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**Enterprise Education in Post-Primary Schools: An
exploration of the antecedent and contextual factors
that impact on successful provision**

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**This dissertation is submitted to the National University of Ireland,
Galway in fulfilment of the requirements for the award of the degree of
Doctor of Philosophy
December 2019**



I declare that this thesis has been composed solely by myself and that it has not been submitted, in whole or in part, in any previous application for a degree. Except where stated otherwise by reference or acknowledgment, the work presented is entirely my own.

December, 2019

Abstract

Enterprise education is universally lauded as a means to enabling an enterprising capacity in young citizens who benefit the local and national economy while also being one of the eight European Union key competences. Enterprise's primacy is articulated in a myriad of European Commission and national reports and embedded in post-primary business related curricula and specifications. However, the teaching and provision of these enterprise programmes in post-primary schools remains *ad hoc* and sporadic while measuring the success of enterprise education remains problematic due to the nature of the content, knowledge on its effective provision as well as the lack of specific certification at post-primary.

Much of the associated research literature focuses on the 'what' and 'how' enterprise should be taught, but a paucity remains in what shapes the ideal context for the provision of enterprise education and what particular factors predispose a teacher, a school or community in its successful implementation within the curriculum. This study seeks to identify and analyse the primary factors, be they antecedent or contextual which facilitates this success in selected schools.

The literature in enterprise presents two dichotomous perspectives, entrepreneurship and enterprise education, which are quite distinct yet oft intermingled in both rhetoric and practice. This dichotomy presents a particular conundrum within the overarching problem which this research study investigates; how best can enterprise education be supported and integrated in the post-primary schools system in Ireland.

This research study employs purposive sampling and qualitative research methods in five selected post-primary schools who had a reputation for success regarding enterprise education provision. The research study is framed in a case study methodological approach. Thirty semi-structured interviews were conducted with key personnel within the schools to capture the essence of their individual enterprise narrative. Using Lichtman's three 'C' approach to data analysis key concepts emerged which formed the basis for discussion and analysis.

Antecedent and contextual factors facilitating the promotion and integration of enterprise education emanating from the emergent concepts are categorised into four pillar areas of action. These pillars of action provide an overview of the primary structural supports required to inform a national framework of strategic policy and development for enterprise education. They offer an opportunity for enterprise education to be universally experienced and become endemic within the Irish post-primary educational system.

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I would like to thank the five case study schools and the six participants within each school. Without their cooperation and involvement this dissertation would not have been possible.

To try and thank Dr. Mary Fleming, my research supervisor without the use of clichés would be impossible, so I shall not try. Mary inspired and when required challenged, and at all times believed in me, even when I questioned myself. This dissertation or research study would not have happened and most definitely would not have been completed without her unflinching support and constant *joie de vivre*. My sincere thanks and admiration.

Thank you Sinead for proof reading the thesis, your wise counsel and attention to detail is always appreciated.

To my wife, Catriona and our Kate and James, I am deeply grateful for your patience and support. Thank you.

Dedication

To Catriona, Kate and James.

May you always be enterprising...

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List of Acronyms

ASTI	Association of Secondary Teachers of Ireland
BERA	British Educational Research Association
CAQDAS	Computer Aided Qualitative Data Analysis Software
CBA	Classroom-Based Assessment
CPD	Continuous Professional Development
DES	Department of Education and Skills
DEIS	Delivering Equality of Opportunity in Schools
ETB	Education and Training Board
EU	European Union
GEM	Global Entrepreneurship Monitoring
IBEC	Irish Business and Employers Confederation
ICT	Information Communication Technology
ILO	International Labour Organisation
LAOS	Looking At Our School
LCA	Leaving Certificate Applied
LCVP	Leaving Certificate Vocational Programme
LEO	Local Enterprise Office
NCCA	National Council for Curriculum and Assessment
NFQ	National Framework of Qualifications
NUTEK	[Swedish Business Development Agency] Nationellt Handlingsprogram for Ungt Foretagande
OECD	Organisation for Economic Cooperation and Development
PLC	Post-Leaving Certificate
QAA	Quality Assurance Agency
SEA	Student Enterprise Awards
SSE	School Self-Evaluation
STEM	Science Technology Engineering and Mathematics
TY	Transition Year
UK	United Kingdom
UNESCO	United Nations Education Scientific and Cultural Organisation
VSG	Vocational Subject Grouping
WEF	World Economic Forum

1 Introduction

As a teacher of business for twenty years I have been immersed in the world of debit and credit and balancing accounts. This world is structured and secure with a failsafe rule that for every debit there is a corresponding credit. It demands no subjective interpretation or requires no specific behavioural traits for student success. However, another topic within the business curriculum has loomed large in the psychic of all business teachers and became the *enfant terrible* for this teacher, enterprise, enterprise and more enterprise.

As a Business department in our school, we often commented on the amount of resources and national discourse dedicated to enterprise, yet it was the only topic on the curriculum which we all considered least qualified to teach. Despite this, the word 'enterprise' had become ubiquitous to our pedagogical existence.

This research study was borne out of a deep desire to improve my understanding of the teaching and learning pertaining to enterprise in post-primary schools. It was hoped that this improved understanding would ultimately aid and inform both my and others' pedagogical practice when teaching enterprise. The initial genesis for the research theme emerged from a process of reflection on my own practice and educational philosophy. I vehemently support the concept and promotion of skill as well as cognitive development in the classroom even though traditionally it was not seen as a priority in the post-primary system (Gleeson 2009 and Trant 2007). After teaching business at post-primary for over twenty years, which always involved teaching enterprise, I had become disillusioned and questioned my ability to effectively teach the topic. This disillusionment was borne out of the experience of teaching enterprise which at times simply just involved the transferring the rudimentary knowledge from the textbook.

I realised this was not the most effective way to teach enterprise, yet I personally found it was the most efficient method as regards classroom management and examination preparation. The focus on examination preparation and the acquisition of knowledge tended to out shadow all other activities in my experience. However, in this researcher's teaching context, one opportunity did exist for students to experience real enterprise learning. This was through the setting up of mini-enterprises in the business classroom, which potentially provided students with real life experience of running a business.

I had for many years participated in a regional mini-company competition for schools, the Student Enterprise Awards (SEA) which is organised by the Local Enterprise Office operating in each county in the Republic of Ireland. Each school enters an allocated competition in their local county. Yearly, I observed that particular schools tended to excel at the county enterprise competition. They consistently outperformed other schools and went forward as the county champion to a national competition.

For this teacher, the practical experience gained by students through their participation in the student enterprise competition was rich and meaningful and totally at one with my own educational philosophy. It provided students with an opportunity to develop and practice their enterprise skills through making a business work. Essentially, it enabled students to practice entrepreneurship and become entrepreneurs. These rich practical skill development experiences for students provided a stark contrast to the experience of many of their peers who experience enterprise within a tight classroom setting, with the tendency for the textbook to be the main teaching aid and this was their only experience of enterprise education.

In my own school, transition year (TY) students were the students who participated in the SEA competition as the TY programme allowed the time and flexibility required for the students to develop their mini-companies. This time and flexibility was not available to junior and senior cycle students where the priority was on knowledge acquisition for the terminal examination which loomed large on the horizon.

Within the TY programme, there was also choice in relation to participation in the SEA, as it was down to the individual teacher whether a school participated or not. This autonomy for the business/enterprise teacher limits the opportunity for all students to experience this extremely rich learning experience with its diverse range of facilitative teaching methodologies outside the traditional didactic approach.

From my previous research as a Master's student, it was found that many teachers were selective and strategic in what they teach. If certain material or activities are not examinable, or can be circumnavigated because they require greater support, then these activities will not be prioritised or even included by subject teachers (McConway, 2010).

Yet these learning experiences and activities may potentially provide the richest learning experiences for students. However, they are seen as wasteful of time and therefore are often omitted (Trant, 2007). Another possible reason for this strategic selectivity may be connected to an individual teacher's perspective on the curriculum, whether it is a product or process vision of curriculum (Kelly, 2009). These crucial decisions, all of which impact on a student's experience of enterprise in post-primary schools are all localised within the individual classroom and are not as a result of any specific national policy.

At a national level, enterprise rhetoric is constant, 'people everywhere talk and write about enterprise' (Downs, 2010, p.6). There is a government department charged with the promotion and development of enterprise and a national organisation to promote enterprise in local regions, the aforementioned Local Enterprise Office (LEO).

The ubiquitous discourse surrounding enterprise is not only taking place in Ireland, as around the world enterprise education and learning is lauded as an important element in economic development. In the United States, 'major attempts are being made... to develop entrepreneurship' and the prevalence of enterprise discourse is also evident in China and the European Union (EU).

In China, entrepreneurship education has received growing attention from governments at various levels while the EU has enshrined entrepreneurship as one of its eight key competences and aspires to have an 'innovation-based nation by 2020' (Seikkula-Leino, 2011, p.69). In Hong Kong, there is a wide recognition that entrepreneurship is the 'engine driving the economy and society in most countries...this created an urgent need to let students, the future work force, learn about entrepreneurship' (Cheung, 2008, p.242).

In Ireland, many resources are available to post-primary schools and teachers for the promotion of enterprise and it is an explicit topic in the curriculum (DES, 2019a). Yet from personal observations, a contradiction exists in the curriculum delivery. Enterprise is part of all business syllabi, yet for junior and senior cycle programmes, the priority for teachers is often examination preparation and not the promotion of enterprise. Hence, enterprise knowledge, rather than skills, are developed in the classroom.

Therefore, there appears to be a mismatch on what the experienced reality is for students as they learn within their school and what is envisaged in the rhetoric and aspirations of government and policy makers (Kelly, 2009, p.11). This deepening and growing awareness of this disparity between rhetoric and practice provided the initial genesis for this research study on enterprise education in post-primary schools.

It was also my observation at the time that certain post-primary schools were continually participating in and successful at national level in the SEA competition. A significant feature of these schools was that junior and senior year-groups' participated at all three levels of the competition and entry was not restricted to TY students only. Many of these schools had earned a reputation for enterprise education on foot of their success in the student enterprise competition while other schools, sometimes in the same town or area, did not participate at all. In essence, my observation was that within the school system a decided chasm exists on how students experience enterprise in schools or whether they experience it at all, and it appears to depend upon their school selection.

These observations and ruminations on the enterprise teaching and learning and its random provision in post-primary education in Ireland laid the foundation for this research study. Specifically, the haphazard provision of enterprise education, the lack of coherency between rhetoric and reality and the variable levels of appreciation of the value of enterprise education as an integral part of the curriculum in the post-primary system initially informed this research study. As a teacher of business and now Inspector, this situation generated many questions for me. Refined versions of these are listed below and these formed the basis for the initial approach to, and design of the research study.

- Why do some schools support participation in the enterprise competitions?
- Are there any significant factors or contexts that promote and facilitate a school's success within the national competition?
- If the rhetoric on enterprise is so strong at national level, why is it a priority in some rather than all school curricula?
- How can enterprise be taught more explicitly and be embedded as a core element within the curriculum?

These deliberations and questions have guided the construction of this research study and allowed the overarching problem for this research study to emerge as, **how best can enterprise education be supported and integrated into the post-primary schools system in Ireland.**

To address this overarching problem, it was decided that a review and exploration of some exemplars of the very good practice could possibly form the basis for the research study. Therefore, the first task was to identify post-primary schools who were consistently including enterprise education in their school curriculum. After some discussion with other teachers and my supervisor, it was decided that schools who habitually compete in, and are successful in the SEA make up the sample exemplars cases for the study.

That is those schools who were consistently winning at county level and proceeding to the national competition. The guiding assumptions here were that in these schools there are situational and other factors that facilitate the school's success and also that enterprise education is seen as a priority within the school's curriculum. An exploration of the reasons why the schools were successful and how they accommodated and managed successful teaching of enterprise within the school and their local area was envisaged, with these findings informing a possible solution to the research problem stated above.

Essentially, the research study was seeking to understand the situational and contextual factors which enabled a schools' continuous success in the competition and therefore allowed enterprise to become an embedded core curricular element.

A secondary aim of the research study is to consider if any common factors existed, and if so, determine what commonalities existed in all the schools. Specifically the researcher was seeking to identify and understand whether there were antecedent and/or contextual factors that favoured enterprise within the selected schools?

The premise was that if such factors can be identified and described, then it may be possible to develop a framework to inform all interested stakeholders on how best enterprise can be supported and integrated in post-primary school curricula at system and national level.

The above summary describes the overarching purpose of, and approach to this study. The next section explores the context of the study.

1.1 *The Irish National Policy Context for Enterprise Education*

The national context for enterprise education presents as a highly fragmented environment with post-primary teachers and schools designing their own programmes based on their own interpretations of the meaning of enterprise and curriculum design. It is the opinion of this researcher that this fragmentation needs to be addressed, so that every student in post-primary education has parity of opportunity for enterprise education. A fundamental objective of the research aim and purpose is to find out how teachers and schools conceptualise enterprise and then translate these conceptions into effective classroom practice within the selected schools. The schools who participated in this study consistently excelled in the SEA and the researcher set out to interrogate and analyse understandings, perceptions, decisions and actions related to enterprise education in order to distil the factors that influence and aid their successful implementation of enterprise education in the classroom. In addition, the information based on 'best practice' will also help address the fragmentation in the present enterprise education provision and also generate a framework of action at national level to increase participation in enterprise education in the system

The fragmented nature of the curriculum in enterprise education was also acknowledged by the Department of Enterprise, Trade and Innovation and the Entrepreneurship Board who published a joint report entitled *Entrepreneurship in Ireland (2014)*. In this report, they made specific reference of the Irish educational system and listed key actions which needed to happen.

Among the key actions was the need to develop guidance for schools to enhance enterprise in education and to 'examine the entrepreneurship in the schools activity in each LEO area and develop strategies to increase participation and impact' (2014, p.22). The Forum recognised that there were many initiatives currently being undertaken to enhance entrepreneurship education and skills development in Ireland, but they remained fragmented (2014, p.15).

The need to support and promote enterprise in Ireland in a fundamental and educational way is also acknowledged elsewhere. The Global Entrepreneurship Monitor (GEM) research project is an annual assessment of the national level of entrepreneurial activity in multiple and diverse countries.

The GEM Irish report was also critical of the Irish performance, and ‘highlighted the need for a national campaign to promote entrepreneurial activity at all levels in society’ (Garavan *et al.* 2010, p.237). The Eurydice Report published by the EU Commission presented the challenges that European countries faced in the implementation of the key competences approach. There are eight key competences and one of these is a sense of initiative and entrepreneurship. The key competences represent a combination of knowledge, skills and attitudes that are considered necessary for personal fulfilment and development; active citizenship: social inclusion and employment (2012, p.7). The report highlighted four challenges that must be overcome if the promotion of the key competence agenda is to be successful. One challenge was the absence of a national strategy or any large-scale initiative for entrepreneurship.

The Eurydice Report (2012) also noted that some competences such as technology and communication skills, entrepreneurship and civics are widely integrated in the primary and post-primary systems, however ‘in one third of European countries...the focus on entrepreneurship education does not start until secondary level’ (2012, p.9). Ireland is one of these countries.

The report is cautionary about the amount of integration that actually takes place where competences are spread across the curriculum positing that it should not be overestimated (2012, p.10). However, a cross curricular and integrated approach, similar to the approach adopted for Literacy and Numeracy is the favoured option and ‘teaching entrepreneurship education as a separate subject is less common’ (2012, p.24).

