy of further prolonged study and should help inform future curriculum development.

Justin Cope (2003) articulates the point succinctly:

"It is only by continuing to study the nature of entrepreneurship ... that a comprehensive understanding of entrepreneurial learning can be developed."

Extending the Research and Application in Different Contexts

This research presents a model and recommendations that may be applied in the context of the case study institution and similar institutions, but may not always be relevant to

implement in other contexts. Thus, conducting a study of this type in larger institutions or Universities in different areas of the UK, it is anticipated, would produce a different set of findings and expand knowledge in relation to the impact that context has on entrepreneurship education and enable practitioner context driven responsiveness to the entrepreneurship education agenda. A further expansion of this investigation into contextual entrepreneurship may be its application at different levels in the educational system, for example, Further Education.

Chapter 7 Reflection and Closing Remarks

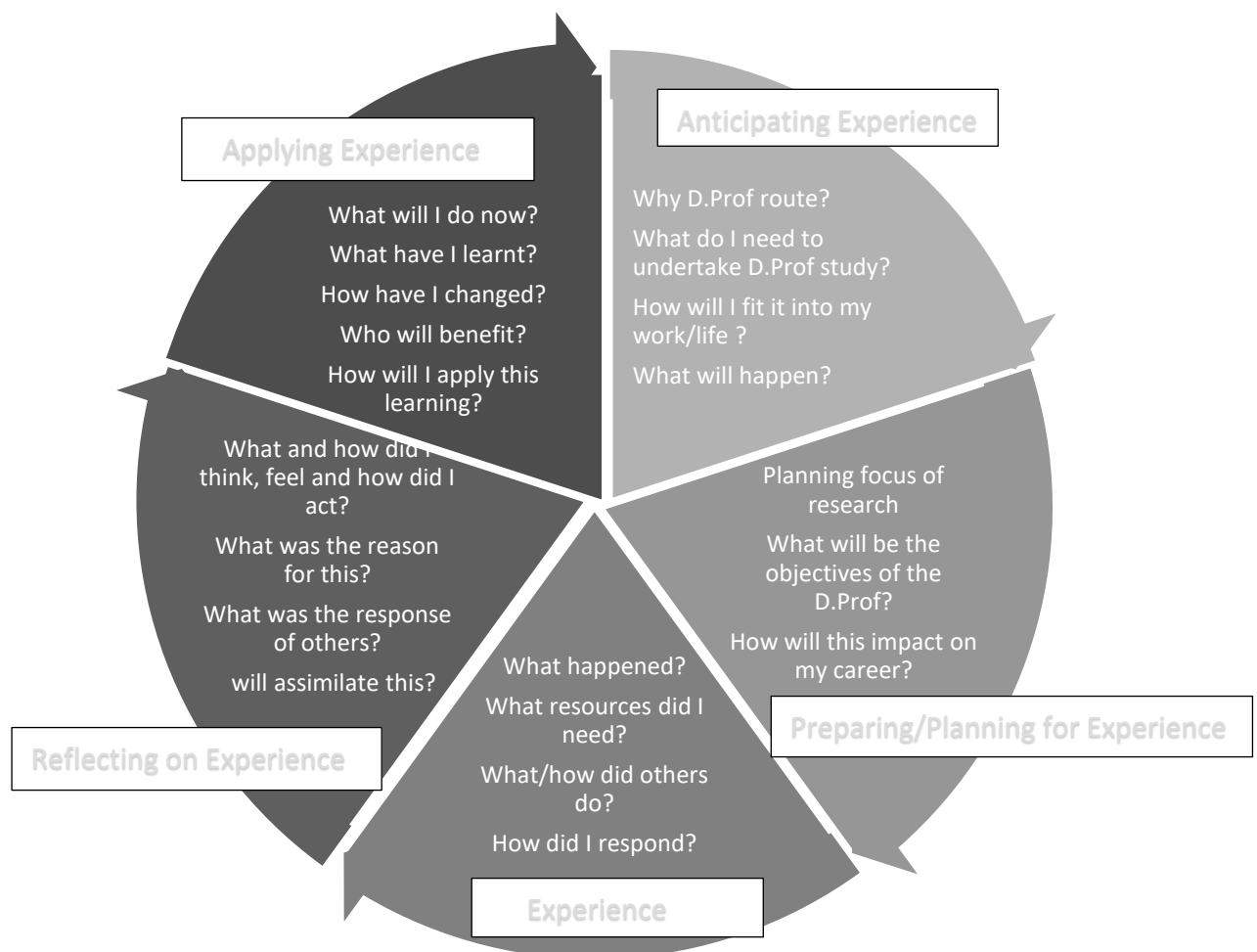


FIG 10
Hancock (2017)
Model of the D.Prof Critical Reflective Process based on Gibbs (1988)

7.1 The Doctoral Journey: Reflections

Introduction

Journeys of every type necessitate a beginning and are often associated with change or transformation as one progresses through unfamiliar territories towards a destination. These elements have been present in my doctoral journey, but so too was disorientation as I engaged in a process of 'becoming' and finding my doctoral voice.

This journey has been the most challenging activity that I have ever undertaken and every day I have had to remind myself that I can and will complete it. Mezirow (1990), along with Jarvis et al (2003) assert that critical reflection is about questioning the way we think, challenging our assumptions and exploring the bias in our patterns of thought. The period of self-reflection and interrogation that I underwent following the completion of this D.Prof. has helped me to identify the important role that undertaking this work has played in developing my notion of professional self-worth. The project helps to bridge the gap between where I feel I should be in terms of my academic career, and the position I actually find myself in currently.

The route towards initiating this Professional Doctorate was taken some years hence when I realised that in order to be recognised as an academic by the establishment and to perceive myself as belonging to that establishment, I would be required to secure the title of 'Doctor'. Moon (1999) refers to the transformative qualities that deep learning can bring about and working in a higher education environment, I understand that the achievement is not in the

award itself, but the experiential journey behind what the award signifies. It was my deepest hope that embarking on the journey towards completing a doctorate would eradicate feelings of insecurity and notions of what was first identified in the International Journal of Behavioural Sciences, as being 'imposter phenomenon' (Clance & Imes, 1978). It is only after completing the main body of this research that I can admit to the tremendous battle that I have faced and the sheer exhaustion of attempting to find ways to cope with the debilitating effect of feeling inadequate. Mezirow (2000) makes reference to the transformative power of learning. According to Brookfield (2000), a dimension of transformative learning is the process of psychological change in the understanding of self. I am optimistic that achievement in this case will result in a sustained transformation in connection with negative perceptions of self.

7.2 My D.Prof Journey

Initial steps to enrol on the doctoral journey were taken as a result of recognising that accreditation and recognition of my professional status was required if I wanted to progress in the world of academia. Resistance was futile and so I knew I had to get on and do it.