The next Eurydice report published in 2016 acknowledged some improvement in the provision of national strategies, however, it was highly critical of how little monitoring for progress or impact surrounded the national strategies. It recommended the need to support countries in developing and implementing more robust monitoring frameworks (2016, p.11). The need for a large scale initiative supports the development of a national framework, with appropriate monitoring embedded for enterprise education is mooted. In this regard, it is important to note that it is envisaged that the framework from this study will facilitate this development of a more coherent and large scale embedding of enterprise education within the post-primary curriculum.

This researcher is reminded of the national literacy and numeracy strategy developed by the Department of Education in 2011, which set out specific targets and actions to be implemented by all schools within a specified time period (DES, 2011). A similar integrated approach which has monitoring and evaluation inbuilt may be required for enterprise education.

Garavan *et al.* (2010) contended that educational provision for entrepreneurship education at primary and post-primary levels is an add-on rather than an integral part of the educational process. This was also noted by the European Commission (2008) where they noted that Ireland along with Estonia had a plan to start offering a specific subject on enterprise in the near future at upper post-primary. The EU report was alluding to the draft specification for a draft short course on enterprise which was prepared by the NCCA for discussion, but has never being implemented.

The drafting of a stand-alone specification for enterprise actually runs contrary to the preferred whole school cross-curricular approach advocated in the Eurydice Reports (2012 and 2016). The potential problems of adopting a cross-curricular approach were discussed in the context of the experience with ICT within the Eurydice Report (2012). In a situation where ICT is not taught as a subject area but as a tool to support learning, 'some teachers might consider it as no more than a support for teaching which can be put aside in order to focus on the content of their specialised subject' (2012, p.26). Hence, the need for a national framework or strategy for enterprise education to be adopted by all teachers as part of their subject curriculum is a very important imperative.

In recent years, awareness of the importance of enterprise education grew amongst policy makers and as a result the rhetoric is more focused on action. The Department of Education and Skills (DES) published annual Action Plans for Education in recent years. Enterprise and entrepreneurship has featured in these plans, and this is applauded, 'entrepreneurship development is central to many government policies for building a knowledge driven economy and an entrepreneurial culture' (Hannon, 2006, p.296). However, definitive action on the plans has not materialised over this time. In fact, the level of emphasis on entrepreneurship in action planning has decreased in recent years.

The *Action Plan for Education 2017* contains five overarching goals, one of which is to build stronger bridges between education and the wider community (2017, p.4). Within this goal is situated enterprise and entrepreneurship. The plan stated that ‘to become an innovation leader and to build a strong talent base we must effectively engage with enterprise... we want to develop stronger entrepreneurship in education to match top performers in Europe’ (2017, p.46). This statement included a tacit pronouncement that to date we have not being successful in the area and have not being a top performer.

The report further acknowledged that ‘a critical success factor is real partnership between education and enterprise’ (2017, p.47). Specific actions are articulated to achieve this. One such specific action was to develop new guidelines for schools on Entrepreneurship Education (2017, p.48). It was action number 107 and was to be completed in quarter 3 of 2017. No action occurred in 2017 or as yet.

In the *Action Plan for Education 2018*, goal four was again included to build stronger bridges between education and ‘the wider community’ (2018, p.4). Once again, the plan was to publish an entrepreneurship policy statement and develop entrepreneurship education guidelines for schools (2018, p. 50). Interestingly, the first part of this plan was listed as action number 81 and no action for the development of entrepreneurship education guidelines is envisaged within the actions. As with the previous year, no action related to the goal occurred in 2018.

In the latest *Action Plan for Education 2019*, the word entrepreneurship appeared only once in the entire sixty page document. It was again under goal number four which was to ‘intensify the relationship between education and the wider community, society and the economy’ (DES, 2019b, p. 35). It appears in sub action number 58.2, which was to ‘publish the “Entrepreneurship Education Policy Statement”’ in quarter 3 of 2019 (2019b, p.37) and no action has occurred in 2019 to date.

So, over the three action plans published since 2017, the national planning agenda for entrepreneurship has receded. While in the past we may have being critical of the overabundance of rhetoric about enterprise and entrepreneurship with little action to match. It now appears that there is less rhetoric to match the lack of action at national policy level.

This research study will move beyond the rhetoric and superficial listing of actions and seek to broaden and deepen informed discourse on enterprise education in post-primary schools.

The European Commission has been also proactive in appreciating the importance of enterprise and the essential role that the education system plays in nurturing entrepreneurial capability and capacity, particularly at post-primary level. This proactivity has been acknowledged by Irish Business and Employers Confederation (IBEC) who state that 'the European Commission has long recognised that to truly foster entrepreneurial spirit, culture and activity across its member states', it needs to ensure that 'entrepreneurial education is made available to all students at all levels across all countries' (IBEC, 2015, p.10).

As far back as 2004, An EU report had twenty-one recommendations on how member states should be approaching the implementation of entrepreneurial education in their countries. The recommendations were action based. Two pertinent recommendations for this study include:

- Each country should adopt a definition for entrepreneurship education, to be used as a reference for activities to be developed at a national level. This definition should be compatible with the one adopted by the experts.
- Launch a national strategy or action plan on entrepreneurship education, ensuring a coherent and global approach.

The second recommendation has appeared in the Action Plans for Education published by the Department of Education and Skills, but as alluded to in the previous section, its inclusion with little evidence of action has only added to the mismatch between rhetoric and reality.

This mismatch is noted by Gleeson who contended that 'in the absence of rigorous analysis, Irish education policy has been characterised by ambivalence on the one hand and a dichotomy between rhetoric and reality on the other hand' (2009, p.16).

1.2 *Defining Enterprise Education and Entrepreneurship*

Returning to the first recommendation from the EU report (2004) which cited the need for each country to adopt a definition of entrepreneurship, this researcher will now focus on the defining of enterprise education and entrepreneurship. At the start of the study a simple and pervasive concept of enterprise was held by the researcher. It simply involved the learning and development of skills or knowledge in order to set up a business and become an entrepreneur. After twenty years teaching Business with a very small enterprise element as previously described, this was my long held understanding of the term.

While I was aware of the term 'Enterprise Education', I did not associate any specific significance to its meaning, but would have viewed it simply and unconditionally as another way to write the term. This simplistic and unconsidered approach to meanings was rapidly dispelled upon my initial reading and research on enterprise. Yet, for two decades I laboured and taught without any understanding of the different meanings attaching to the two terms, much less realising that there existed a distinct difference in the terms which I used on a daily basis. Interestingly, at no time over two decades was I asked to consider its meaning and how I taught the concept in lessons. Thus, the question arose for the researcher, what specifically was I teaching? Was it entrepreneurship or enterprise?

The defining of entrepreneurship and enterprise has posed many difficulties and not just for this teacher/researcher. Edwards and Muir supported this assertion stating, 'since the inception of research into the field of entrepreneurship, academics can neither agree on a definition of the term "entrepreneur" nor the notion of "enterprise"' (2012, p.279). This lack of agreement was confirmed almost ten years previously by Leffler and Svedberg who asserted that there is 'no unequivocal scientific definition of the concept, which may partly be explained by the phenomenon being changeable and by different disciplines focusing on different aspects of entrepreneurship' (2005, p.221).

Around the same time, Hytti and O'Gorman also stated that there is 'still considerable conceptual confusion as to what constitutes enterprise education' (2004, p.12). In general terms, there is a nuanced language pertaining to enterprise. *Enterprise education* refers to the development of general life skills so as to allow an individual to develop enterprising skills for usage in all facets of their lives. The EU defines enterprise education as the 'seeking to foster self-esteem and confidence by drawing on the individual's talents and creativity,

while building the relevant skills and values that will assist students in expanding their perspectives on schooling and opportunities beyond' (ILO & UNESCO, 2006, p.22).

On the other hand, *entrepreneurship* refers to the concept of developing enterprise skills for the express purpose of starting a new business venture.

The primary focus of entrepreneurship is on using enterprise skills to start a business. That is to plan and launch a new business venture while the focus of enterprise education is on active learning to develop the knowledge and skills needed to function as an enterprising citizen, the development of personal skills, behaviours and attitudes that enable active engagement as members of society, including running a business. In practice third level institutions tend to approach the topic of enterprise from the business start-up perspective and too often the distinction is not evident (Jones and Iredale, 2010, p.11).

This dichotomy or binary is supported in the extant literature relating to enterprise, 'enterprise education is not the same as entrepreneurship education' (Harte and Stewart 2012, p.331 and Caird 1989). Entrepreneurship is a part of or a subset of enterprise education. Entrepreneurship covers how enterprise skills are employed to set up a new business venture, whereas enterprise education is learning about general enterprise skills, skills which will aid the learner throughout their life such as communication, problem solving and critical thinking and how they can be applied to all aspects of a person's life.

Enterprise education is a broader concept and is wider than the narrower application of entrepreneurship solely to business start-ups. This clarification is important to address so as not to perpetuate the confused usage of terms.

The experience at post-primary level in Irish schools is similar to third level, enterprise as a term is used interchangeably with entrepreneurship and tends to be solely applied to the business start-up scenario within business subjects and related programmes, hence it is viewed as only a term and activity relevant to Business.

The difference between the terms was not apparent to this researcher and was not problematic for my teaching, as all programmes with an "enterprise" title and dimension promoted entrepreneurship and business start-ups.

Hence the teaching of enterprise was always viewed as within the remit of Business teachers in a school. Remarkably, the use of the word “entrepreneurship” is not used in the title of any business programmes or modules, it was and is always the word “enterprise” which is used. Thus, the use of the word “enterprise” in the title of business modules and programmes at post-primary perpetuates the blurring of the distinction between the two terms.

To aid understanding of how the terms are used and applied outside of the Irish education system, it is necessary to look at how other countries define and distinguish between the terms enterprise education and entrepreneurship. Interestingly, there is clarity in the understanding of the difference between the terms and consistent thinking among all contributors to the academic field, it is in the application of the terms to education systems that the disparity emerges. The next section will consider how the terms are interpreted and applied in other education systems.

In the United Kingdom, the terms have been explicitly defined over recent years with key contributions from researchers and policy informers in the field of enterprise.

The past 30 years or more have seen a greater involvement by Government in education than in the past, and arguably this stemmed from the speech delivered by James Callaghan at Ruskin College, Oxford in 1976. Included in the concerns he voiced at that time was that young people leaving school did not fit the requirements of industry, and Callaghan was of the view that new skills were needed

Jones and Iredale, 2010, p.8

A report on enterprise education in the post-primary system in the United Kingdom defined enterprise competency as ‘the ability to handle uncertainty and respond to change, to create and implement new ideas and new ways of doing things, to make reasonable risk/reward assessments and act upon them in one’s personal and working life’ (Davies Report, 2002, p.19).

The Quality Assurance Agency (QAA) for the United Kingdom defined enterprise education as ‘equipping students with an enhanced capacity to generate ideas and the skills to make them happen’ (QQA, 2012, p.2). Alternatively they defined entrepreneurship as equipping ‘students with the additional knowledge, attributes and capabilities required to apply these abilities in the context of setting up a new venture or business’.

Allan Gibb (2008) believed that enterprise education must encompass three elements of learning: learning for the pursuit of some task, learning through a particular pedagogy and finally it required particular thinking skills in learning about enterprise. While Harte and Stewart are unequivocal in their explanation of the two concepts, 'entrepreneurship education whilst similar in its approach to developing and improving skills has in addition, in many instances, a clear intention on business start-up' (2012, p.332).

Similarly In Sweden, the National Swedish Board for Industrial and Technical Development (NUTEK) suggested that to be 'entrepreneurial or enterprising means utilising opportunities and changes and having the ability to carry out activities aimed at improving, developing and creating values that may be social, personal, cultural or economic' (NUTEK, 2000, p.78).

It is interesting to note that Sweden has adopted a wide focus on enterprise education and do not advocate the creation of a new stand-alone subject, but rather to create an attitude to learning (Leffler and Svedberg, 2005, p.221). The aspiration is that enterprise education would be available throughout the whole education system (Leffler, 2009, p.104).

The wider aspiration articulated here envisages enterprise education as embedded in all subject disciplines and not ring-fenced in one subject area, which is the practice also advocated in Ireland and supported by Birdthislile *et al.* who declared that 'the focus and objectives of enterprise education programmes should involve the acquisition of a broader set of life long skills and not simply training for business start-up' (2007, p.266).

Eva Leffler identifies it as a dual approach to enterprise education within post-primary schools where, 'entrepreneurship in a schools' context comprises two orientations, one of which is entrepreneurial and the other enterprising'. She expands on the two competing discourses taking place in the area of enterprise education within post-primary schools.

Simply put as a question, is it about teaching students to set up and run a business or is it developing students' capacity to be enterprising? Leffler states that there is 'conceptual problems concerning what entrepreneurship in schools really implies' (2009, p.105). These problems are exacerbated by the confusion surrounding the term enterprise, as exemplified this researcher's experience as a business teacher, who never considered it may have equal relevance to every teacher and subject in the school's curriculum.

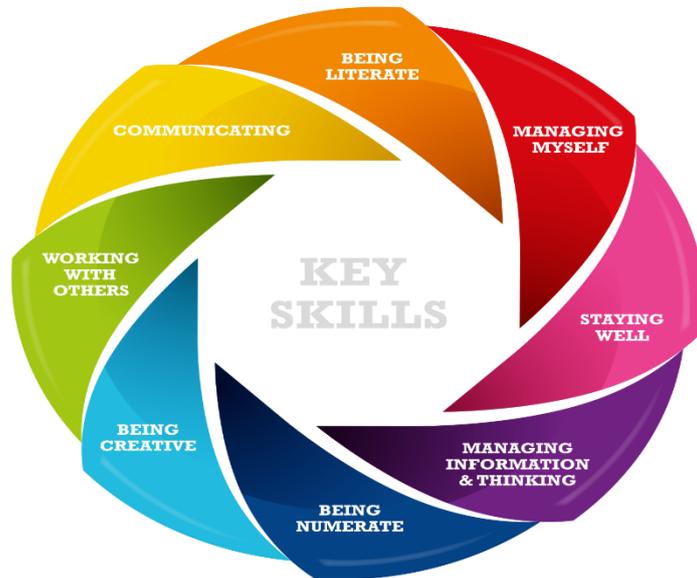
When enterprise is viewed narrowly as a business-related topic and non-business teachers are unaware of its potential application to their subject area, then there will be difficulty in embedding it across the entire curriculum and moving it outside the business classroom. A key issue attaching to this research project will be to enquire into this contention of a lack of understanding of the meaning of enterprise and to seek ways to embed it more widely in the curriculum.

This ideological approach to enterprise and belief that it needs to be embedded throughout the entire curriculum is still quite rare, except in Finland (Seikkula-Leino, 2011, p.70). In their education system, 'entrepreneurship education is not seen as a subject, but is integrated thematically into other subject areas – to be included in the subjects by way of local curriculum development' (2011, p.70). The Finnish model for implementing enterprise education is further supported by Hytti and O'Gorman, they suggested from their research in four countries which included Finland, that 'enterprise education will fail when it is conceived narrowly as setting up businesses as part of vocational education and training, and, consequently is not integrated into the students' overall studies' (Hytti and O'Gorman, 2004, p.14).

Draycott and Rae posited that 'the United Kingdom and Ireland have distinctive national strategies for enterprise education in focusing on a broad, skills-based definition of enterprising behaviour, applicable not only to business venturing but also to increasing employability' (2011, p.132). This national enterprise education strategy in Ireland is currently being rolled out as part of the key skills development for junior and senior cycle students (NCCA, 2019). The term 'enterprise' is not explicitly used in the context of developing these skills but rather the word 'key'. The majority of the NCCA key skills for junior cycle are relevant to enterprise education, such as communication, working with others, being creative, managing myself along with managing information and thinking.