Entrepreneurship Educator:

When I first embarked on this doctorate, I was a Senior Lecturer in the Faculty of Lifelong Learning with a responsibility for Entrepreneurship Education. Shortly after starting, I changed Faculty to the Business Faculty which provided a new perspective on my studies. It

is significant that the literature, particularly Gibb (2007) argues that Business Schools should not be solely responsible for facilitating entrepreneurship education.

I have been fortunate enough in my career to engage in two, for me, hugely influential Programmes of Entrepreneurship development. The first was a Programme run by the International Entrepreneurship Educators Council which was government funded towards targeting those responsible for designing and delivering EE. I felt I had learned so much and had gained exposure to a wide range of Universities in which, as part of the course, I had to deliver an entrepreneurship activity. The course forced me to be creative and innovative and took me away from the pressure of attempting to be creative in a familiar environment where the tried and trusted ways are favoured over risk taking new ways.

Following on from the IEEC course, I was funded to attend a Programme for EEs at Babson College in Boston, USA. This open my eyes to even further ideas and provided me with an opportunity to work with international colleagues, comparing and contrasting our delivery methodologies and content.

As a direct result of attending this course, I began to work with a colleague from University of Barcelona and we managed to publish three co-authored Entrepreneurship articles in peer reviewed journal. I felt immense pride, but delivering at conferences and publications didn't fulfil the gap that was evident from not having a doctorate. The lack of a doctorate shook my confidence, particularly as everyone else around me had been awarded theirs. I felt like an imposter and was determined to receive recognition by ensuring I completed doctoral research.

Head of Department: Business and Finance

Midway through my research, I became part of the Faculty Management Group, being promoted to Acting Head of Department. The advancement to Head took me away from the role of Entrepreneurship Educator and in so doing, together with the commencement of my doctoral studies, signalled the development of a new sense of identity.

This promotion applied greater pressure to achieve a doctorate, without which I would not sustain the management role I had risen to. In that sense the pressure to undertake this research was twofold, acknowledgement and recognition for a career spent in academia and the requirement to remain in a management position. In the role of Head I felt it was important for me to demonstrate to colleagues that it was possible to balance management responsibilities with a research undertaking, a task that I felt less confident of carrying out as time went on. I had always put the Faculties needs before my own professional aspirations because it had been my experience that colleagues who had focused on doctorates had neglected their students and I felt this to be reprehensible. This bias emanates from a generation who believed that you always had to work very hard for a living, my grandmother (who brought me up) and from a personal desire to please people and always give my best.

The significant challenge at the first stage was to make inroads into drawing up a proposal for the thesis and associated research. This would appear straightforward, but in view of the feelings that I have outlined above, and the preconceptions that hampered the belief that I could feasibly achieve this objective, I delayed the start of my studies.

Researcher:

Pivotal to commencing and submitting my doctoral proposal was the supportive discussions I had with a mentor. I entered into discourse with a long-term mentor that supported the start of a change in my perspective of self. Rather than perceiving myself as inadequate and requiring verification of professional standing, he was able to support me through effective discourse that undertaking a D.Prof was a positive step towards establishing professional confidence. Mezirow (2000) discusses the use of discourse in validating how one understands oneself and modifies a held belief although the new disposition needs to become integrated into one's frame of reference. Learning that is connected with changing perception of self, I am now able to confirm, requires constantly topping up and I undertook a number of mentoring sessions in order to learn about me and the impact that my perspectives on my capability was having.

Following the submission and successful outcome of a minor research project, I commenced a major research project. This enabled me to reframe, as Brookfield (2000) posits, my learning journey to date and analyse the ways in which I engage, the skills and knowledge I would need to develop and the support mechanisms that I would need. Yipp articulates this process in a discussion on reflection, noting that it is:

"...a self-involvement process...personal experience feelings and cognition are intermingled in recalling past experience, resolving current difficulties, easing ...uncomfortable feelings, evaluating ones present and past performance and searching for new perspectives and new solutions." (Yip 2006)

Once the research trajectory had been set, I embarked on what would turn out to be an extremely rocky path towards completing a D.Prof programme of study. Gardner (2010 & 2008) discusses predictability in relation to experiential learning. Perhaps others may have been better placed to predict what potentially could happen, but I could never have envisaged what would transpire and the affect that it would have on me.

Over the years I dealt with significant change related to both working environment, position and perspective as well as a number of changes in research supervisor. The latter being the most challenging to assimilate and having the greater impact on my confidence and resolve. Academic staff moving on, retiring, resigning and changing role focus are all familiar aspects of the higher education environment, but when a supervisory relationship has been entered into, confidences established and perspectives confirmed, it is a challenge to re-start that process with a new supervisor. This was particularly challenging to me as I had made the assumption that each time I was provided with a supervisor, they would be as committed to the partnership as I was. This assumption was only an assumption. Assumption analysis is one of the four tenets of critical reflection referred to by Brookfield (2000) who argues that it is the first step toward challenging held beliefs, values and social structures and practices. Assessing its impact on our activities and the capacity of assumptions to result in false reasoning can impede our view of reality according to Brookfield (2000). It is during this period of reflection that I can see a correlation between what I felt was a lack of commitment from others and the low productivity in connection with D.Prof studies on my part. Reviewing and analysing my thoughts, feelings and associated actions, undergoing what Silverman & Casazza (2000) refer to as the process of deconstruction in regard to "...long-held habits of

behaviour” (p239) It is through the process of critical reflection and evaluation of the actions taken during the course of my doctoral journey that I am able to examine what I do, how and why. I can see that examining my responses to what I saw as unanticipated changes in supervisor, I was transferring the responsibility for progression in my research to an external force. This provided me with an excuse and went some way to feeding notions of the blame for my lack of progression onto someone else. An aspect of this reflective process is the learning that has emanated from examining why I felt the way I did and how I can change that and the responses that I had to that stimulus. It is clear from this experience that I do avoid taking responsibility when things aren't proceeding as I want them to. Understanding this and using this learning to move forward, I will in future comprehensively plan for and form contingency for change and adversity. This has been a significant aspect of the learning that has taken place during this journey.

The research and related processes undertaken for this study have been less problematic or attached to emotional evocations, than the supervisory challenges outlined above. The data collection, whilst it had to be planned and implemented, was supported by undertaking it in an academic environment, whose players understand the components and processes of research. It was a challenge to in the focus groups to get students to focus on the subject of discussion and so I did adopt a more questioning stance than what I had previously planned. This was aided by undertaking a pilot, which Sampson, 2004, argues is an important instrument for refining research approaches and data collection. Sampson posits that pilots are under used, but certainly in my case the focus group pilot highlighted the need to tweak the interview methodology and give more of a lead to the respondent students. In addition, it

allowed me to identify gaps and consider the broader issues such as representation within the focus group. Leading a focus group was not an altogether unfamiliar experience, but conducting it for my own doctoral research was and so a greater desire to 'get it right' meant they I exerted increased pressure on myself. This in turn meant that I had to avoid over engineering the discussion or questions; the pilot assisted greatly with this.

Interviewing externals shed significant light on the ways in which the University environment; staff and students perceived from other perspectives. This was extremely important as the risk is that the research could become too internally focused and lacking in the connections with the authentic business landscape for which the University is attempting to equip students for. The contribution made by externals to this research was vital in that it brought a validity and reliability to the contextualisation of the entrepreneurial learning that was being analysed.

Overall, the undertaking of this D.Prof study has been a significantly valuable, if sometimes painful experience. Mezirow(2000) discusses the impact of a 'disorienting dilemma' and how such an event brings about a transformation. The D.Prof journey has brought about a number of crisis or 'dilemmas' that have disorientated me, but have resulted in a deep change and review of self. Mezirow (2000) goes on to assert that a sense of alienation emanates from a disorientating dilemma that in turn leads to new ways of thinking and new modes of working. Ultimately he argues that it is through this process of working through and critically reflecting that one is able to reintegrate. Throughout the D.Prof journey, I have felt alienated from what I see as my 'practitioner self'. Researching and data collection demand a different way of working; a different relationship with those I work alongside and those within my frame of

reference. Colleagues become respondents, associates become participants. This unfamiliar way of working with others created a deep lack of confidence, I had to rethink the perception I had of myself and analyse why I was overwhelmingly disorientated. I began to understand that understanding the relationship I have with those around me is significantly important in serving to reassure who I am and my role in the University environment. I can see now that my role within the working environment supports how I define myself. Changes to that role or how I work disorientates and causes me to question myself and lose sight of who I feel I am in relation to work. Because of the experience emanating from this Doctoral study and resulting identification of a trigger, I can plan for change more effectively. Moving forward, I am now able to apply strategies that avoid a significant loss of confidence and self-belief and maintain a positive mind set in relation to my work.

Future Aspirations

I am, at the end of this journey, but at the beginning of a new one now, both in terms of my academic and personal growth. A growth in confidence and more fully rounded notion of what it is to be an academic has resulted. I have greater insight into how I can deal with unfamiliar situations and feelings and who I can be and the extent of my capability, hence the journey has been one of transformation.

As an Entrepreneurship practitioner my teaching has been informed not simply by my research, but my experiences of resilience, creativity, flexibility and practical problem solving that this doctorate has afforded. I will offer students undertaking an entrepreneurship module or course the very best in teaching and support as a result of this research. As a Manager, I can more effectively and authentically encourage and support those in my team to embark on the doctoral journey. I can recognise their professional development needs and

offer advice and insight. Finally as a researcher I intend to resume my publication of articles with renewed vigour and knowledge as this is only the start of my 'becoming'. I intend to continue to review and revisit the model devised in this research, adapting and amending as indicated by sectoral developments. In addition to this I have already begun to liaise with international colleagues to undertake entrepreneurship education research on a global scale that will continue to build on this doctoral study.

References

Ajzen, I. (1991) The theory of planned behavior. *Organizational Behavior and Human Decision Processes* 50 (2): pp179–211

Ajzen, I. & Fishbein, M. (2005) The influence of attitudes on behavior. In Albarracin, D.; Johnson, B.T.; Zanna M.P. (Eds.), *The handbook of attitudes*, Lawrence Erlbaum Associates.

Anderson, A. & Jack, S. (2008) *Role typologies for enterprising education: the professional artisan* *Journal of Small Business and Enterprise Development*, 15

Bandura, A (1977) Self-efficacy: Toward a Unifying Theory of Behavioural Change, *Psychological Review*, Vol 34, 7 pp191-215

Baumol, W. J. (1968) Entrepreneurship in Economic Theory, electronic copy (www.jstor.org/stable/1831798)

BBC News (2011) “Business: David Cameron, Now is the time to start business” Available at: <http://www.bbc.co.uk/news/business-12877083>

Beech, M. & Lee, S. eds. (2008) *Ten Years of New Labour*, Palgrave Macmillan

BERR (2008) Enterprise: Unlocking the UK’s Talent: <http://www.berr.gov.uk/files/file44992.pdf>

Bird, B. (1988). Implementing entrepreneurial ideas: the case for intention. *Academy of Management Review*, 13(3), pp442-453.

Bird, B. (1992). The operations of intentions in time: The emergence of the new venture. *Entrepreneurship Theory and Practice*, 17(1), pp11-20.

BIS: Department for Business, Innovation and Skills (2013) Enterprise education in Higher Education and Further Education: Final Report, June 2013: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/208715/bis-13-904-enterprise-education-impact-in-higher-education-and-further-education.pdf

Blenker, P., Dreisler, P., Foergeman, H., Kjeldsen, J. (2006) Learning and Teaching Entrepreneurship: dilemmas, reflections and strategies, Edward Elgar, Cheltenham.

Boggs, A. (2010) Understanding the Origins, Evolution and State of Play in UK University Governance: 'The New Collection', Vol 5 pp1-8.

Brindley, C. & Ritchie, B. (2000), Undergraduates and small and medium-sized enterprises: opportunities for a symbiotic partnership. *Education and Training* 42 (8)

Brookfield, S. (1990) Using critical incidents to explore learners' assumptions, in J.Mezirow (ed.) *Fostering critical reflection in adulthood* Jossey-Bass.

Brookfield, S.D. (2000) 'Transformative learning as ideology critique' In Mezirow, J. & Associates (Eds), *Learning as transformation: Critical perspectives on a theory in progress* pp125–150 Jossey-Bass.

Bruner, J. (1990) *Acts of Meaning*, Cambridge, MA: Harvard University Press

Bryman, A. & Bell, E. (2007) *Business Research Methods*, 2nd edition. Oxford University Press

Buckland, R. (2004) Universities and Industry: Does the Lambert code of governance meet the requirements of good governance? *Higher Education Quarterly*, 58(4) pp243-257

Burchell, G. (1993) Liberal Government and Techniques of the Self, Economy and Society 22 pp267-282

Burke A. (2011). Group work: How to use groups effectively. The Journal of Effective Teaching, 11, pp87-95

Casson, M. C. (1982) The Entrepreneur: An Economic Theory, Cheltenham: Edward Elgar

CELCEE (2003) The Centre for Entrepreneurial Leadership Clearing House on Entrepreneurship Education (www.celcee.edu/about)

Chan, K. C. & Anderson, G. C. (1994) Academia-industry fusion: action learning for teaching enterprise, Industrial and Commercial Training, 26 (4)

Chell, E. (2008), The Entrepreneurial Personality: A Social Construct (2nd ed) London: Routledge

Chia, R. (1996), Teaching Paradigm Shifting in Management Education: University Business Schools and the Entrepreneurial Imagination, Journal of Management Studies, 33

Clance, P.R. & Imes, S.A. (1978) 'The impostor phenomenon in high achieving women: dynamics and therapeutic intervention' Psychotherapy: Theory, Research and Practice. 15: 3 pp241–247.