The full list of junior cycle key skills is displayed in figure 1.

Figure 1 NCCA Junior Cycle Key Skills



However, this link between these key skills and enterprise is not explicitly referenced in any literature pertaining to the NCCA key skills and consequently, despite the commonality in the sets of skills, many teachers do not associate key skills development with enterprise. This may also be due to the business connotations the term enterprise holds across the Irish curriculum and so teachers do not see the connection of enterprise to their own subjects or related to key skill development across the curriculum.

An EU Commission report, referring to the term entrepreneurship, with its narrow focus on business start-ups, stated that to move entrepreneurship education from a peripheral almost extra-curricular activity to a situation where it is embedded systemically will necessitate a paradigm shift with teachers acting as the key agents of change (2010, p.46). To this end it is imperative that teachers have a clear understanding of the concept, ‘from the beginning it is important that there is a solid – and scientific – understanding of how teachers perceive entrepreneurship education’ (2010, p.46). This discrepancy needs to be addressed as ‘the development of this understanding will inform the development of teacher training’ and any future Government policy (2010, p.46).

The criticality of understanding by teachers of the concept is further elucidated upon in the report and ‘any strategic approach to developing entrepreneurship is underpinned by a thorough understanding of the ways in which teachers understand and internalise notions of “entrepreneurship” and what it means in educational settings’ (2010, p.47).

This confusion over the naming and defining of enterprise, enterprise education and entrepreneurship is not aided by the increasing popularity of other concepts or topics being introduced into the field, such as creativity and innovation. The concept of creativity and innovation are gaining traction and yet both concepts reflect the same skills required for enterprise. It is noteworthy that in some of the academic literature the words enterprise and innovation are now used interchangeably to signify similar meaning (Gleeson, 2009; IBEC, 2014).

In Hong Kong, Cheung after extensive research on four enterprise competitions operating in the education system contended that, ‘the existing business education was not relevant to the business world, and this situation applies both in Hong Kong and the West’ (2008, p.242). He asserted that there now existed a consensus among educators today that the focus should be placed on developing a set of generic attributes, skills and behaviours essential to the successful entrepreneur (2008, p.243). Thus, for Cheung the distinction between the two terms is a moot point, as the development of general enterprise education skills will equate to the development of entrepreneurship skills and vice versa.

For this research project, the use of the term enterprise education will be used to denote its wider meaning and application, as the development of enterprise education skills will include entrepreneurship skills amongst others that can be described as life skills whilst noting that the latter is a subset of the former.

Given the paucity of research on enterprise skill development in post-primary schools in Ireland and the confused vista presented with the naming of enterprise programmes, this research study will focus its investigation on the factors associated with the development of enterprise through the lens of entrepreneurship skill development in schools participating in the SEA awards. Furthermore, this approach will provide an appropriate conduit to investigate the factors facilitating selected schools to excel in the curricular provision enterprise education.

1.3 Enterprise Education within the Irish Post-Primary Curriculum

As stated previously, enterprise is not a new topic in the curriculum. It is a topic on all business education syllabi for junior and senior cycle post-primary in Ireland. It was introduced to the Business Studies syllabus as part of a reformed junior certificate (now called the Junior Cycle Award) in 1989 and as part of a redeveloped business syllabus in the Leaving Certificate in 1997. The teaching of enterprise at both levels is mostly focused on the skills and characteristics of an entrepreneur and how setting up a business benefits the local community (DES, 2016; DES, 1997). It tends to be presented as a stand-alone topic and is normally a chapter in a business textbook for junior and senior cycle. The explicit syllabus requirements are knowledge based and the provision of evidence of the development of enterprise skills is not a mandatory element of the syllabi.

Enterprise at junior cycle is part of the Business Studies curricular specification. The Business Studies specification is based on thirty-seven learning outcomes and 'Enterprise' is the title of one of the three units in the specification. Within the specification, three learning outcomes specifically refer to enterprise and 'entrepreneurial opportunity' (DES, 2016, p.15).

The primary learning aim is to 'describe the skills and characteristics of being enterprising and appreciate the role of an entrepreneur in an organisation, in society and to the economy' (2016, p.15).

My experience of teaching this unit was to focus on the knowledge content and use the textbook as the primary teaching aid when providing examples from the local and national scene. The type of learning in my classroom could be described as mostly cognitive requiring description of facts rather than experience. As a teacher my priority was the acquisition of knowledge for examination preparation and success. Supporting the contention that in Ireland the role of the teacher is primary in terms of syllabus implementation (Gleeson, 2009, p.23). As a teacher I viewed the specification as a list of topics to be taught and delivered for examination success as opposed to using the specification as described in the rationale to encourage 'students to develop skills for learning for work and skills for life' (DES, 2016, p.4).

Responding somewhat to feedback from teachers and the general rhetoric on enterprise education at national level, there is now an option for students in second year of the Junior Cycle programme to partake in a *Business in Action* project or a Classroom-Based Assessment (CBA) since the introduction of the Business Studies specification in 2016. This group project is a research project on any one of three business areas; economics, finance or enterprise. This provides an opportunity for students at junior level to develop their market research skills towards developing a product or service of their choosing. That is should they opt to complete the enterprise option.

The issue remains that while the *Business in Action* project is mandatory, the enterprise option is not. Therefore, teachers and students can avoid deeper engagement with enterprise and concentrate on aspects of the specification which are possibly less onerous and support better focused examination preparation. Again, the flexibility within the curriculum can be used by teachers in their pedagogical practice either for life-long skill development or measurable knowledge acquisition.

How an individual teacher and their school perceive and navigate these binary perspectives of enterprise and what are the factors that contribute towards this pedagogical stance and perspective in a school are key issues that underpin this research study.

In senior cycle, enterprise is not a specific subject, but is part of the Leaving Certificate Business syllabus (DES, 1997). It is one of the seven units in the syllabus and the smallest. Once again the syllabus requirements are centred on learning the skills and characteristics of successful entrepreneurs and the role of enterprise in the local and national economy. The unit prescribes theory-based learning and does not require any practical engagement or skills or attitudinal learning. The teacher's guidelines accompanying the syllabus state that the 'objective is for students to understand the importance of enterprise in business' (DES, 1997, p.11). There is no specific reference to or requirement for skill development, rather the expectation is that students will understand the importance of enterprise for business. This understanding is then assessed in the terminal examination. Once again it is possible for a teacher to eschew the development of entrepreneurship skills and attitudes.

Other opportunities for enterprise learning do exist within the Leaving Certificate Programmes. The Leaving Certificate Vocational Programme (LCVP) was introduced in 1994 with a very specific focus on the business and vocational environment (Malone, 2011, p.96). It is an activity-based programme which was developed to provide students in senior cycle with transferable skills (DES, 1994). The programme is taught and delivered alongside the established Leaving Certificate through student participation in two modules, one of which is titled 'Enterprise Education'. The programme is optional for all senior cycle students and students qualify for participation based upon their subject selection or what is called Vocational Subject Groupings (VSG).

The rationale for this method of selection is that students are supported in their learning by taking selected VSGs and it is envisaged that cross curricular links between the subjects be developed and this in turn will support and enhance the practical aspects of the programme. The DES has carried out a number of evaluations of the LCVP programme which are available on its website.

A common recommendation is for the cross-curricular links to be developed more explicitly (DES, 2019c). However, the reality is that the opportunity to develop links has not materialised in many schools as the link modules are often considered as a stand-alone endeavour. This experience of the LCVP over the past 25 years provides a salient harbinger for the proposed embedding of enterprise education across the curriculum as an integrated curriculum in schools is a new venture in Ireland.

It is interesting to note that in the Enterprise Education module of the LCVP students learn about enterprise in society and entrepreneurship. Students and teachers can, if they so decide, become involved in an enterprise activity and set up a small enterprise. However, this is optional and not mandatory. Thus, many teachers do not opt for this activity and eschew it in favour of more theory-based elements. This was confirmed in a previous research project where the researcher investigated the evolution of the LCVP in a cluster of schools and found that teachers' are the main decision makers in deciding whether to include the practical elements of curricula. (McConway, 2010). Once again, the opportunity to embed enterprise education in its wider meaning in schools is circumvented.

The Leaving Certificate Applied (LCA) programme is an alternative to the established Leaving Certificate. It is a distinct, self-contained, two year Leaving Certificate programme aimed at preparing learners for adult and working life. It is aimed at learners whose learning needs are not adequately catered for by other Leaving Certificate programmes. Again, there is a provision for enterprise education to be part of the programme and again this is optional and not mandatory (DES, 2019d).

The rapid growth of the Transition Year (TY) programme in senior cycle over the past twenty years, has presented an opportunity to many schools and over this time enterprise has been introduced as part of the programme's curriculum offering in many schools. As schools have the flexibility to design their own TY programme and modules, they sometimes include enterprise as part of their TY business module or in other situations as a stand-alone module itself. The Department guidelines for TY emphasises that the aim of all designed modules will be to provide 'opportunities to help pupils to develop skills and attributes which would have a particular impact on their personal development' (DES, 1993, p.12).

From this researcher's interaction with teachers and schools, it is evident that some schools have opted to develop a business programme which is theory or knowledge driven, while other schools have viewed the TY programme as an opportunity to develop skills and attributes through an activity based business programme, which has enterprise and entrepreneurship at its core.

The development of innovative enterprise programmes within the TY programme has been commented upon in the school inspection reports published on the Department's website (DES, 2019c). However, another study on the TY programme in schools noted considerable variations in how the programme is delivered, particularly as regards content, organisation and assessment (Jeffers, 2007). The flexibility the programme offers can be used to optimum effect, but also can allow mediocrity to prevail. An observation in a subsequent study on TY is that the use of active methodologies 'were not as widely used as was recommended by the DES' (Malone, 2011, p.98). This raises the concern that teachers may not be embracing the active life skills and personal development dimension of learning advocated and are eschewing personal life-skill development for the more traditional cognitive learning and knowledge acquisition.

This determined focus on knowledge embodies what Gleeson described as teachers 'fixation with subjects and syllabus content' (2009, p.174). The provision of enterprise in post-primary schools is evident at all levels of the curriculum, however it remains a non-mandatory aspect of the design.

Another supporter and promotor of enterprise learning in post-primary schools is the school's competition for enterprise, the aforementioned Student Enterprise Awards (SEAs). The assumption and premise guiding the competition is that teachers will follow a specially designed enterprise programme which culminates in the development of a student enterprise or 'mini-company'. Specific resources are provided to the teachers and students to support their teaching of the programme. The resources provided for the SEA competition and its corresponding year-long programme are readily available on the SEA website and so provides a *de facto* curriculum for a school's enterprise education programme. There is a month by month breakdown of suggested activities provided for participant schools with appropriate accessible resources. The year-long programme culminates in a school entry to local county SEA competition operated under the Student Enterprise Programme (Student Enterprise, 2019).

There are three levels or categories of entry into the competition. The three categories are; junior, intermediate and senior. The junior category caters for students in the junior cycle of post-primary education, the intermediate section is for Transition year students while the senior section caters for senior cycle students. It is no surprise that the intermediate level of the competition is the most popular as teachers and students have the time and curricular space to focus on the enterprise programme and competition.

All county champions in the three categories are invited to attend this national event, where an overall national winner for each of the three categories is selected. It is success in this enterprise competition which was used to select the five participant schools for this study. The full selection criteria and process will be described in the Methodology chapter.

1.4 Conclusion

These preoccupations and scenarios engaged this researcher in additional ruminations and reflections on the topic of enterprise in post-primary schools. Particularly on how the student experience of enterprise education is dependent on a myriad of variable factors, such as subject choice, school curricula and ambition and school personnel's and stakeholders' perceptions on the value and purpose of enterprise education within the curriculum. There is a manifold dependency on the vagaries of multiple factors and these need to be understood if enterprise education is to become embedded in the educational system.

Yet, some schools are indeed very focused on enterprise education and have earned a reputation for its successful embedding within the curriculum. This reputation is evidenced, moderated and promoted by their continued and consistent success in the SEA awards. The study will explore the factors that contribute to this success within a purposive sample of schools and follows on a recommendation of the EU Commission:

Additional research is needed to understand how the key competence [entrepreneurship] is reflected in national curriculum approaches – alongside exploring small-scale good practice and translating these into scalable models of embedded curriculum practice.

EU Commission 2014, p.27

Using information on the effective practice which already exists in these successful schools within the system to help identify how best to support and integrate enterprise education within the post-primary school curriculum is the primary aim of this study.

What is envisaged by integration is embedment into the curriculum, so enterprise education is no longer a stand-alone topic in some specifications, but rather it develops as a core part of the all subject provision in post-primary schools. This is a 'big ask' as the situation that is described above is such that enterprise education is located mostly within one subject - Business or as a standalone endeavour within a programme.

It is posited that a 'fundamental re-ordering of how economies function and of how organisations are structured and managed has created a new imperative for enterprise education' (Hytti and O'Gorman, 2004, p. 11). This researcher is fully cognisant of the demands this new embedded existence for enterprise education may place on how curriculum is conceived within the post-primary school system.

However, subscribing to a view of curriculum as the totality of experiences a student has in their schooling and not simply the delivery of specified content is paramount (Kelly, 2009, p.13). This will demand for many teachers a shift in mind-set or what Senge called *metanoia* (1990, p.13). To view the student experience as equal to the content prescribed in a specification document will be crucial in bridging the gap between the intended curriculum and the received curriculum.

This research study will aim to identify how some schools are bridging the gap and are making headway in marrying the apparent disconnect between the rhetoric representing the intended curriculum and the local reality represented by the received curriculum in the classroom. It is imperative that 'we must not lose sight of the fact that curriculum studies must ultimately be concerned with the relationship between these two views of curriculum, between intention and reality... with closing the gap between them' (Kelly, 2009, p.12). Closing the gap will be supported by pursuing a solution to the problem of how best we can support the integration of enterprise education within the post-primary curriculum in Ireland. As a starting point investigating the following research questions form the basis of the research study:

1. What are the antecedent and or contextual factors facilitating selected schools to excel in post-primary enterprise education?
2. How can these selected schools in post-primary enterprise education inform any possible national framework of strategic policy and development in schools?

1.5 Thesis structure

Chapter one provides a background to the research study and the genesis for the research theme and what the study seeks to address. A biography of the researcher is presented as their involvement in enterprise over the past two decades is described. An outline of Irish national policy is expanded upon and how this policy interacts with various stakeholders at both local and systemic level. A clear distinction is drawn between enterprise education and entrepreneurship and how these concepts have shaped and at times confused the existing landscape for enterprise educating within Irish post-primary schools.

Chapter two provides an overview of the relevant policy documents and academic literature pertaining to enterprise education. The paucity of targeted enterprise research at post-primary level emerges. The curriculum argument is presented along with the philosophical and economic underpinnings. A stratified model of enterprise is explained providing a vision for how enterprise education can be supported and integrated within a curriculum. Critical issues pursuant to enterprise education, such as assessment along with the role of the teacher are analysed and interrogated.

Chapter three maps out the methodological approach adopted by the researcher for the study and why a case study approach was favoured. All decisions which formed the methodological landscape are defended and supported by the appropriate literature. The selection process for the five schools is explained and justified positioned against a background of little relevant research in the area.