Colton, T. (1990) Enterprise Education Experience. A Manual for School Based In Service Training. SDEC.

Cope, J. (2003) Entrepreneurial Learning and Critical Reflection: Discontinuous events as triggers for 'higher-level' learning. Management Learning 34:4 pp 429-50.

Cope, J. (2005) Toward a Dynamic Learning Perspective of Entrepreneurship. *Entrepreneurship Theory and Practice*. 29:4, pp 373-397.

Cornelius, S., & Gordon, C. (2008) Providing a Flexible, Learner-Centred Programme: Challenges for Educators. *Internet & Higher Education* 11 pp33-41.

Coyle, P., Gibb, A., Haskins, G. (2013) *The Entrepreneurial University: From Concept to Action*, NCEE.

Crabtree, B.F. and Miller, W.L. (1999), "A template organizing style of interpretation", in

Crabtree, B.F. and Miller, W.L. (Eds), *Doing Qualitative Research*, 2nd ed., Sage, pp. 163-77

Cresswell, J. W. (2007) *Research Design: Qualitative, Quantitative and Mixed Method Approaches* (2nd ed) Sage.

Davidsson, P. (2002) What entrepreneurship research can do for business and policy practice. *International Journal of Entrepreneurship Education* 1, pp. 5-24.

Deakins, D. (1999), *Entrepreneurship and small firms*, McGraw Hill

Deer, C. (2002) *Higher Education in England and France since the 1980s*, Symposium Books

Dearing, R. (1997), *The Dearing Report*, available at: <https://bei.leeds.ac.uk/Partners/NCIHE>

Dunsby, M. (2014) 10 Entrepreneurs' tips to create a million pound start-up, available at: <http://startups.co.uk/10-entrepreneurs-tips-to-create-a-million-pound-start-up/>

Denzin, N.K. (2002), "The interpretive process", in Huberman, A.M. and Miles, M.B. (Eds), *The Qualitative Researcher's Companion*, Sage, London, pp. 349-66.

Dyhouse, C. (2007) *Going to University: funding, costs and benefits*, published on the History & Policy Website: <http://www.historyandpolicy.org/papers/policy-paper-61.html>

Ebner (2005) Entrepreneurship and economic development From classical political economy to economic sociology *Journal of Economic Studies* 32

Eckhardt, J.T. & Shane, S.A. (2003). Opportunities and Entrepreneurship, *Journal of Management* 29

Eisenhardt, K. & Bourgeois, L.J. (1988) Politics of Strategic Decision Making in High-Velocity Environments: Toward a Midrange Theory *Academy of Management Journal* Vol. 31

Etzkowitz, H. (2003) Research Groups as Quasi-firms: the Invention of the Entrepreneurial University. *Research Policy* 32. pp109-121.

European Commission (2012) Effects and impact of entrepreneurship programmes in Higher Education

European Commission (2010) Member States competitiveness performance and policies

Fayolle A. (2009) Entrepreneurship Education in Europe: Trends and Challenges, OECD LEED Programme, universities, innovation and entrepreneurship: good practice workshop. Online: <http://www.oecd.org/dataoecd/11/36/43202553.pdf>.

Fayolle, A. (2007) *A Handbook on Research in Entrepreneurship Education Volume One: A perspective*, Edward Elgar Publishing Limited.

Fayolle, A. & Gailly, B. (2013). The Impact of Entrepreneurship Education on Entrepreneurial Attitudes and Intention: Hysteresis and persistence. *Journal of Small Business Management*, 51, 315–328.

Feagin, Orum, & Sjoberg (1991) *A case for case study*. Chapel Hill, NC: University of North Carolina Press.

Fisher, S. L., Graham, M. E., Compeau, M. (2008) in Entrepreneurship Learning Harrison & Leitch Routledge

Fletcher, D. E. (2012) Undertaking Interpretive Work in Entrepreneurship Research in Perspectives in Entrepreneurship: A Critical Approach, Mole, K & Ram, M. Palgrave MacMillan

Gartner, W. B. (2008) Entrepreneurship – Entrepreneurship Theory & Practice Volume 32

Gibb, A. (1987) Enterprise Culture - Its Meaning and Implications for Education and Training. Journal of European Industrial Training, Vol. 11 No. 2

Gibb, A. (1993) Enterprise culture and education: Understanding enterprise education and its links with small business, entrepreneurship and wider educational goals.

Gibb, A. (2002) In pursuit of a new 'enterprise' and 'entrepreneurship' paradigm for learning: creative destruction, new values, new ways of doing things and new combinations of knowledge, International Small Business Journal. Vol. 11 No. 3

Gibb, A. (2011) Concepts into practice: meeting the challenge of development of entrepreneurship educators around an innovative paradigm. International Journal of Entrepreneurial Behaviour & Research Vol. 17 No. 2

Gibb, A. (2012) Exploring the Synergistic Potential in entrepreneurial university development: towards the building of a strategic framework, Annals of Innovation & Entrepreneurship 3

Gibbs, G. (1988) Learning by Doing: A guide to teaching and learning methods, Further Education Unit, Oxford

Gillard, D. (2011) Education in England: a brief history www.educationengland.org.uk/history

Glaser, B. (1992). Basics of grounded theory analysis. Mill Valley, CA: Sociology Press

Goleman, D. (2011) Leadership: The Power of Emotional Intelligence – Selected Writings, More Than Sound.

Grønkjær, M., Curtis, T., de Crespigny, C. & Delmar, C. (2011). Analysing group interaction

In focus group research: Impact on content and the role of the moderator. Qualitative Studies, 2(1) pp16-30.

Halsey, A. H. (1995) Decline of Donnish Dominion; the British academic Professions in the twentieth century. OUP

Hampden-Turner, C. (2009) Teaching Innovation and Entrepreneurship, CUP

Harper, D.A. (1996) Entrepreneurship and the Market Process: An Enquiry into the Growth of Knowledge, Routledge

Harper, D. A. (2003) Foundations of Entrepreneurship and Economic Development, Routledge.

Harris, Lois R. & Brown, Gavin T.L. (2010). Mixing interview and questionnaire methods: Practical problems in aligning data . Practical Assessment, Research & Evaluation, 15(1). <http://pareonline.net/getvn.asp?v=15&n=1>.

Hatakenaka, S. (2005) Development of third stream activity Lessons from international experience, Higher Education Policy Institute Report

HEFCE (2009) A Guide to UK Higher Education, The Higher Education Funding Council for England

HEFCE Teaching Excellence Framework (2015)

<http://www.hefce.ac.uk/news/newsarchive/2015/Name,104412,en.html>

Henricks, M. & D. Newton (2003) Can Entrepreneurship be Taught? Entrepreneur Magazine

Retrieved from: www.entrepreneur.com/magazine/entrepreneur

Holliday A. (2007) Doing and Writing Qualitative Research. London, SAGE

Huber, G.,P. (1991), Organisational learning: the contributing process and the literatures, Organisation Science, 2 (1)

Husserl, E. (1970) Logical investigations New York, Humanities Press

Hycner, R H (1985) Some guidelines for the phenomenological analysis of interview data, Human Studies 8, pp279-303

Johansson, A. W. (2004) Narrating the Entrepreneur, International Small Business Journal 22, pp273-293

Jones, C. (2011) Teaching Entrepreneurship to Undergraduates, Cheltenham, Edward Elgar

Jones, C. & Matlay, H. (2011) Understanding the Heterogeneity of entrepreneurship education, Education and Training, 53:9 pp692-703

Jones, O., Macpherson, A., Jayawarna, D. (2013) Resourcing the Start-Up Business, Routledge.

Katz, J. A. et al. (2003) Doctoral Education in the Field of Entrepreneurship, Journal of Management, Vol. 2

Kern, William S. "The Lemons Principle, Democratiz Politics, and Frank Knight's First Law of Talk, Public Choice. October, 1988 pp83-87.

Kihlstrom, R. E. & Laffont, J. J. (1979) A general equilibrium entrepreneurial theory of formation based on risk aversion. Journal of Political Economy 87

King, N. (2004), "Using templates in the thematic analysis of text", in Cassell, C. & Symon, G. (Eds), Essential Guide to Qualitative Methods in Organizational Research, Sage, pp. 256-70.

King, R. (2004) The University in the Global Age, London, Palgrave.

Kirby, D (2006) Entrepreneurship Education and Incubators: Pre Incubators, Incubators and Science Parks as Enterprise Laboratories, National Council of Graduate Entrepreneurship, Working Paper 04, NGCE, Birmingham.

Kirby, D., A. (2002) Entrepreneurship Education: Can Business Schools Meet the Challenge? Conference Paper, International Council for Small Business pp 16-19

Kirzner, I. M. (1997) Entrepreneurial Discovery and the Competitive Market Process: an Austrian Approach, Journal of Economics Literature, 35(1), pp60-85

Kitzinger, J. (2013) Using focus groups to understand experiences of health and illness in Ziebland et al (eds) Understanding and Using Health Experience. Oxford University Press

Klapper, R & Tegtmeier, S. (2010). Innovating Entrepreneurial Pedagogy: examples from France and Germany. Journal of Small Business and Enterprise Development, 17, 552–568

Knight, F. H. (1921) Risk, Uncertainty and Profit (ed G. j. Stigler Chicago: UC Press)

Kolb, A.Y & Kolb, D. A. (2008) Experiential Learning Theory: A Dynamic, Holistic Approach to Management Learning, Education and Development in Armstrong, S. J. & Fukami, C. (Eds.) Handbook of Management Learning, Education and Development. London, Sage

Kuratko, D. F. (2005) The Emergence of Entrepreneurship Education, Development, Trends and Challenges, Blackwell.

Kuratko, D. F. (2016) Entrepreneurship: Theory, Process and Practice, Cengage Learning

Lambert Report (2003) Lambert review of business-university collaboration: final Report, 4 December, HM Treasury, available at: www.hm-treasury.gov.uk/lambert_review_business_university_collab.htm

Langley A and Abdallah C. (2011) Templates and Turns in Qualitative Studies of Strategy and Management in: Ketchen D and Bergh D (eds) Research Methods in Strategy & Management:6 pp201-235

Leibenstein (1968) Entrepreneurship and Development American Economic Review 58 Vol 2

Lubenow, W.C. (2000) University History and the History of Universities in the Nineteenth Century. The Journal of British Studies, 39 p247

<http://www.dailymail.co.uk/news/article-3151744/Going-university-waste-time-want-run-business-says-Dragons-Den-star-Peter-Jones.html>

Major, D. (2016) Models of work-based learning, examples and reflections, Journal of Work Applied Management, Vol. 8 : 1, pp.17-28

Mandel, R. & Noyes, E (2016) "Survey of experiential entrepreneurship education offerings among top undergraduate entrepreneurship programs", *Education + Training*, Vol 58:2 pp.164 – 178

Manning, P. (2009) "The Entrepreneurial Personality: A Social Construction, 2nd ed.", *International Journal of Entrepreneurial Behavior & Research*, Vol. 15 : 6, pp.626 - 628

Matlay, H. (2009) Entrepreneurship education in the UK: a critical analysis of stakeholder involvement and expectations, *Journal of Small Business and Enterprise Development*, Vol. 16 No. 2,

Measor, L. (1985) 'Interviewing: a Strategy in Qualitative Research' in R Burgess (ed) *Strategies of Educational Research: Qualitative Methods*. Lewes, Falmer.

Mezirow, J. (2000) *Learning as Transformation: Critical Perspectives on a Theory in Progress*. Jossey Bass

Miller, B. K., Bell, J. D., Palmer, M., & Gonzalez, A. (2009). Predictors of entrepreneurial intentions: A quasi-experiment comparing students enrolled in introductory management and entrepreneurship classes. *Journal of Business and Entrepreneurship*, 21(2), pp39–62.

Molas-Gallart, J. et al (1992) *Measuring Third Stream Activities*, Science and Technology Policy Research Unit, University of Sussex

Moon, J. (1999) *Reflection in Learning and Professional Development: theory and practice*. Kogan Page

Morris, M.H., Kuratko, D.F. and Cornwall, J.R. (2013), *Entrepreneurship Programs and the Modern University*, Edward Elgar

Mosca, I. & Wright R. E. (2010) National and International Graduate Migration Flows in the UK : Population Trends, 141 pp. 36-53

Musto R. G. (ed) (1991) Documentary History of Naples, Italica Press, New York

Nadin, S. and Cassell, C. (2004) "Using data matrices", in Cassell, C. and Symon, G. (Eds), Essential Guide to Qualitative Methods in Organizational Research, Sage, pp. 271-87.

Northwest Enterprise Champions' Project (2012) University of Chester publication

O'Connor, A. (2013), "A conceptual framework for entrepreneurship education policy: meeting government and economic purpose", Journal of Business Venturing, Vol. 28, pp. 546-563.

OECD (2009), 'Evaluation of Programmes Concerning Education for Entrepreneurship', Report by the OECD Working Party on SMEs and Entrepreneurship, OECD.

Oslo Agenda for Entrepreneurship Education in Europe (2006)

Office for National Statistics: Graduates in the UK Labour Market 2013 (19/11/13)

Iglesias-Sánchez, P; Jambrino-Maldonado, C; Peñafiel Velasco, A; Kokash, H. (2016) "Impact of entrepreneurship programmes on university students", Education + Training, Vol. 58(2) pp209 – 228

Mellinger, M. & Chau, M. (2010) 'Conducting focus groups with library staff: best practices and participant perceptions', Library Management, Vol. 31: 4/5, pp.267-278

Payne, B. K., Sumter, M., & Sun, I. (2003). Bringing the field into the criminal justice classroom, field trips, ride-alongs and guest speakers. *Journal of Criminal Justice Education*, 14(2), pp327–334.