The data analysis process applied to the collected data is presented to aid the reader in understanding how the factors for research question one have emerged and provide the foundation stones of a proposed national framework for enterprise education in the post-primary system.

Chapter four presents the findings from each of the five case study schools. Each case is presented as an individual narrative, so the contextual and antecedent factors emerge organically as the reader learns how each school achieved success on their own unique enterprise education journey, but common themes and associated factors tie all these individual journeys together. It is these themes and factors that germinate into the antecedent and contextual factors within all schools.

Chapter five provides a discussion based on the five case story narratives contained in the previous chapter. The identification of the antecedent and contextual factors in chapter four is elaborated and categorised into individual, whole school and national level. These inform the four pillars upon which a possible national framework for action is constructed. The chapter concludes with a review of the overall research problem and how answering the two research questions could reduce the present mismatch and consequent fragmentation which exists between the rhetoric associated with enterprise education and the reality for many post-primary schools in Ireland today.

2 Literature Review

In this chapter the researcher will explore the relevant academic literature and policy documents concerning enterprise education. It will build on the salient issues raised in the introduction chapter and probe deeper into the themes emerging related to the teaching of enterprise and enterprise education curricula today.

Initial reading within the area of enterprise education in post-primary schools indicated that much research has been conducted by the EU. The EU Commission report of 2004 initially reviewed the situation across the EU member states and concluded that there was evidence of good practice across Europe in many different countries. However, the greatest challenge was to disseminate this good practice and positive examples across all the member states, 'national and local authorities, educational establishments and all other organisations and actors concerned may learn from each other's best practice, or draw inspiration from it' (EU Commission, 2004, p.9). This report provided a guiding vision for this research project. Specifically to identify and explore schools excelling in enterprise education and to investigate what others and the system in general can learn from these in how to embed enterprise education in their curriculum.

This literature review chapter centres around five primary themes which have emerged from deep exploration of the problem with expansive reading in the key areas whilst at all times cognisant of the focus of the two primary research questions from the previous chapter; the antecedent and or contextual factors facilitating selected schools in their curricular provision of enterprise education? The research problem and questions emanated as an outcome of the paucity of research on the provision of enterprise education in the curriculum of post-primary schools in Ireland.

There is research on what and the how enterprise should be taught, but a gap exists in the analysis of what shapes and supports the effective provision of enterprise programmes, what particular background factors predispose a teacher, a school or community to provide enterprise education for their students. The task of selecting the five themes for the review was not aided by the fact that a great deal of information was available about enterprise, but much of the information had to be unwoven to ascertain what particular aspect of enterprise was being addressed.

A view supported by Downs when he declared 'that people everywhere talk and write about enterprise' (2010, p.6) and also by Haase and Lautenschlager who claimed 'although practitioners, educators and policy-makers recite the benefits of enterprise education like a mantra, it seems that the belief in the effectiveness of enterprise education is often more ideologically than empirically grounded' (2010, p.151).

This research will seek to investigate the optimum context and situation for enabling enterprise education to be taught as a topic within the curriculum of post-primary schools, so the discussion can move from ideological aspirations to one grounded in the reality of schooling today.

The five themes which provide the framework for this literature chapter are:

1. Curricular and philosophical perspectives pursuant to enterprise education
2. Learning in enterprise education
3. The critical role of the teacher for enterprise education
4. Assessment approaches and practices in enterprise education.
5. Challenges of a changing paradigm of education.

2.1 Curricular and Philosophical Perspectives Pursuant to Enterprise Education

There has been a steady rise in the literature surrounding enterprise since the late 1980s, and this 'has exploded across the globe' (Neck *et al.*, 2014, p.2). However, the growth in the scholarship relating to enterprise education has not developed in a coherent fashion. 'Enterprise scholars do not agree on the discipline's purpose or on what theoretical perspectives are relevant...or how it is defined'. The issue regarding definitions was addressed previously, this confusion culminated in what Downs described as a 'messy map of enterprise' (2010, p.19). A view supported by Draycott and Rae who contended that a 'summary of literature suggests a confused agenda, fraught with tensions between ontology, pedagogy and assessment' (2011, p.131). This confused map of enterprise did present a particular challenge for this study in terms of defining the term and identifying what is true and authentic learning in enterprise.

Prior to the 1980s, the literature mostly tended to explain the psychological aspects of the entrepreneurial mind. A common feature of this was the trait theory approach to entrepreneurship.

It characterised the entrepreneur as a person with a specific set of characteristics or traits. Haase and Lautenschlager described this approach as where 'entrepreneurs have a unique set of stable, inherent and enduring personality characteristics' (2010, p.152). Such characterisation appeared to suggest a natural proclivity or an innate set of skills in order to be enterprising. This guiding perspective and approach to understanding enterprise declined in popularity in subsequent years for two reasons. Firstly, the specific range of skills set down as congruent for entrepreneurship were manifold and diverse. Psychological studies conducted in the area of entrepreneurship have produced an expansive list of entrepreneur attributes (Gartner, 1988). Secondly, many of the ascribed skills can be learned in the appropriate pedagogical and social setting and so cannot be classified as simply innate. They can be nurtured and developed with the appropriate training and experience. It is interesting to note that Haase and Lautenschlager critique on this approach as having led to an 'empirical dead end' (2010, p.153).

Gartner (1988) was among the vanguard of researchers who changed the approach to how we view enterprise and entrepreneurs today. He began 'to close a chapter on an increasingly fruitless period of research in entrepreneurship that placed the personality of the entrepreneur at the centre of the discipline' (Downs, 2010, p.58). He argued for a behaviour approach to the study of entrepreneurship and suggested two additional problems with the psychological approach (Neck *et al.*, 2014, p.4). The first was that by attaching too much importance to the individual, no significance was attached to the contexts in which it happens and in addition, he believed that personality theory did not in itself address the issue of individual behaviour within a context very well. The factor of context and situation is a primary concern for this research project, as it forms the basis for the first research question which investigates if the context of a school is a significant factor for developing enterprise education.

2.1.1 *Seminal literature on enterprise education*

Further development of the literature in the area of enterprise education has been marked by various seminal publications over the years. Colin Ball (1989) published a report for the Organisation for Economic Co-operation and Development (OECD) entitled *Towards an 'Enterprising' Culture: a challenge for education and training* where he stated that schools should be developing an enterprising and specifically 'an enterprising culture' (Ball, 1989,

p.21). This was the first report of its kind which focused on enterprise and post-primary education. The report laid the foundation upon which the European Commission has based many of its policy documents in the intervening years.

Today, entrepreneurship is one of the eight key competences promoted by the EU Commission across all the member states (EU, 2012). Gartner (1985 and 1988) asserted that traits are ancillary and the main decisive factor was the entrepreneurs' behaviour and how they respond to their environments. Thus, pointing to the paramount importance of the contextual factors facilitating certain schools' success in the teaching and learning of enterprise.

Sally Caird (1989) published research which sought to understand what it means to be enterprising and its links with entrepreneurship. Her research examined enterprise competencies from Scotland and its national drive on encouraging enterprise education for economic growth. The focus of the discourse centred on enterprise for business start-up. In 1992, she categorised 'enterprise' skills into seven groups and concluded that there was no clear understanding of what enterprise competency means. She raised the questions, asking what it means to be enterprising if not to train future entrepreneurs. Then, what was the meaning of and what qualifies a person to be enterprising? Thus, she precipitated a discourse on the concept of enterprise and the binary between enterprise education and entrepreneurship (Caird, 1989). A binary and confusion which is still evident in practice and policy today and which was examined in the introductory chapter.

Allan Gibb's (1987; 1993; 1996; 1997; 2000; 2002 and 2008) research focused on a discussion and exploration of the conceptual models for enterprise learning and the pedagogical implications with regard to learning outcomes and assessment. A leading pioneer in the area of enterprise education, he advocated a holistic approach to and understanding of enterprise education. Draycott and Rae applauded Gibb's pioneering work stating that 'enterprise was a confused field without distinct understanding and lacking in academic research, with few people other than Gibb making a useful contribution to the field of either enterprise or entrepreneurship education' (2011, p.130).

For Gibb, enterprise education aimed to maximise opportunities for the development of enterprising skills, behaviours and attributes (Gibb, 1993). Learning by doing was paramount to developing the entrepreneur and this *doing* should allow the individual make mistakes. Thus, noting the experiential nature of the learning. Essentially, Gibb argues throughout his research that ‘enterprise skills are not fixed personality traits, but can be learned and developed through experience, [and this] is a tacit premise of all experiential learning-based enterprise programs’ (Athayde, 2009, p.486).

The United Kingdom has published Government reports on the topic of enterprise education and its significance for their education system. The Davies Report (2002) was a major report on enterprise education for post-primary schools and published recommendations for best practice which included the promotion of an integrated approach to enterprise learning along with the development of new more effective teaching and learning materials (2002, p.11). The report also critiqued the deficit in systematic monitoring and evaluation of enterprise capability, learning and activities (2002, p.26). Over a decade later, in 2014, the UK published a report entitled ‘*An education system fit for an entrepreneur*’. This report highlighted the need for more ‘robust enterprise education at school’ and believed that ‘enterprise education should be mandatory in the curriculum for 4-18 year olds... [because] the kind of education enabling economic activity in the modern world was lacking’ (UK Government, 2014, p.8).

An important publication with an Irish connection was written by Hytti and O’Gorman in 2004. They analysed and assessed the objectives and methods within enterprise education programmes in four European countries, Austria, Finland, Ireland and the United Kingdom. They concluded that enterprise was a broad and fluid topic within the programmes which typically focused on entrepreneurial training rather than the more general enterprise education.

As recently as 2016, the EU Commission published a report entitled, *Entrepreneurship education – at school in Europe*, this report reaffirmed the EU’s approach to ‘entrepreneurship is not only related to economic activities and business creation, but more widely to all areas of life and society’, yet it uses the title entrepreneurship education as opposed to enterprise education (2016, p.21).

It reported low levels of participation in practical entrepreneurial learning at school and there exists a need to further develop the entrepreneurial skills of young people (2016, p.9).

The foregoing summary affirms a confused agenda, fraught with tensions between ontology and pedagogy where the 'voices of educators in the school sector... are significantly absent in a discourse dominated by political ideology' as suggested by Draycott and Rae (2011, p.131). This research study will provide a voice to a myriad of stakeholders who support and enable enterprise education within the post-primary school system in Ireland. While there has been a huge proliferation in the literature surrounding enterprise education since the 1980s, its place in the school curriculum is contested. Therefore, it is necessary to examine curricular issues and positions within the Irish context and how these impact on enterprise education in post-primary schools.

2.1.2 The curriculum argument and enterprise education

The confusion surrounding the defining of enterprise education and entrepreneurship and how it is perceived may be connected to where enterprise education resides on the Irish curriculum. To understand fully where enterprise education may be placed on the curriculum, it is appropriate to interrogate the concept of curriculum as it applies to enterprise education and its epistemological history. The researcher will now explore the concept of curriculum and knowledge and from these explorations analyse their critical implications for curriculum planning and design.

This is especially prescient for enterprise in post-primary schools as it has heretofore being treated as the orphan of the Irish curriculum, with no specific curricular home to nurture its growth and development within the whole school curriculum, but rather relying on the interest and sometimes largesse of the business teachers and other champions (Eyal and Yosef-Hassidim 2012). This peripatetic lifestyle possibly emanates from the general lack of discussion on enterprise and its philosophical lineage.

Historically in Ireland, the common understanding of curriculum is an anthology of subjects and their associated content (Gleeson, 2009, p.93). This is the pervasive view for many teachers with each subject having its own disciplinary knowledge which is listed in the content of each subject syllabus. Such a view has become 'axiomatic with the term itself' (Print, 1993, p.5).

The nature of the content of each subject is devised by the statutory body charged with developing the syllabi for each subject. The National Council for Curriculum and Awards (NCCA) consults with relevant stakeholders when designing a new syllabus, which latterly is referred to as the subject specifications, through a subject development group. The composition of a subject development group formed by the NCCA can often be politically informed and teachers are the dominant stakeholder members in the groups (Gleeson, 2009). Therefore, the decision making and vision for new and revised subjects curricula can often be biased towards teacher perceptions of a content driven focus. Deeper discussions on what constitutes the curriculum are not encouraged or promoted within the development groups and a consequence of this is that the concept of curriculum is viewed too narrowly (Gleeson, 2009, p.138).

Curriculum and its design is a wider concept than simply selecting appropriate subject content, an opinion shared by Kelly, who states that curriculum denotes the content of a particular subject or area of study, from the use of it to the total programme of an educational institution (2009, p.9). This opens up the concept of curriculum as a much wider concept than mere content.

Curriculum is not concerned with individual subjects or anthologies of subjects, 'any definition of curriculum, if it is to be practically effective and productive, must offer much more than a statement about content knowledge' (Kelly, 2009, p.9). This wider concept of the total curriculum must be accorded prior consideration and a major task that currently faces 'teachers and curriculum planners is to work out a basis on which some total scheme can be built' (2009, p.9).

For enterprise education, its basis within the Irish curriculum needs to be examined especially considering the confusion on its meaning and understanding.

The broad understanding of enterprise education and its relevance to all subject areas, means it has the potential to have a wider resonance on the curriculum than merely knowledge of what it is. Therefore, a broader perspective of curriculum is required for enterprise education to coalesce into the existing curriculum. The challenge remains as to how can enterprise education with its universal application fit into the total curriculum?

If a narrow perspective of curriculum prevails, then the content knowledge relating to enterprise education would have to be taught in all subjects and this will result in repetitive content for the learners albeit subject based. Hence, a wider perspective and conception of a curriculum is sought and required if enterprise education is to be embedded across the Irish curriculum.

So, what does a broader curriculum mean or even what is curriculum? Defining the curriculum has being problematic for many and this is acknowledged within the literature.

Educators define curriculum in different ways, in part because they bring to that task different perceptions of what curriculum should be. Some educators see the curriculum as a list of subjects to be studied, while others see it as an entire course content. Still others perceive curriculum as a set of planned learning experiences offered by teachers. Another group state that curriculum is a written plan of action, thereby distinguishing it from what actually happens in a school.

Print, 1993, p.7/8

To incorporate enterprise within a school's curriculum, a wider concept than mere content or a list of subjects must be the guiding premise of the definition of curriculum. Curriculum must encompass the wider endeavours which occur in each teacher's pedagogical practice and a student's experience.

Kelly describes the gap that can exist between the planned curriculum and the received curriculum (2009, p.11). The planned curriculum being the syllabus while the received curriculum is the actual curriculum that is experienced by learners, the formal and the informal, and there is often a mismatch between the two. The formal curriculum encapsulates the planned activities such as the time-table allocation for a subject, whereas the informal curriculum includes all the activities that happen on a voluntary basis such as extra-curricular activities. Enterprise education often resides in the latter. For Kelly, 'activities of this kind are usually regarded as having as much educational validity and point as any of the formal arrangements of the school... some would even argue that in certain cases they have more point' (Kelly, 2009, p.12).

The concept of curriculum must be extended to include the formal and the informal curriculum, and this thinking has a particular prescience for enterprise education in post-primary schools. As stated, enterprise education and entry to the student enterprise competition is often an activity that is undertaken as an extra-curricular activity.

Thus, as it is not part of the formal curriculum, it is not assessed explicitly as an element of the terminal certificate examinations. Yet, it must be argued that its educational value and validity is affirmed by the large numbers of schools who engage with enterprise education in schools, as evidenced by the number who enter the SEA annually. For Kelly the ultimate goal of curriculum design and planning is the 'closing of the gap between them' (2009, p.12).