Patton, M.Q. (1990) *Qualitative Evaluation Research Methods*, Newbury Park, Sage and Paul Chapman Publishing

Payne, G. & Payne, J. (2004) *Key Concepts in Social Research*, London, Sage Publications

Per Blenker Stine Trolle Elmholdt Signe Hedeboe Frederiksen Steffen Korsgaard Kathleen Wagner (2014), "Methods in entrepreneurship education research: a review and integrative framework", *Education +Training*, 56 (8/9), pp697 - 715

Pfeffer, J., & Fong, C. T. (2003). The end of business schools? Less success than meets the eye. *Academy of Management Learning and Education*, 1.

QAA Consultation Report (2012) *Enterprise and entrepreneurship education*
Guidance for UK Higher Education providers

Rae, D. & Carswell, M. (2001) Towards a Conceptual Understanding of Entrepreneurial Learning, *Journal of Small Business and Enterprise Development*, Vol. 8 Iss: 2

Rae, D., Martin, L., Antcliff, V., Hannon, P. (2010) Enterprise and Entrepreneurship in English Higher Education: 2010 and Beyond, *Journal of Small Business and Enterprise Development*, Vol. 19 Iss: 3

Ravasi, D., Turati, C., Marchisio, G. & Ruta, C. D. (2004) Learning in entrepreneurial firms: An exploratory study in Corbetta, G., Huse, M. & Ravasi, D. (Eds.)

Crossroads of Entrepreneurship, Kluwer Academic

Reisman, D. A. (2004) Schumpeter's Market: Enterprise and Evolution, Edward Elgar.

Reynolds, P., Bygrave, W., Autio, E., Cox, L., and Hay, M., (2002). Global Entrepreneurship Monitor: 2002 Executive Report, Accessed July 2015
www.gemconsortium.org/download/1311587888205/WebGlobalGEMReport11.12_1.pdf.

Robinson, E. E. (2007) Higher Education Review Vol 39, No. 3 ISSN 0018-1609

Roddick, A. (2000) Business as Usual, London, Thorsons

Rose, N. (1992) Governing the Enterprise Self in The Values of Enterprise Culture, eds. P. Heelas and P. Morris, London, Routledge

Rothblatt, S. (1997) The modern university and its discontents : the fate of Newman's legacies in Britain and America. Cambridge: CUP

Rüegg, W. (2003) Mythologies and Historiography of the Beginnings, pp 4-34 in H. De Ridder-Symoens, ed, A History of the University in Europe, Cambridge University Press

Sampson, H. (2004) Navigating the waves: the usefulness of a pilot in qualitative research
Qualitative Research, Sage.

Sarasvathy, S. D. (2001) Causation and effectuation: Toward a theoretical shift from economic inevitability to entrepreneurial contingency, Academy of Management Review 26

Sarasvathy, S., & Dew, N. (2005). Entrepreneurial logics for a technology of foolishness. Scandinavian Journal of Management, 21(4), pp385-406.

Sarasvathy, S. (2008). Effectuation: Elements of the entrepreneurial experience. Northampton, Massachusetts: Edward Elgar

Schwinges, R. C. (1992) Student education, student life, in: A History of the University in Europe I: Universities in the Middle Ages, ed. by Hilde de Ridder-Symoens, Cambridge

Segal, G., Borgia, D., Schoenfeld, J. (2005) The Motivation to Become an Entrepreneur International Journal of Entrepreneurial Behaviour and Research volume 11.

Shane & Venkataraman (2000) The Promise of Entrepreneurship as a Field of Research, Academy of Management Review, Volume 25

Shapero, A. (1984). The entrepreneurial event. In C. A. Kent (Ed.), The Environment for entrepreneurship. Lexington, Mass.: Lexington Books.

Shapero, A., & Sokol, L. (1982). Social dimensions of entrepreneurship in C. A. Kent, D. L. Sexton & K. H. Vesper (Eds.), Encyclopaedia of entrepreneurship 72-90. Englewood Cliffs (NJ): Prentice Hall.

Silverman, D. (2007) A very short, fairly interesting and reasonably cheap book about qualitative research London: Sage

Silverman, D. Ed. (2010) Doing Qualitative Research: theory, method and practice, 3rd edition, Sage

Simon, H., A. (1993) Altruism and Economics, American Economic Review 83

Schon (1983) The Reflective Practitioner: How Professionals Think in Practice, London

Schmidt, S. M. P., Ralph, D. L., & Buskirk, B. (2008). The effective marketing class: Enhancing student learning. *Journal of American Academy of Business*, 13(2), pp52–57.

Stevenson, H.H. (1985) A New Paradigm for Entrepreneurial Management in *Entrepreneurship: What it is and How to Teach It*, eds. J. Kao and H. Stevenson, Cambridge

Stevenson, H. H. (1983) 'A perspective on entrepreneurship', Harvard Business School Paper

Stevenson, H. H. and J. C. Jarillo (1990). 'A paradigm of entrepreneurship: entrepreneurial management', *Strategic Management Journal*, Volume 11.

Smilor, R. W. (1997) *Entrepreneurship: Reflections on a subversive activity*, *Journal of Business Venturing*, Volume 12

Smith, R. (2008) Being differently abled: learning lessons from dyslexic entrepreneurs. OpenAIR@RGU. [online].

Stanley, L & Wise, S (1993) *Breaking Out Again : Feminist Ontology and Epistemology*, Routledge, London.

Stokes, P. & Wall, T. (2014) *Research Methods: Palgrave Business Briefing*, Palgrave Macmillan.

Strauss, A. & Corbin, J. (1998) *Basics of Qualitative Research Techniques and Procedures for Developing Grounded Theory*, Sage Publications: London

Sullivan, R. (2000) Entrepreneurial Learning and Mentoring, *International Journal of Entrepreneurial Behaviour & Research*, Volume 6.

HM Treasury (2011) *The Plan for Growth* Department for Business, Innovation & Skills

Twaalfhoven, B and Wilson, K. (2004) Entrepreneurship Education at European

Universities and Business Schools and Breeding More Gazelles: The Role of European Universities, European Foundation for Entrepreneurship Research Report, EFER

Scott, P. (1988) Blueprint or Blue Remembered Hills? the relevance of the Robbins Report to reforms in Higher Education, Oxford Review of Education, Volume 14, No 1

Shattock, M. (2006) Managing Good Governance in Higher Education. Maidenhead: OUP

Smith A. (1910) The Wealth of Nations. Knopf: New York

Sutton Report (2008) Increasing Higher Education participation amongst disadvantaged young people and schools in poor communities, NCEE commissioned

Swinges, R.C. (1992) 'Student Education, Student Life' in, A History of the Universities in Early Modern Europe: universities in the middle ages., ed H De Ridder-symoens, CUP pp195-242

Timmons, J. (1994) New Venture Creation: Entrepreneurship for the Twenty-first Century, Irwin, Boston.

Walden, G. R. (2006) 'Focus group interviewing in the library literature: A selective annotated bibliography 1996-2005', Reference Services Review 34: 2, pp.222-241,

Watson, H. E. and Harris, B. (1999)

Weick, K. E. (2007) Drop Your Tools: On reconfiguring management education, Journal of Management Education, Vol. 31 No. 1, pp5-16

White, G. (2014) On Chester On, University of Chester Press.

Wilson, K. (2008). "Entrepreneurship Education in Europe". In Entrepreneurship and Higher Education, edited by J. Potter, Local Economic and Employment Development (LEED)

Wiseman, A. (2014) Promises and Challenges for Innovation and Entrepreneurship in Education, in Alexander W. Wiseman (ed.) International Educational Innovation and Public Sector Entrepreneurship (International Perspectives on Education and Society, Vol 23) Emerald Group Publishing Limited, pp251 - 274

Yin, R. (1994) Case study research: Design and methods, Thousand Oaks, CA: Sage

Yip, K. S. (2009) 'Self-Reflection in Reflective Practice: a note of caution', British Journal of Social Work 36:5 pp777-788

Ziegler, P. (1993) Wilson: The Authorised Life of Lord Wilson of Rievaulx, Weidenfeld & Nicolson

Appendix One: Transcript of Semi-structured Interview with External Stakeholder

Interview with Paul Hinkins Managing Director of Business Watch Limited

Business Watch Ltd

Centurion House

Tweeddale North

Bridgnorth Rd

Telford TF7 4JR

Date of Interview: 26/10/2012

CH: Thank-you for agreeing to be interviewed and participating in this study, your support is much appreciated.

CH: Why did you decide to contribute sessions to the Business Management and Entrepreneurship Degree Programme?

PH: Well, you asked me and I thought about it. When you told me about the objectives of the course and what you were hoping to achieve, you managed to convince me that it was a good idea. I wasn't convinced myself that I could teach university students, but I thought about the years of business that I've put in and that must be of value to them. I could give them the benefit of those years.

I should mention that over the last couple of years I have got much more involved with employability skills and sit on a number of boards such as Telford & Shropshire Business Board, Shropshire Manufacturing Partnership, Marches LEP Skills Board (This works with BIS) Co-operative Council Procurement Board, Marches LEP Redundant Building Grant Scheme Board (This one is great as, along with others, I am able to authorise grants to budding entrepreneurs) and now a Governor of Telford College of Arts and Technology. I have also set up two Business Watch Academies, one in Telford College and the other in Wolverhampton College. We are also working with Wolverhampton University in building up a series of courses under the title of 'Growing Your Business' which is aimed at guiding new business start-ups covering a plethora of business subjects. Who would have thought that I would be so involved in the education sector! Of course all of this results in an improved networking function for my businesses. I can reach people in high places, so whilst always being mindful of any potential conflict of interest, the company enjoys a high

level of exposure and at the end of the day it all revolves around economic regeneration and getting people back or into work.

In answer to your question then, in delivering a couple of sessions to the students on the degree course, I'm able to give something back and I believe it is mutually beneficial. I can support business degree courses, give the students the benefit of my expertise and experience, see what graduates are coming into the jobs market and learn new techniques. Purely from a selfish perspective, I can keep a look out for outstanding students who could work in the business or who I could help with a placement. I do enjoy the experience of coming into university though and meeting students who are interested in business and business forming. It reminds me that I have knowledge that is useful to others.

CH: Do you feel that Entrepreneurship can be taught in Higher Education?

PH: I am confident that it can and I stay in contact with numbers of the students that have been in my talks and I can witness their progress. I can compare it to athlete training, they may know how to run, but to be top of your game, you need training, you need support, you need to have someone or people around you who are interested in you. How they can do business can be taught but you need heart and minds.

The students are young people who need to be supported, to learn and experiment and higher education is about that. I do know that students have other subjects that they need to balance, but their other subjects should be all relevant to creating a business and understanding all about business, after all they will either be working for someone else in business or working for themselves. It's all for a good cause, their futures.

CH: Did you feel the students benefited from your contribution to the Programme?

PH: I hope they did, and their progress when I listened to their end of term pitches displayed progress. I was heartened when I could see and hear that the students that I had spoken to were displaying some of the communication elements I had been speaking about with them. I can tell you it was rewarding. I suppose it is difficult for me to categorically state whether there was benefit or not as I don't see their other work, the work that they have to produce as part of their course, their essays or reports. My feeling and the evidence that I have witnessed points to progress.

The three students that I assisted with obtaining placements were certainly a credit to the University. I know from speaking to the company that they learnt a lot when they were there and again it is great to hear of this. It is about seeing, witnessing business in action, observing people and doing it themselves. I pretty much tell the students that I see, precisely that.

I went to see the businesses that two of the groups set up, you know at the Young Enterprise competition, and they were tremendous, tremendous. They were confident young people speaking out to a crowd of hundreds listening to their pitch, I say well done. They did learn from their course categorically, and all the things they'd done as part of it. The thing is that the students themselves could see the fruits of their labour and that is bound to instil with confidence. That and all the things they do and by doing and finding out how they need to do things that's how they learn.

CH: What did you think were the main learning points of your intervention?

Your questions are difficult, what do you mean by intervention? Do you mean what I came in to do?

CH: Yes, sorry, what were the main points that you wanted to convey in your teaching?

PH: Well, I was briefed on what point the students were at and was sent the course list, I mean the course session list – the timetable, presumably so that I could see the point at which my session came in. I was given paperwork on what the course was about and what things the students needed to learn about. On the first session the student were all introduced to me by the teacher and they knew who I was and that later on in the term I would be delivering a lesson. It was good for me to see the students and meet them before I came in proper to do my presentation as they knew what to expect and I knew what to expect.

Mainly I wanted the students to know that starting up and running a business is about persevering and working hard. I wanted them to see what had happened to me and what I had done. I think that's the main point of the lesson I was offering for the students, that they can understand from the experiences of those of us who have been there and done it. They need to know what they need to do to get where they want to be.

CH: What do you feel worked well towards motivating the students in the session?

PH: I know this because they told me afterward. I ran through an event that happened and a decision that I had to make when I very first started out in business. I ran through the scenario and asked that they came up with ways to solve the problem that I was facing. I wanted to get them to think about what was possible, what was probable and improbable and what was practical. The students asked me lots of questions as a matter of fact I was bombarded with questions. I found that it was giving the class a problem to solve in groups, a problem that was real, that had really happened, was the key to getting all the class involved.

CH: Did you find the groups worked well together?

PH: They motivated each other and more in a group. They were made more confident in a group, sharing and taking turns and giving each other the push to come up with ideas. I could tell they'd worked in a group before.