If curriculum itself is a wider concept then the design of curriculum must reflect this stance, 'curriculum is the totality of the experience the pupil has as a result of the provision made' (Kelly, 2009, p.13). This definition facilitates the universality and the space for enterprise education to exist and develop within the curriculum.

Kelly suggests that such preoccupations about the meaning of curriculum do not take place and for many teachers, where 'decisions concerning the knowledge-content of the curriculum become the first, indeed the only, stage in curriculum planning' and inevitably the debate and discussion surrounding the meaning of curriculum operates at the 'superficial level of shared assumptions about human knowledge' (2009, p.33).

This situation as it exists today is not surprising considering the superficiality in the approach to curriculum design and new syllabi in the past, where discourses on the meaning of knowledge and its implication for curriculum were not a common occurrence. Rather the focus for discussion tended to be on the content of any proposed new syllabi and the associated assessment modes for national certification. Gleeson postulates that this lack of epistemological debate has resulted in the main objectives of Irish education been the acquisition of technical knowledge (2009, p.21). This rationalist approach, where all knowledge is viewed as independent of senses, objective and timeless promotes the 'inalienable right of certain subjects' and leads to a technicist approach to curriculum and its design (Kelly, 2009, p.34).

The alternative to this approach is empiricism, where ‘no knowledge comes into the mind except through the gates of the senses’ (2009, p.35). This latter approach promotes the value of knowledge acquired through experience and ultimately from reflection on this experience. This approach was initially promoted by John Dewey in the early twentieth century, who viewed ‘knowledge as hypothetical and therefore subject to constant change, modification and evolution’ (Kelly, 2009, p.35/36).

Dewey’s pragmatic approach did not view knowledge as independent, rather that learners should be exposed to experiences and then frame their own hypotheses and critical perspectives from these experiences (Kelly, 2009; Dewey, 1916). The teacher becomes a facilitator who enables the learners to build on their experiences (Print, 1993, p.6). The pragmatist approach to knowledge as promulgated by Dewey and the empiricism movement is highly suited to enterprise education, as the value of educational experiences is acknowledged and valued (Kelly, 2009, p.34/35). Yet, the constant focus for the Irish post-primary curriculum design up until recently can be considered as emanating from a technical approach or paradigm - a product perspective. The recent introduction of the new junior cycle framework into schools in 2015 with a learning outcomes focused specification for all subjects has initiated a shift towards a process model with eight underlying principles attaching to the curriculum (DES, 2015, p. 11).

The focus on the technical approach to curriculum design is originally associated with Ralph Tyler and his four questions (Tyler, 1949). He suggested that curriculum has to be seen as consisting of four elements, and curriculum planning, therefore, as having four dimensions (Kelly, 2009, p.20). Four fundamental questions must be answered in developing any curriculum and these are displayed in table 2.1:

Table 2.1: Tyler’s four fundamental questions for curriculum development

What educational purposes should the school seek to attain?
What educational experiences can be provided that are likely to attain these purposes?
How can these educational experiences be effectively organised?
How can we determine whether these purposes are being attained?

A focus on each reflects a differing ideology to curriculum design. As a result, different models will emerge according to the ways in which we might 'permutate those elements, the priorities we might give to them and the choice of focus we might adopt' (Kelly, 2009, p.21).

Where the educational purposes are prioritised above the other dimensions, this is referred to as the aims and objectives model of curriculum. Where educational experiences are provided or listed as a syllabus of content and the mere transmission of knowledge is promoted, this is referred to as the content model of curriculum and is based on an 'absolutist epistemology' (2009, p.57). It is this model of curriculum which has been prioritised in Ireland in the past. Tyler was a major proponent of the objectives approach to curriculum. However, for Kelly, this model has major limitations attached, and possesses a scientific and technicist flavour as it has a focus on aims and objectives with a matching focus on assessment of the stated aims and objectives (2009, p.68).

Both models of curriculum present significant challenges and problems. They view the learning process as a step by step linear process, which reduces education to a scientific activity. There is for Kelly a notion of 'indoctrination rather than education and this is to be deplored' (2009, p.72). Consequently, teachers do not have flexibility and freedom to engage and become curriculum designers, and have no autonomy to interpret and deliver the curriculum best suited to the context. Both models do not allow for the student voice to be heard within the curriculum, except where teachers have the professional confidence to interpret the curriculum and distil a version appropriate to the learners' needs. As a result, both models are 'at odds with the notion of education for emancipation and empowerment (Kelly, 2009, p.72).

Both dialogue and narrative on curriculum have traditionally been dominated by the technicist discourse and preparation for state examinations. No time or consideration is given to deeper curricular issues or learning process. This view was supported by Gleeson who notes that 'macro-curriculum issues are further overshadowed by the demands of the external examination system and the associated didactic approaches to teaching' (2009, p.90). The discourse on curriculum needs to be broadened and deepened to look at the wider implications of the students' success, beyond external examinations.

It is time 'contemporary curriculum discourses challenge the assumption that the Tylerian approach should be the basis or the focus of all curriculum studies' (Slattery, 2006, p.8).

For some theorists, the Tylerian rationale does not go far enough and curriculum innovation needs to move away from the focus on his four fundamental questions. 'Tyler's questions have been 'codified as goals and objectives, lesson plan, scope and sequence guides, and mastery of learning evaluations' (Slattery, 2006, p.52). Wheeler's cyclical model of curriculum design represents for Chaudhary and Kalia an improvement upon Tyler's model which is too linear. They contend that the improved cyclical model does not view the evaluation as an end, but rather the terminal evaluation informs the curricular objectives and the process begins again, hence the eponymous cyclical process (2015, p.58/59).

What is needed now in the postmodern world is a complete rethinking of the curriculum and its design with a shift to a model that promotes the continual growth and encourages the eclectic interests and talents of students. The problem for many curriculum designers with this postmodernist approach is that 'no firm definitions are possible' (2006, p.23). However, it does view curriculum as a verbal phrase, an activity as opposed the stationary noun. Slattery describes the meaning of the word curriculum and how it has now changed its original meaning:

Curriculum' is thus a verbal phrase, an activity...the modern curriculum development rationale has truncated the etymological meaning and reduced curriculum to an object noun, the racecourse itself. Thus, generations of educators have been schooled to believe the curriculum is a tangible object – the lesson plans we implement or the course guides we follow – rather than the process of running the racecourse.

Slattery, 2006, p.62

While postmodernism offers an alternative perspective on curriculum, its inability to specifically define the term does poses problems for the designing of any national curricula and is perhaps a step too far. However, it does have the advantage of promoting the concept of activity and students are at the centre of the curriculum process and its design.

The process model of curriculum rejects the concept of the knowledge base for curriculum design. Rather, curriculum planning must be based on clear statements of its underlying principles or of the processes it seeks to promote, rather than of the goals it is concerned to attain (Stenhouse, 1975).

For Kelly education should be seen not just as any process or series of processes, but as a process of development (Kelly, 2009, p.93). It provides for the provision of broad agreed underlying principles that will inform the learner activities, and crucially, it allows teachers to interpret how best to deliver these principles in their own context whilst instilling in the curriculum design process an emancipatory purpose (Stenhouse, 1975). So, it also has characteristics which predisposes it to postmodernism with its focus on the process of the learning as opposed to the focus on the product of the learning. This is noted by Slattery, 'the shift in focus to the active process of learning has never denied that texts, material, lesson, test and classrooms are important, they are just not the substance of curriculum or the purpose of education' (2006, p.62).

In Ireland, the vision for Junior Cycle reform for students in lower post-primary education is enshrined in the *Framework for Junior Cycle 2015* document. It describes a shift towards the process model of curriculum with its eight key principles (DES, 2015, p.13).

However, all subjects have a specification with prescribed learning outcomes and retain a terminal examination. For this researcher, the process model of curriculum and enterprise education are ideologically suited. It seeks to refocus the aim of any curriculum from the prioritising of the achievement of stated explicit aims or contents to valuing the important of the learning experience. This approach is integral to effective enterprise education. Gleeson is scathing in his opinion of curriculum reform in Ireland. While there is much rhetoric around educational change, the reality is these reforms have 'primarily involved changes in subject matter rather than classroom practice and school culture' (2009, p.121).

Kelly outlined three reasons why the process model of curriculum is not fully adopted and promoted. Firstly, it is expensive to implement as a proper form of universal education. Secondly, teachers are sceptical of its success as it depends on the professional decisions made on the spot by teachers and to succeed it is dependent on an individual teacher's competency. This requires teachers to be praxis-oriented and casts teachers in the role of researchers (Gleeson, 2009; Stenhouse 1975). The concept of teacher praxis will be explored later in the chapter. Finally, the reason why this model of curriculum has not been adopted is that 'such a curriculum cannot be closely controlled through central direction' (Kelly, 2009, p.107).

Enterprise education as it is defined within this dissertation is predisposed to the process model of curriculum, where the experiences given to the learners and their learning journey/process are equally valued. In essence, the experiences and journey/process are more critical to each student's learning success than the product (Kelly, 2009, p.93). Yet, as observed above, the Irish curriculum is immersed in the technical perspective and so this militates against the embedding of enterprise education as a curricular element of value.

This has led to an examination driven education system where elements not externally examined or certificated nationally are viewed as 'doss' and are not valued nor validated. This rhetoric is frequently used in relation to the Transition Year programme, where enterprise education is mostly situated. This dominance of the terminal examination culture impacts on pedagogical practice, as students focus their efforts on mastering strategies to help them succeed within an examination setting rather than on developing 'mastery of subject matter and honing lasting competencies' (Gleeson, 2009, p.150). Teachers also have tended to focus their teaching on examination preparation and any activities outside of this are regarded as wasteful of time and not worth the effort (Trant, 2007). This critique of the present system's dominant approach is shared by the Irish Business and Employers Confederation (IBEC) and 'its perceived failure to move beyond coaching for examinations to development of generic skills' (Gleeson, 2009, p.225). It is time for a change. A change in the nature of curriculum discourse, so it will probe deeper into relevant issues for a modern society.

A change in the overarching emphasis on external examination which appears to be stifling all other educational endeavours. Enterprise education has to navigate its existence in a system which is highly fragmented and highly technical. This will demand a shift of mind or what Senge called *metanoia* for many of the fragmented stakeholders who are involved in curriculum planning and design (1990, p.13). Slattery does note that there is some change in emphasis within the discourse and hence design in more recent times.

Curriculum development in the postmodern era emphasises discourses that promote understanding of the cultural, historical, political, ecological, aesthetic, theological, and autobiographical impact of the curriculum on the human condition, social structure, and the ecosphere rather than the planning, design, implementation, and evaluation of context-free and value-neutral schooling events and trivial information.

Slattery, 2006, p.192.

However the rate and trajectory of this change of emphasis is very slow as reflected by the limited extent of curricular developments over the past twenty years, especially in terms of structure and design. We still have a subject-based curriculum in the post-primary system with a terminal high stakes examination a dominant feature.

While the change sought by Slattery may involve too much *metanoia* in the short term, it is necessary in the meantime to initiate dialogue on the deeper significance of enterprise education as a core aspect and element of a students' learning within post-primary schools.

The realisation that curriculum as practice cannot be understood adequately or changed substantially without attention to the context is not a new understanding and has a significance for enterprise education. Curriculum is contextually shaped and so will enterprise education within a school's curriculum (Cornbleth, 1990, p.6).

While a change is required at national curriculum level, this research will explore the local contextual factors of the schools' curricula and investigate what is shaping the successful inclusion of enterprise education. The significant role of a school's context in shaping learner experience was initially promoted by John Dewey over a century ago. He 'viewed education as a process of experience and social activity, and the school was intimately related to this process in the society it served' (Slattery, 2006, p.189). The process model and the related role of context and its influence on learner experiences is developed further in the next section where the philosophical underpinnings are delineated from the learners' perspective.

2.1.3 Philosophical perspective on enterprise education and entrepreneurship

Many renowned philosophers have proffered opinions on the topic of enterprise, however 'the rationale and philosophy of enterprise is poorly articulated and understood in the educational policy literature...is it free-market political ideology?' (Draycott and Rae, 2011, p.137).

John Dewey, promoted the pragmatist movement which viewed knowledge as hypothetical and subject to constant change and modification. Knowledge was not a fixed or immutable thing (Kelly, 2009, 35/36). As stated previously, he supported the process model of curriculum and was passionate about the importance of experience for effective education.

A learner's experience provided a bridge and continuity for the learner from their encounters in the classroom to the outside world (Pepin, 2012, p.804). The purpose of learner experiences is not to facilitate a process whereby learners duplicate the practice but rather they use them for transformative effect.

'There is no denying the conceptual kinship between the Deweyan vision of occupation as a means of conducting education and performing entrepreneurial activities for the purpose of enterprise education' (Pepin, 2012, p.804). This was supported by Neck *et al.* who contended that Dewey promoted learning as a social activity rooted in participation in life (2014, p.86). He stressed the importance of experience as the only route to anything one could describe as education (Kelly, 2009, p.100). This resonates perfectly with enterprise education which can only really be realised through experience or the active engagement of the learner.

Lev Vygotsky also supported a social approach and emphasised the critical importance of involving outside expertise in developing knowledge and gaining practical experiences for learners (Wenger, 1999). He appreciated 'the importance of interaction with other, more knowledgeable people' and using this knowledge to build and construct new learning, thus promoting a constructivist approach to learning (Leffler and Svedberg, 2005, p.221).

Context is seen as critical to learning; 'building further on Vygotsky's assumptions about the importance of interaction with other more knowledgeable people, and the importance of social context for children's learning' (Leffler and Swedberg, 2005, p.221). The social context for learning, is typically school and student interaction is integral where 'knowledge is built together and mistakes are regarded as a part of the learning process... is based on social constructivism, learning communities have a major role to play in these processes' (Seikkula-Leino, 2011, p.72).

In the early 20th century, Alfred Whitehead, a British mathematician and philosopher in his work *The Aims of Education and Other Essays* (1929), argued that for high levels of learning to occur, then energy and excitement were required from both the learner and the educator. He believed that we should not teach too many subjects, but rather teach a few well.

Jones affirmed this contention of Whitehead's and stated the challenge for all teachers is 'to determine how to create student interest in any specific learning activity' (Jones, 2007, p.602).

Whitehead, referring specifically to the teaching of business, advised that all students who completed any business course enjoy their learning and have a 'zest for business' (Whitehead, 1929, p.93). For him this enjoyment of learning could not be achieved without active participation from the learner. This perspective supports the development of a process model of curriculum and sings in harmony with what an enterprise curriculum could embrace. Whitehead stated that 'the curriculum is to be thought of in terms of activity and experience rather than of knowledge to be acquired and facts stored' (Whitehead, 1932, p.1).

Colin Jones in his research combined the ideology of Alfred Whitehead and Allan Gibb, he believed that such a merger will result in 'two specific factors, seldom associated with textbooks, [to] emerge as the central drivers of enterprise education...these two inputs are energy and excitement'. He considered the primary role of the educator was to 'elicit energy and excitement...and the transfer of inert knowledge must be avoided at all cost' (Jones, 2006, p.337). This was redolent of Whitehead who wanted students to possess a 'zest for business' (Whitehead, 1929, p.93). Where 'knowledge is built together and mistakes are regarded as a part of the learning process' (Seikkula-Leino, 2011, p.72).

Biesta (2015) considers the purpose of education to be the most fundamental question for the simple reason that:

If we do not know what it is we are seeking to achieve with our educational arrangements and endeavours, we cannot make any decisions about the content that is most appropriate and the kind of relationships that are most conducive.

Biesta, 2015, p.77

For Biesta, the question of the purpose of education was multidimensional, he identified three domains to this purpose: qualification, socialisation and subjectification. These cannot be separated. Even where we may be giving students some knowledge, it will potentially empower them and hence it will fall within the two domains of qualification and subjectification.

All educational endeavours will satisfy one of the domains and at particularly points in our lives we will prioritise one domain to the detriment of the others. This needs to be carefully monitored, as all three domains need to be balanced. It is not good to overly promote one on a long term basis, rather they need to be kept in 'an educationally meaningful balance' (2015, p.78). To decide how each domain will be navigated and balanced relies on the critical judgement of the teacher.

Enterprise education can as a discipline marry all three domains, with its subject content satisfying the qualification domain and its interaction with active learning and external stakeholders thus satisfying the socialisation domain. The impact of these two domains; qualification and socialisation, will speak to the learner in unique way facilitating subjectification.

Biesta is critical of the language that has now become ubiquitous in much educational discourse, where 'the language of learning' is used in an abstract and general sense, calling the phenomena the 'learnification of education'. For him, this is part of a larger agenda and part represents 'neo-liberal policies that seek to burden individuals with tasks that used to be the responsibility of governments and the state' (2015, p.76).

He is not alone in his critiquing of how educational debate has evolved in recent times and so the benefits attaching to the promotion of enterprise in the educational field is not universally embraced and a critical perspective is reviewed later in the chapter.

2.1.4 The economist's perspective on enterprise education and entrepreneurship

Along with renowned philosophers, many economists have offered their perspective on enterprise and enterprise education. Indeed, the term entrepreneur was coined in the economic world in the early 19th century, although it was largely ignored theoretically until the latter part of the 20th century. Some renowned economists have addressed the area of enterprise; however 'entrepreneurship and small business as academic disciplines are often depicted as the young, unruly and immature baby brother of economics' (Downs, 2010, p.39). Among key economists who have researched the entrepreneurship, the economy and learning are Joseph Schumpeter and Frank Knight.

Schumpeter argued that economic systems tended towards disequilibrium. In order to avoid the fate of a stagnating economy constant innovations are required, and it is entrepreneurs that provide those innovations (Downs, 2010, p.43). This 'dynamism of capitalism and the acts of entrepreneurs in breaking down the old failing routine ways of doing things that gave new life to the system...creative' and this is essential to future development (Downs, 2010, p.44). For Schumpeter, it was important that entrepreneurs provided new ideas, which served to kill off the old ways of thinking and allowed new systems to develop and evolve. The entrepreneur was a true hero to Schumpeter and someone who would go to great lengths to find and create a private kingdom (Haase and Lautenschlager, 2010, p.147).

Another economist who wrote about enterprise was Frank Knight. He stressed the importance of creativity and its significance for entrepreneurship. 'Even though...Schumpeter (1911), and Knight (1921) outlined and shed some light on the concept of entrepreneurship, it was not until McClelland (1961) introduced the need for achievement and its possible impact on entrepreneurship that the initial formative stages of identity began'. Utilising the 'individual as the unit of analysis and applying psychological principles to help understand the motivation of entrepreneurs, other scholars began to contribute to the field' (Plaschka and Welsch, 1990, p.57). Their contributions laid the foundations for trait theory which dominated the thinking for a time until the concept of behavioural theory began to gain traction with Gartner (1985 and 1988).

This brings us back from our historical journey to the publication of seminal literature which emerged since the 1980s and was identified at the outset of the chapter. From the 1980s, the identification and development of enterprise skills has firmly become enshrined in the enterprise literature and will be explored later in the chapter. This study will seek to deepen the discourse by investigating what factors can aid the development of enterprise education, and once identified then explore how they can inform the national discourse on enterprise education.

2.1.5 *Enterprise and the promotion of a neo-liberalism agenda*

The promotion of enterprise is not universally applauded. The association of enterprise with the freedom to earn and retain profits is irrefutable and thus its association with neoliberalism. A definition of neoliberalism by Harvey affirms this point, where it is defined as 'a theory of political economic practices that proposes that human well-being can best be advanced by liberating individual entrepreneurial freedoms and skills within an institutional framework characterised by strong private property rights, free markets and free trade' (2005, p.2).

The language of liberation for individuals with regard to enterprise skills has a resonance with the emancipatory role of a curriculum, where the curriculum should provide learners with a forum to express their skills and perspectives and be active participants in their learning. For some commentators this freedom applies only to learners' expressive thoughts as opposed to their entrepreneurial flair.

Peters asserted that 'the word is used as a simple and popular substitute for "business"' (1992, p.2). This association with business has implications for how enterprise is received and perceived in schools. Smyth (1999) is highly critical of enterprise being taught in schools, 'the alleged benefits of enterprise teaching and learning are much extolled by policy entrepreneurs, but remain still largely untested at the level of the school and beyond' (1999, p.435).

He stated that suggesting that students need to have a certain set of skills to succeed in the workplace, placed the responsibility on the individual when the problem was with the economic system and has a much wider scope than the individual, 'what gets lost in this kind of narrow utilitarian analysis is any sense that the problem is far wider and more complex...massive restructuring of international capitalism lies at the heart of our apparent inability to compete, but these issues seem to be elided and relegated to the background' (1999, p.439).

McCafferty (2010, p.542) is equally scathing of enterprise, declaring that the 'emerging and pervasive neoliberal pedagogy where the ethos of state education is arguably being transformed to one of free market fundamentalism' was not to be encouraged.

She advised caution in the relationship between education and business along with the inculcation of such values in students, thereby 'glorifying and embedding the values...closely associated with neoliberalism through placing enterprise at the heart of the curriculum' (2010, p.543).

This critique of enterprise and the neoliberal agenda has not deterred IBEC from becoming involved in the Irish education system and has representation on the NCCA development boards for all business-related curricula where it has consistently promoted the importance of skill development. 'The neo-liberal nature of IBEC discourse is clearly reflected in their education policy statements' (Gleeson, 2009, p.210). IBEC have their own critique of the Irish post-primary education system which is not related to neoliberalism, but rather on 'its perceived failure to move beyond coaching for examinations to the development of generic skills' (Gleeson, 2009, p.225).

The critique posed by connecting the promotion of enterprise in schools with a neo-liberalist agenda is framed in the association of enterprise with simply the development of skills for business creation, entrepreneurship. Viewing enterprise in schools through the wider lens of enterprise education ameliorates the proposition that enterprise is about profit making.

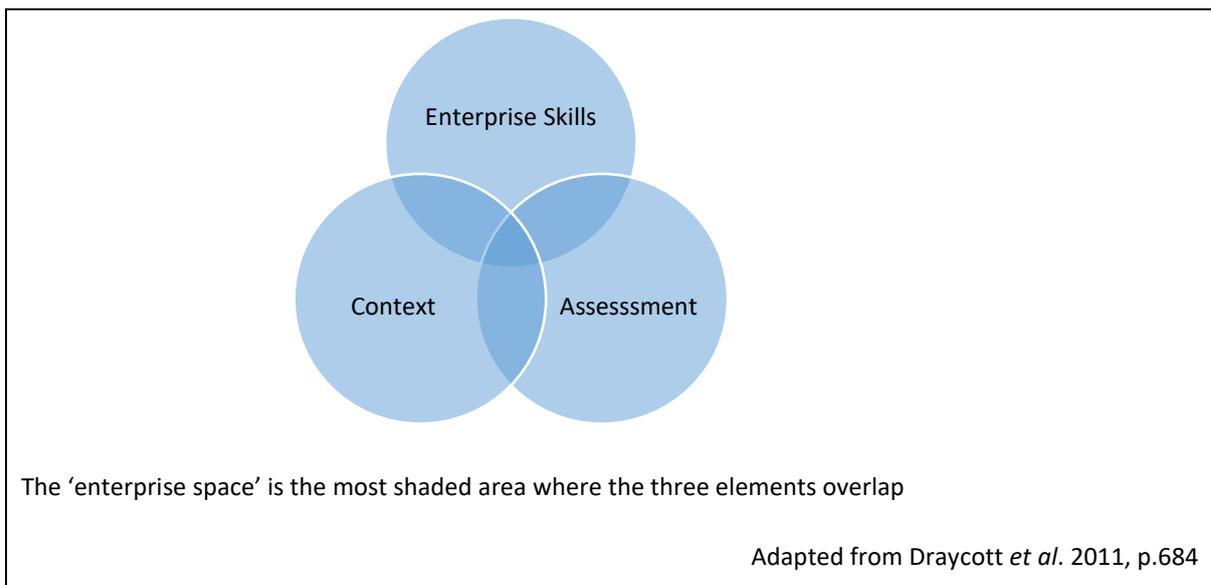
A model which seeks to capture this wider perspective of developing learner personal skills for life is expanded upon in the next section. It represents an opportunity for an enterprise education pedagogy to offer all learners an opportunity to self-actualise and develop their personality.

2.1.6 Stratified model of enterprise education

Given the critiques posed concerning the neo-liberal agenda that enterprise in schools has the potential to harness, it is appropriate to proffer a vision of enterprise education which counters these associations and promotes the holistic development of all learners. The Stratified Model of Enterprise Education (figure 2) considered enterprise as a pedagogy with four key elements, with each element divided into different layers. The first layer has four elements, enterprise skills, assessment, context and the enterprise space. The enterprise space is where all three elements merge in figure 2.

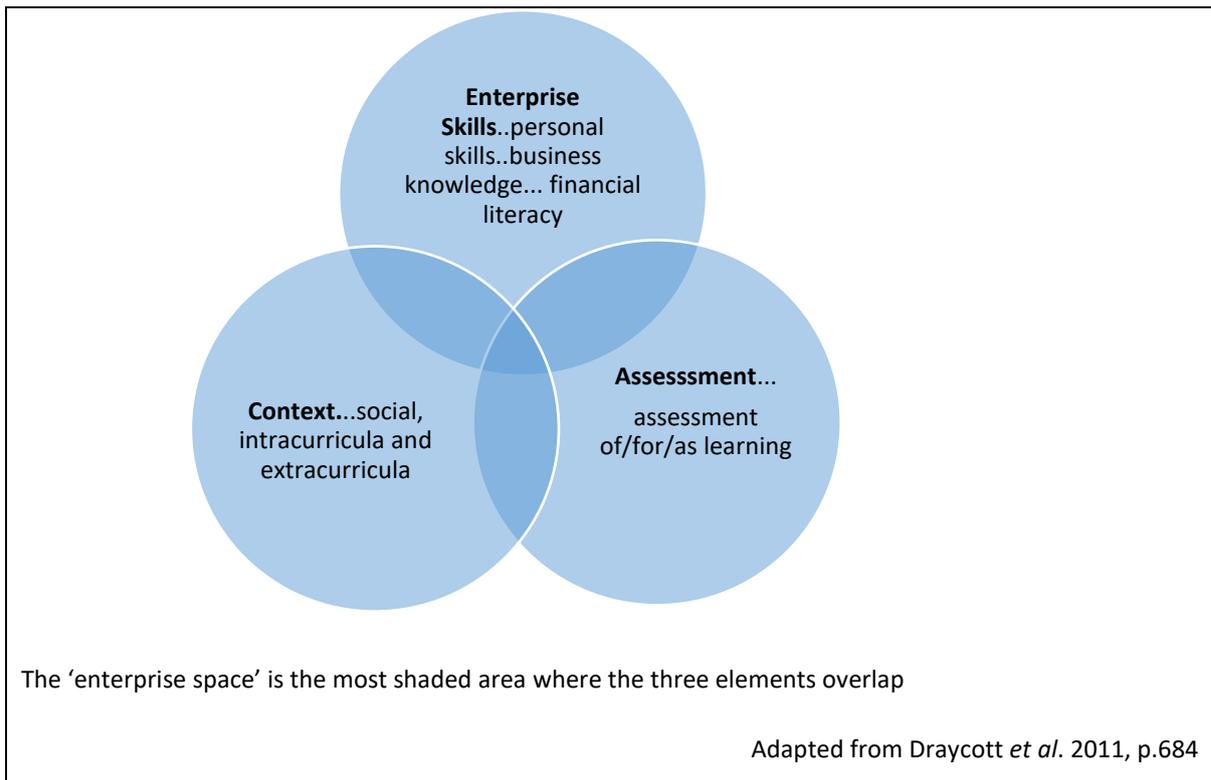
This area where three elements interconnect is the enterprise space and is the unique element of the pedagogy, 'forming a nexus where the elements meet and the enterprising student develops' (2011, p.683). It is envisaged that this element will be 'filled by those individually-centred aspects which stretch the limits of traditional education systems, including intuition, motivation, self-expression, emotional intelligence, self-direction, and the development of personality' (2011, p.683).

Figure 2 Model of Stratified Enterprise Pedagogy (Layer 1)



The stratified design of the model means each element has within it a range of learning options available, selecting which options to use for a particular enterprise programme allows for customisation and individuality. Figure 3 displays some of the constituent parts of each element as the top layer of the programme is peeled away.

Figure 3 Model of Stratified Enterprise Pedagogy (Layer 2)



The model can be designed to suit individual contexts depending on what sub elements are selected as part of an enterprise programme. This individualisation can also extend to the assessment methods employed. The model would remove the emphasis on achieving learning outcomes and rather be focused on a student's journey through an 'enterprise landscape' whereby they would seek to reach various 'waypoints' as measure of their achievement (2011, p.686).

This model relies heavily on the teachers' self-efficacy and knowledge surrounding enterprise. A third layer included in the model provides greater detail and specifics on the sub elements detailed in layer 2.

The central area for this method would be the enterprise space; over time the student would take more responsibility by deciding how they reach those waypoints; creating their learning, by initiating activities and projects through which they can develop and eventually set their own targets to measure their success against, a transition over time from assessment 'of' to assessment 'for', and eventually assessment 'as' learning being the key activity of the student

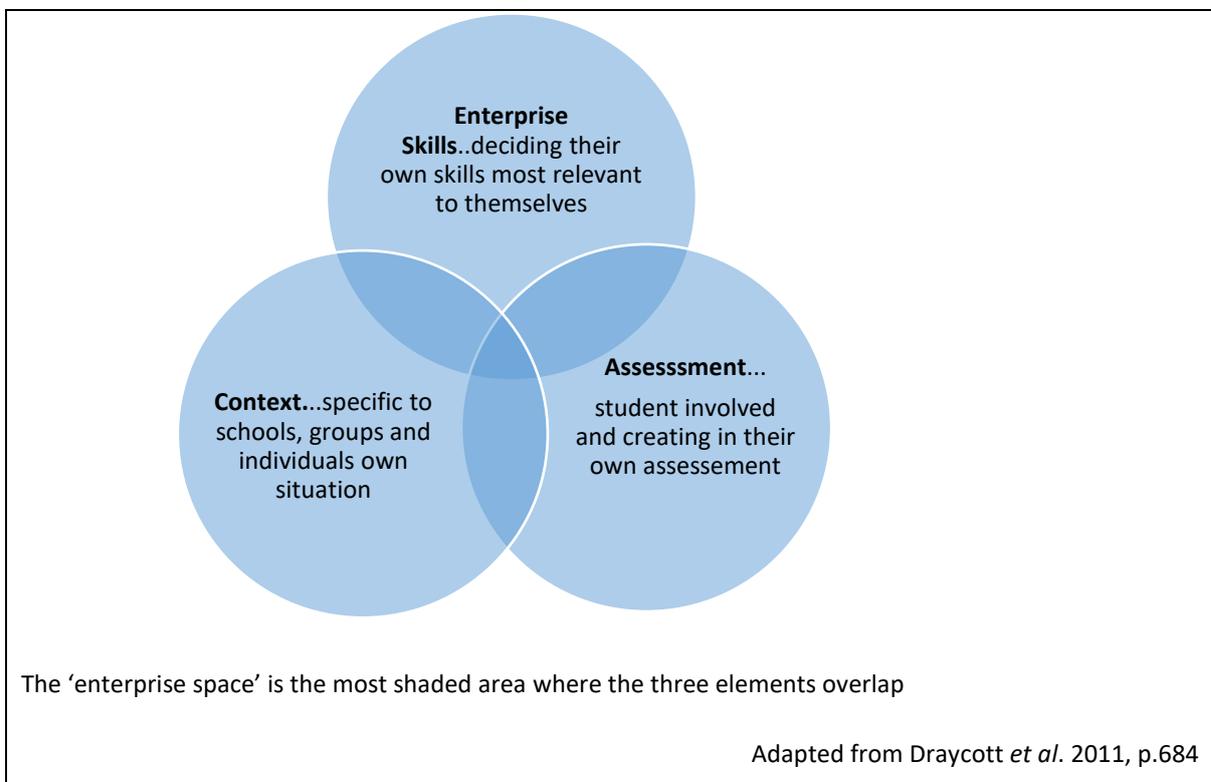
Draycott *et al.* 2011, p.687

Assessment strategies would emanate from self-reflection and would be supported by performance tasks, the collection of portfolios or the use of blogs.