CH: Do you feel the university successfully integrates entrepreneurial activities into the Business Programmes?

PH: Well I know that you use the word entrepreneurship and the students use the same, to me it's all business but I think that what you call entrepreneurship is the practising of business. I may be wrong, I'm often wrong, but it is this aspect of business, the aspect of entrepreneurship, that isn't practised as much as it could be in universities or at a university academic level, on a degree course and I noticed that it was only a small number of students in the Business Department that were taking these activities and there at my talks. I could get on my soapbox though it is important that business people of tomorrow, young people learn how to do business with others and that isn't about writing in a notebook, it is about getting out there and doing your stuff, business stuff.

CH: Do you think that the students you have contact with get sufficient opportunity to practise business?

PH: No, as a matter of fact, I don't, the course is short, I think I'm right in thinking that the course or modules as they are called, only last 1 year and they need to follow the business journey through in my opinion. As far as I'm aware the students I have seen don't do this next year, this is the one opportunity they get to do this. Is that correct?

CH: Yes, although they could go on to do a year out in industry.

PH: Not the same as starting up something, starting up your own venture, that's what I would want to say. That's where it happens, the learning about what it takes. There's nothing that can replace that experience or learning.

CH: Thank-you so much for providing this interview that will help me with my research, your responses have been really helpful. Is there anything that you would like to add?

I don't have anything further to say, except that I think strong leadership is needed, not simply for students to follow, but for them to see the approaches and skills that they need to adopt. Leading by example is needed here. The students need to have access to role models, business leaders, people who have put their faith into a business.

CH: Thank you very much for participating in this research Paul, I really appreciate it.

Appendix Two: Question Areas for Focus Groups and Semi-Structured Discussion

DYNAMIC, FLEXIBLE LEARNING CONTENT	Cope (2003) Matlay (2009) Jones & Matlay (2011) Ajzen (2012) Neck et al (2014) Kickul & Foyelle (2007) Foyelle (2009)	Question Area: To what extent do you feel the sessions on entrepreneurship engage you and are interesting, both in terms of their content and delivery? Do you think there are diverse opportunities, activities and experiences to development an entrepreneurial mind-set and the skills and behaviours associated with that?
U/G STUDENT EFFECTUATION	Sarasvathy (2001) Cope (2003) Bandura (1986) Shapiro (2004) Krueger (2009) Goleman (2011)	Question Area: Can you talk a bit about how confident you feel to behave entrepreneurially as a result of the modules you have undertaken? Do you feel the learning equips you to behave as entrepreneurially as you would like? Can you provide examples?
ENTREPRENEURSHIP FACILITATION	Klapper & Tegtmeier (2010) Gibb (2007) Sarasvathy & Dew (2005) Ajzen & Fishbein (2005) Higgins & Elliot (2011) Minniti & Bygrave (2001)	Question Area: I'd like you to reflect upon the degree to which you feel supported in the activities connected with entrepreneurship that you undertake at Chester. Do you feel that contributors to your course communicate entrepreneurial attitudes, behaviour and experience?
STAKEHOLDER INPUT	Gibb (2012) Kuratko (2016) Buckland (2006) Cope & Watts (2000)	Question Area: Thinking about visiting speakers now; do you feel they add value, offer support and/or bring something different to the entrepreneurship learning and business activities that you engage in?
STUDENT FOCUSED LEARNING	Jones (2014) Chell (2008) Gartner (1985) Gibb (2012)	Question Area: Can you talk about the extent to which you feel the teaching and learning on your Programme is tailored to your needs and to your career aspirations? For example: assessment? Delivery style? Content? Activities? Etc. Are there opportunities for you to be creative and to contribute ideas to your work?

UNIVERSITY ENVIRONMENT	<p>Jones & Matlay (2011) Gartner (2008) Shane & Venkataraman (2000) Gibb (2012) Jones et al (2013) Wiseman (2014) Jones & English (2004)</p>	<p>Question Area: I'd like you to think about and discuss how conducive you feel that the University environment is in relation to student entrepreneurship. Do you feel that you are presented with opportunities? Do you feel motivated to be entrepreneurial? Is entrepreneurial endeavour valued within the environment? Do you feel the University offers you the opportunity and supports a culture to cultivate relationships across the institutional environment?</p>
-------------------------------	--	--

Appendix Three: Pilot Session Questionnaire

Many thanks for agreeing to participate in this important research which is undertaking as part of my doctoral study into Entrepreneurship Education. Your completion of this questionnaire will help towards ensuring that the University of Chester is able to offer Entrepreneurship Education that meets the needs of current and future students. This questionnaire will help to support the devising of a strategy for the running of the focus groups where respondents will discuss research questions and pertinent issues connected to the study.

Please tick the most appropriate number to correlate with the strength of feeling and level of agreement in relation to the following statements, with 1 = low correlation & 5 = high correlation

Connie Hancock

Age

Please tick as appropriate:

Female

Male

1. I am motivated to participate in entrepreneurship activities as part of my Programme:

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

2. I am motivated to participate in a diverse range of activities outside of my Programme:

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

3. I feel my course has helped me to become resilient and work solidly towards achieving the goal I have set myself:

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

4. I feel my course has helped me respond positively to uncertainty:

I respond positively to an environment that evokes more questions than answers.

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

5. The course has supported my ability to be self-sufficient and demonstrate drive:

1 2 3 4 5

6. As a result of my learning I am able to persuade and convince others to see things from my perspective.

1 2 3 4 5

7. I am disciplined and the course has enabled me to drive myself forward to success

1 2 3 4 5

8. I feel empowered because of the course to deal with whatever challenges come my way.

1 2 3 4 5

9. The course has provided me with opportunities to contribute to team building activities:

1 2 3 4 5

10. The course has equipped me to extend my networking skills and establish strategic and effective relationships:

1 2 3 4 5

11. As a result of the teaching and learning on my Programme I am aware of existing and potential opportunities in the market for business ideas:

1 2 3 4 5

12. My course has empowered me to develop my self-drive in order not to rely so much on the support of others.

1 2 3 4 5

13. The University environment supports and develops me towards becoming an entrepreneurial individual:

1 2 3 4 5

14. The University provides excellent teaching and learning resources to develop my entrepreneurial capacity:

1 2 3 4 5

15. As a result of the support offered at the University of Chester, I anticipate being able to set up a business at some stage in the future
(Circle most appropriate)

YES

NO

16. My primary reason for wanting to start a company is:

1. I am passionate about becoming an entrepreneur
2. I want to become my own boss
3. I have a great idea for a business
4. I want to become financially successful
5. In this climate it is difficult to get a job that you enjoy
6. Other

17. The biggest obstacle I see in starting my own company is:

1. Finance
2. Knowing where to start
3. Understanding what you need to learn
4. Finding someone to work with
5. Fear of failure
6. Other (state)