This innovative approach would be challenging for the teachers and represent a significant change in existing practice, an acknowledgement of learner self-knowledge and maturity is proffered by the researchers if this shifting the responsibility for the learning from the teacher to the student is to be realised (2011, p.687). This shift in pedagogical approach and conceptual understanding of curriculum was discussed earlier in this section of the chapter. A logical progression from this shift in pedagogy would be a shift in assessment practice, so they become what Chum described as coterminous (Chun, 2010, p.23). The approach will enable assessment to be 'flexible, ongoing and student-centred, whilst also being able to address external standards and reference points' (Draycott *et al.*, 2011, p.688). The forms of assessment applied will be authentic and appropriate for enterprise education. This issue of authentic assessment will be expanded upon further in the chapter.

A particular feature of this model is it would account for progression by the student through various stages in their educational journey avoiding repetition of activities for participants, as the 'approach would enable progression based on prior learning at an individual level'.

Figure 4 Model of Stratified Enterprise Pedagogy (Layer 3)



This curricular model exemplifies the potential for enterprise education to be unique for every learner, but such a model stretches the limits of traditional educational systems, as suggested by its developers, so how can enterprise education locate itself within existing curricular approaches and learning concepts. Rather than stretching the existing education system, can enterprise education synergise with current approaches and practice in teaching enterprise education.

2.2 Learning in Enterprise Education.

The model of Stratified Enterprise Pedagogy explores the ideal learning environment and options for enterprise education which can be tailored to optimise contextual factors. In this section the researcher will explore some of the general learning concepts which align with enterprise education.

A recurrent theme in the literature is the necessity for general skill development to occur along with knowledge acquisition (Claxton, 2002; Gleeson, 2009). My own experience of teaching enterprise was weighted in favour of knowledge acquisition with skill development a secondary and at times a random result. However, skill development is imperative in the teaching of enterprise as it allows learners to develop their creativity and risk-taking capability. This is the view of Cheung who asserts that 'if students gained confidence in their creativity at post-primary schools, they would be able to make better use of their creativity in the future...encouraging students to take risks' (2008, p.248). Looking back, this proclivity for cognitive learning as opposed to psychomotor and affective learning was borne out of the researcher's lack of awareness of its importance, even existence and being guided primarily by the syllabus documents and textbooks. It also served to highlight the dominance of the technical approach to curriculum and assessment explored in the previous section (Gleeson, 2009).

The National Swedish Board for Industrial and Technical Development (NUTEK) which promotes the wider definition of enterprise education, seeks to inculcate a myriad of skills in the delivery of enterprise education, 'all forms of work that stimulate students' self-confidence, self-knowledge, creativity, energy, and ability to co-operate and communicate' are to be advanced (NUTEK, 2000, p.47). This range of skills will extend further with time as knowledge economies seek to employ individuals with more sophisticated skills such as self-awareness, emotional intelligence and creativity (Lucas and Spencer, 2017).

This contention is supported by Leffler and Swedberg, stating that ‘if enterprise in schools is going to be successful, the new identity must include not only the traditional entrepreneurial skills, but also live up to the demands of the new knowledge society...power of initiative, creativity and activity...the new discourse and need for an emphasis on learning in action’ (2005, p.225/6).

This assertion moves the teaching of enterprise beyond the narrow focus of entrepreneurial teaching and into the broader remit of enterprise education. It also imposes the need for skill development in all curricular subjects and learning situations within a school. This broadening is supported by the European Commission (2004) which states that ‘education in entrepreneurship should be adapted to different educational levels and that, even if it is business-oriented, the education should include promotion of personal qualities such as creativity, power of initiative, risk-taking and a sense of responsibility’ (Leffler, 2009, p.110). Hence the EU Commission has adopted the wider definition of entrepreneurship where it is ‘not only related to economic activities and business creation, but more widely to all areas of life and society’ (EU Commission, 2016, p.21). Reflecting the widening range of skills promoted in enterprise education, Table 2.2 below illustrates a list of researchers and the range of skills they cited as integral to enterprise education:

Table 2.2: Key skills integral to enterprise education

Researcher	Skills promoted in enterprise education
McMullan and Long (1987)	Leadership, creative-thinking, exposure to technical innovation
Ronstadt (1990)	Ambiguity tolerance
Krueger and Brazeal (1994)	Building confidence and promoting self-efficacy
Rae (1997)	Communication skills with a focus on persuasion, critical-thinking, problem-solving and time management skills
Boyle (2007)	Creativity, persistence and innovation
Haase and Lautenschlager (2010)	Proactive, need for achievement
Bager (2011)	Self-efficacy, creativity, complex problem-solving and dealing with complexity and ambiguity

Haase and Lautenschlager (2010, p.147)

The range and scope of skills associated with enterprise education is extensive and continues to expand. Gaming skills are now gaining currency in the education field. Jones (2007) explored the process of developing a game entitled the Resource Allocation Game, which provided students with access to an enterprise reality. It aimed to strengthen student's engagement with theory and provide a process for self-reflection. The game was part of a bigger framework developed by Jones called the *hic et nunc* framework. The *hic et nunc* or 'here and now' framework was constructed according to the teaching philosophy of Alfred Whitehead.

It provided the opportunity for students of enterprise to learn through and for enterprise in their here and now. It incorporated activities such as presentations, case study design along with the creation of a student reflective journal.

At the heart of the *hic et nunc* frameworks design is a desire to add value through creating multiple learning opportunities from different sources; to provide an opportunity for students to apply newly gained principles and ensure the reinforcement of entrepreneurial behaviours; and, to get them involved in a learning experience that develops a capacity to think for themselves, to be less reliant upon others and ultimately, to believe in themselves

Jones, 2006, p.346

For Jones, the essence of enterprise skill development lies in the teaching approaches which provides learners with multiple learning opportunities, to build their own knowledge from these experiences through reflection and reflective practice. Redolent of the writings of John Dewey and Alfred Whitehead, Jones viewed the development of a reflective journal as an aid to critical learning which is required for entrepreneurship (2006, p.342). 'The reflection journal aims to provide students with the opportunity to pause and reflect on how they – as individuals – are contributing' to their own learning.

This is supported by the final stage of Kolb's experiential learning theory (1984). It reasserts the criticality of student reflection as a valued part of the learning process as 'it allows students to take stock of their behaviours and consider what personal changes are required to improve or maintain their individual entrepreneurial outcomes' (2006, p.342).

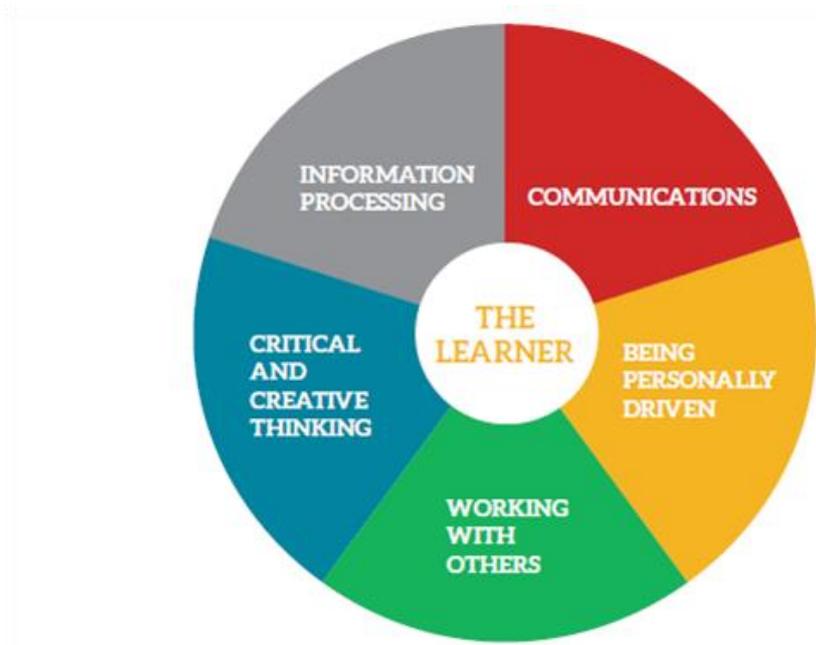
Haase and Lautenschlager raised the question of whether it is possible to teach enterprise skills to individuals, but this question as discussed earlier is obsolete as trait theory is now rated is an empirical dead end (2010, p.153).

This was supported by Kuratko who believed that the question of whether entrepreneurship can be taught or not is 'obsolete' and the general consensus is that it can be developed in individuals (2005, p.580). Therefore, enterprise skill development is for all and should not be the preserve of entrepreneurship courses which are typically addendums to general business courses.

As can be observed from the panoply of skills cited in the table 2.2 above, the diverse range of enterprise skills are possible to be taught in all subjects and are not the preserve of any single subject area. Thus, for enterprise education to be experienced and embedded, it must be integrated across the entire curriculum.

The Irish educational system does acknowledge the significance of key skill development within the wider curriculum. Similar to the junior cycle as discussed in chapter one, there is a set of senior cycle key skills which are to be integrated across the senior cycle curriculum and part of the learning process. The five senior cycle key skills are displayed in figure 5:

Figure 5: NCCA Senior Cycle Key Skills



Reflecting back on my own practice as a teacher, the product of the curriculum was the paramount concern, my teaching was focused on the syllabus content and the learner outcomes in terminal examinations, as opposed to the reflecting on the process of learning and skill development.

Therefore, the development of key skills at senior cycle was a secondary concern. I did not engage in an analysis of curricular approaches and practices so the development of enterprise skills was not prioritised or even considered as they were not assessed in the terminal examination, only facts and information which could be written on an examination script was required. The priority attached to the development of key skills in lessons was another illustration of the rhetoric espoused and planned at national level and the received reality of the learners in the classroom. The challenge is to raise teachers' awareness of the need for enterprise education and the integral importance of skill development. This will allow for deeper connection with the need for skill integration and embedment across the curriculum.

However, there is change on the horizon. The introduction of the new junior cycle has sought to provide a more balanced approach to teaching and learning, with skills being part of the learning outcomes in subject specifications, as discussed earlier. At this level within the post-primary curriculum there appears to be a greater movement towards the process model of curriculum where skill development has greater priority and emphasis.

The *Framework for Junior Cycle 2015*, the core document setting out the vision for junior cycle reform in Ireland states that:

At the heart of junior cycle reform lies the need to build on our understanding of education, to provide students with quality learning opportunities that strike a balance between learning knowledge and developing a wide range of skills and thinking abilities... the teacher's role as a leader and facilitator of learning in the classroom will grow as key skills are developed during the meditation of the content of subjects.

Framework for Junior Cycle, 2015, p.29

However, this new vision for junior cycle reform with the added emphasis on skill development alongside knowledge and to a lesser extent attitudinal is not universally welcomed. In late 2018, the largest post-primary teachers' trade union in Ireland, the Association of Secondary Teachers of Ireland (ASTI) conducted a survey of teachers' experience of the implementation of the Framework for Junior Cycle. One of the concerns reported was teachers' uncertainty about what is to be taught and fears relating to the 'dumbing down' of standards, particularly in the context of common level examination papers (ASTI, 2019, p.2).

Once again, a shift of mind or *metanoia*, on behalf of teachers who heretofore have been immersed in the technical approach to curriculum is required (Senge, 1990, p.13). A shift in approach from the sole consideration of transmission of knowledge to an acknowledgement of the importance of skill development in their pedagogical approaches.

The present approach has not favoured the embedding of enterprise education, which is best approached from an active learning perspective and also because there is no examination relating to enterprise education as an explicit curricular or syllabus element.

The dominance of knowledge transmission exists because Haase and Lautenschlager believe 'entrepreneurial hard facts...can be easily taught...experience-based soft skills related to entrepreneurship are rather difficult to impart or develop, but they are much more important and render enterprise education unique' (2010, p.147). The time and effort for the process of skills learning to happen is too big of a demand and so deemed not worthwhile. Fee (2012, p.27) proclaimed that 'many business courses teach only what is needed to pass the exam...not prepared for reality'. He considered the key to encouraging enterprise is to teach the theory, tell stories of success and failure, then release people in a safe place to try it for themselves.

Some will succeed and learn, others will fail and learn even more. Failure is necessary and it is better to fail while training (Fee, 2012, p.28). Fee acknowledges the necessity for failure and ambiguity tolerance as important skills for life and this does take time, space and effort from the school day.

While Fee has focused his research on business courses, his commentary is appropriate to the Irish context where the business curricula presently provide the only outlet for experiencing enterprise. The value of experiencing failure as a life skill can be embedded in all pedagogical practice and his advice for the development of enterprise skill in the business context can be extrapolated to enterprise education and become relevant to all learning contexts.

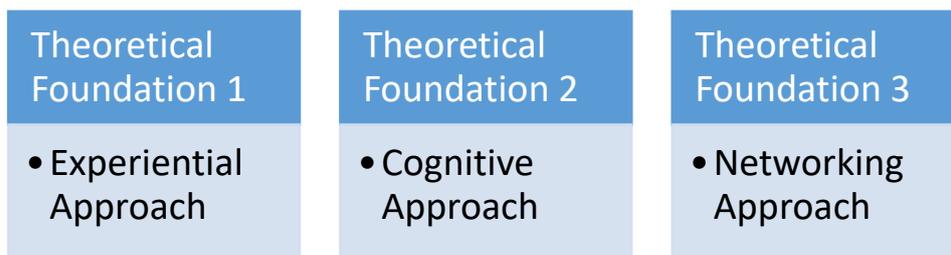
Fee introduced the importance of failure as part of the learning associated with enterprise and this can only be experienced through real life experiences being available to students. Where they have to make decisions and understand the consequences for them.

Important lessons are to be learned from failure, such lessons cannot be garnered from simply taking notes and listening in classrooms. For Jones, uncertainty and complexity are kept within the learning process to challenge students to think for themselves, to help them develop new channels through which to learn, and the challenge would seem to be the ‘development of a learning space where students feel comfortable to fail’ (Jones, 2006, p.346).

The real challenge is to embed enterprise education across the whole curriculum. Man (2006) asserted that the learning of generic skills is important as then they can be applied in a multitude of situations particularly in the context of an ever changing and evolving world. This supports the inclusion of enterprise education as a core element of the whole curriculum. He studied how students of enterprise learn and suggested that entrepreneurs learn in three different ways, and ‘prior studies have been devoted to study entrepreneurial learning through different theoretical foundations’ (2006, p.301). Man’s three foundations for entrepreneurial learning and the development of the skills, knowledge and attitude have significance for enterprise education and the potential of their wider application across the curriculum.

Figure 6 displays a graphical representation of the three theoretical foundations.

Figure 6: Man’s Theoretical Foundations



The three theoretical foundations are explained as follows:

1. Experiential approach – conceptually grounded upon Kolb’s experiential learning approach (1984) whereby the learning is a process derived from and continuously modified by experience. It requires making sense of these experiences using reflective skills, ‘entrepreneurial learning not only means repeating what has been

successfully done in the past and by others, and avoiding what have failed, but also involves an active interpretation of experience by the learner' (2006, p.311).

2. Cognitive approach – conceptually based upon a person's ability to acquire and structure knowledge and focused on different cognitive, attitudinal, emotional and personality traits (2006, p.311).
3. Networking approach – based upon the concept that an entrepreneur learns from their interactions with other working adults. The skills and knowledge acquired from other agents both internally and externally (2006, p.311). Essentially, using the skills and knowledge acquired in the other two foundations to effect change. Networking also provides workplaces where students can make and observe decision making, and give students real life experiences (Fee, 2012).

These three foundations provide a useful framework to illustrate the teaching approach and practice which is required to embed the skill, knowledge and attitude pursuant to enterprise education across the 'total' curriculum (Kelly, 2009, p.9).

2.2.1 Foundation 1: experiential approach

Skill development and learning is a key foundation for any entrepreneurial learning (Man, 2006). Claxton argued that 'education, if it is to offer an effective preparation for life, should foreground the development of transferable, real-life learning skills' (2002, p.24). The diversity in the range of skills identified in the previous section behoves a cross curricular approach and an approach which values the process of curriculum along with the product (Stenhouse, 1975: Kelly, 2009).

'Entrepreneurship learning is an experiential process which requires students to practice real roles and tasks of an entrepreneur', this is necessary if skill development is to occur as opposed to mere knowledge acquisition (Pihie and Bagheri, 2011, p.3310). Such an approach to teaching 'goes outside the traditional didactic approach' and involves students being given a 'hands-on experience' within the enterprise classroom (Cheung, 2008, p.243).

This is supported by Gibb who stipulated:

Entrepreneurial behaviour, skills and attitudes nurtured by well-designed pedagogies and exposure to experience are essential components of being able to 'feel' what it is like to be entrepreneurial

Gibb, 2002, p.235

This promotion of 'feeling' like an entrepreneur can only be realised when students can experience what it is like to be an entrepreneur and make decisions which impact on their simulated business lives and is again supported by Man's third theoretical foundation for the study of entrepreneurial learning, the networking approach (2006) described earlier.

David Kolb (1984) pioneered the circle of experiential learning which operates at four stages:

- I. Concrete experience
- II. Observation and experience
- III. Forming abstract concepts
- IV. Testing in new situations

These four stages in the experiential learning circle can be compared with the following actions within the classroom:

- I. Experiencing an activity
- II. Reflecting on the activity
- III. Thinking creative and innovatively on the activity
- IV. Acting and testing a new and adapted activity.

Activity is integral to Kolb's experiential learning circle and without activity on the part of the learners, then experiential learning will not occur. This activity driven practice is evident in some classrooms, but the dominance of the technical approach to curriculum supports teachers in the prioritisation of examination preparation and the associated didactic methodologies. 'Virtually no models seek to integrate the experiential learning model with the traditional classroom paradigm' (McKnight, 2011, p.3). Placing activity at the centre of pedagogical practice as opposed to examination preparation necessitates a facilitator role to be adopted by teachers.

Building on Kolb's model of experiential learning (1984) is the development of critical thinking skills. Colakoglu and Sledge argued that critical thinking skills have become key components for success among business professionals and 'effective pedagogical tools such as active learning exercises [are necessary] to foster critical thinking skills' (2013, p.115).

They defined critical thinking as the ability 'to understand and interpret information appropriately' (2013, p.115). This is a skill which is valued in all facets of life and once again is not simply for the business and enterprise teacher.

Based on the elemental importance of critical thinking and in conjunction with a search for a model of learning to support a wider and deeper experience of critical thinking, the researchers extolled the virtues of service learning which they defined as 'a pedagogical tool that combines academic learning with community service... help students move beyond the basic technical and functional skills taught...and focus on more broad-based skills'.

This type of learning describes what is expected within an enterprise education classroom. Fiet (2001) concurred with this and recognised the perfect fit between service learning and entrepreneurship.

A shift from using traditional teaching methods (e.g., lectures, exams, and case studies) to using experiential learning methods (i.e., service learning) that reflect the risks and unpredictability of the real world situations in entrepreneurship education...considering the natural fit between service learning pedagogy and entrepreneurship education and the essential role of service learning projects in the development of critical thinking skills that are fundamentally important for entrepreneurial success, there is a void in the literature for studies integrating the three realms...

Colakoglu and Sledge 2013, p.118

Petty (2014) links the reflective practice of teachers to Kolb's circle of experiential learning, where the reflective practitioner is constantly reflecting on their teaching experience using the four stages of experiential learning, as all teaching is experiential (2014, p.320). This need for ongoing reflection allows teachers to build on what is working well and reflect on how challenges can be circumnavigated.

For Kelly, the highly effective teachers do not allow themselves to be constrained or hampered by this approach, but rather they 'cannibalise what they are offered' and use it to guide their teaching for their own context. Teachers 'who choose praxis are reflective facilitators of learning who depend on their professional judgement to interpret the curriculum as text' (Gleeson, 2009, p.4).

Developing praxis gives teachers the confidence to take a syllabus and specification and then use it to inform their teaching. It can also provide the underlying principles which was required for the process model of curriculum.

In essence, what happens is that when teachers are aware of the overarching aims of a curriculum, they use their own professional capability to interpret and design appropriate learning activities which best fit their context.

The adoption of praxis will require a cultural shift in the values and meanings of teachers and policy makers and in their understandings of the relationship between education and the economy, teaching and learning, vocational and academic education, affective and cognitive learning, and between schooling as we know it and the demands of living in an 'information age'.

Gleeson, 2009, p.358

Dewey was an early advocate of teacher praxis, however, in the Irish context it has heretofore received little attention (Gleeson, 2009, p.6).

2.2.2 Foundation 2: cognitive approach

This foundation of acquiring knowledge is well developed, the concern here is that it is overly developed to the detriment of the other two foundations. Teaching approaches tend to favour the embedding of knowledge and the preparation for state examinations (Trant, 2007). However, such an approach to teaching where learners are passive and focused on memorising knowledge for examinations may actually inhibit key skill development. Claxton stated that 'classrooms that are neatly and tightly scripted may help students achieve [in examinations], but may do so unwittingly by depriving them of opportunities to develop their own resourcefulness' (2002, p.33). He suggested that the overemphasis on knowledge acquisition inhibited broader skill development in learners, as they do not have an opportunity to develop any skills other than memorisation of facts.

2.2.3 Foundation 3: networking approach

Man's final foundation for the development of entrepreneurial attitude is networking. The European Commission report (2011) of the Directorate-General for Enterprise and Industry based on two symposia held in Budapest and Istanbul, reasserted the value of the entrepreneurial mind-set and the 'essential role that education plays in development of such mindsets'. It would require 'nothing less than a sea change in the approach to education, emphasising active learning and the provision of new experiences for students outside of the classroom' (2011, p.1). As well as emphasising active learning, it also emphasises the importance of external experiences, the interaction with other parties outside of the school.

This valuing of real-world life experiences was restated by the EU Commission in 2016, declaring that ‘research suggests that methods involving students’ experiences outside the classroom and connecting with the real world are central to entrepreneurship education’ (2016, p.12). The reader is reminded that the EU Commission uses the term entrepreneurship education to denote the wider application of the term enterprise and so signifies enterprise education. The messy tangle of titles is thus reinforced again.

Such external interactions have the potential to facilitate deeper learning, where knowledge and skills can be applied in real life situations and reflected upon. This contention is supported by Fee, who alludes to importance of giving learners the opportunity to experience real life decision making and problem solving (2012, p.27).

Gilbert (2012, p.158) states that a ‘high level of engagement from an industry partner(s) is essential’ to build enterprise skills and capacity. Findings from his longitudinal study in Australia indicated that ‘students strongly support the value of working with highly skilled and experienced innovators’ as it moved the learning experience away from a ‘chalk and talk approach to learning’ and facilitates a learning environment which ‘enables students to be forward thinking so opportunities may be recognised and importantly acted on’ (Gilbert, 2012, p.161). However, it is generally acknowledged that creating and building valuable and suitable links with businesses is a challenge both from a policy and practice perspective.

Presently, links between businesses and Irish schools tend to be developed on an *ad-hoc* basis, there is no formal strategy or policy for the development of such links. Their creation is dependent on individuals within a school. Enterprise education by nature does provide the opportunity to build greater links with local partners in the community, an objective summarised by Jones and Iredale; ‘enterprise education assists, develops and improves links between education and business’.

It is necessary to ‘seek to promote effective education-business collaboration and mutual understanding, by developing better two-way contacts that benefit both education and industry and involve employers more centrally in young people’s education’ (2010, p.9).

Leffler affirmed the opportunity which is available to schools and the local community, believing that 'schools should in some way establish and develop cooperation with the surrounding community' (2009, p.112). Links to real life situations, business or otherwise, are possible to relate to each subject area, facilitating learning experiences which will aid learners to develop skills needed for real life.

Schools which really embed capabilities rapidly realise that, for it to be sustainable and authentic, they need to be creative in engaging children and young people, giving them new roles, creating new co-curricular opportunities and partnering with a range of youth and community groups outside of the formal sector.

Lucas and Spencer, 2017, p.13

As with all matters concerning curriculum, teaching approaches and effective practice, the key person in creating and building links that enable deep learning in enterprise education is in most instances the classroom teacher. Thus the researcher will now focus on the centrality and role of the teacher in enterprise education.

2.3 Critical Role of the Teacher for Enterprise Education

While no consensus may exist in the defining of enterprise education in the literature, there is a consensus as regards how it should be taught in schools and what teachers should be practising within the enterprise education and entrepreneurship classroom. Birdthistle *et al.* (2007) asserted that schools have a role to play in providing students with the knowledge and skills required for their future career choices. But they were cognisant that 'the success of enterprise programmes is dependent on the level of commitment and the knowledge and skills of the teacher' (2007, p.267). This places the teacher at the centre of enterprise education and all teaching.

A point echoed by Kelly, who declared 'the teacher as the central figure and his/her competence as the crucial factor in the quality of the educational experiences provided for the pupils' (Kelly, 2009, p.15).

While affirming the teacher as an important key figure in all forms of development work, and this applies to the introduction and implementation of enterprise in schools, Leffler and Svedberg also noted 'that teachers' knowledge of entrepreneurship is very limited, and that in addition they were rather sceptical about entrepreneurship'.

They conclude that if enterprise in schools is going to be successful, then a new identity must include not only the traditional entrepreneurial skills, but also live up to the demands of the new knowledge society and focus on the wider perspective of enterprise education (2005, p.225).

The importance of the teacher in the process of teaching enterprise has long since been acknowledged in the literature, 'practitioners are an integral part of entrepreneurship education, they can and should provide input to entrepreneurship curricula design' (Plaschka and Welsch, 1990, p.66). Lepisto and Ronkko again stressed the significance of the teacher in the classroom postulating that 'education is key to the development of an entrepreneurial mind-set with teachers having a particularly central role in this process' (2013, p.641). Teachers are critical to all teaching, but they have added currency in the promotion of enterprise as the conduit of learning in the classroom and as role models which facilitate effective pedagogical endeavour.

The critical role of the teaching can manifest itself in a myriad of ways within the classroom. One aspect where teachers can become critical to their students' learning experiences is when they become role models for their students. 'Teachers are role models' and can significantly impact the personality and life choices of their students (Sobel and King, 2007, p.432). This is part of the hidden curriculum which Kelly refers to as part of the total curriculum, the 'things which pupils learn at school because of the way in which the work of the school is planned and organised' (2009, p.10).

How the teacher plans and organises their teaching will impact on students and their learning in a topic. How the curriculum is implemented and presented will affect students' perceptions, motivations to learn and consequent life choices.

Modelling by a teacher and its effects on students was investigated in a study based in Singapore. The focus of the study was a programme entitled *Thinking Schools, Learning Nations* with a focus on innovation and enterprise. The programme involved developing enterprise skills in students but not on creating business entrepreneurs, rather on building an 'attitude of mind...developing intellectual curiosity amongst all our children, a willingness to think originally' (Ng, 2004, p.186).

Findings indicated that the role of the teacher was paramount and their importance as a role model was stressed in the study, concluding that teachers play a critical role in promoting the spirit of innovation and enterprise among students and 'need to model the right attitude and qualities' (Ng, 2004, p.186).

Linked to role modelling and as suggested by Ng is the attitude of the teacher. The attitude displayed by a teacher can affect a student's perception of a topic or theme on a curriculum. Pihie and Bagheri, researchers based in Malaysia contended that 'to improve students' entrepreneurial learning and competencies...they should be taught by qualified teachers who have a positive attitude toward entrepreneurship and a strong sense of entrepreneurial self-efficacy' (2011, p.3308). The attitude of the teacher was critical to the successful teaching of enterprise education stating that 'teachers' attitude toward a subject not only affect their choice to teach that subject and the quality of their instructional performance, but also influences students' attitudes toward the subject, their motivation to learn the subject, and their achievement' (2011, p.3308).

The positive attitude of a teacher towards a topic or theme on a curriculum is supported and contingent upon a teacher's self-efficacy. The importance of self-efficacy is critical to how the teacher performs in the classroom.

A definition of teacher self-efficacy provided by Tschannen-Moran *et al.* is where 'the teacher's belief in his or her capability to organise and execute courses of action required to successfully accomplish a specific teaching task in a particular context' (1998, p.233). The belief in one's own capability is key to possessing self-efficacy. This belief can only be acquired when a teacher has full command of the task in hand. This capability will provide teachers with the confidence to challenge themselves and their students, to try new approaches in their teaching and challenge the dominance of the technical approach to curriculum explored in previous sections (Gleeson, 2009, p.45).

The teacher's critical role is recognised by many and its importance is reflected in the following quote from Pihie and Bagheri (2011, p.3310) 'Teachers play critical roles in creating such a pragmatic and social interactive environment which improves students' entrepreneurial self-efficacy through mastery experiences, vicarious learning, verbal persuasion and social support' (Gibb, 2002 and Bandura, 1997).

Jones and Iredale reaffirmed this contention on the critical significance of the teacher to enterprise education, 'the role of the teacher/lecturer and the teaching environment are of great importance when introducing enterprise education' (2010, p.12). Their positivity will enthuse the students and equally their perceived negativity will also be absorbed and perhaps modelled.

However, this positivity is dependent on the teacher having full command of the subject content and confidence in their own capability to perform tasks in the classroom. Teachers who lack this self-efficacy will be reluctant to change their practice or explore new ways to actively engage with their students. The teaching of enterprise must be done in an active environment as 'it is vital for teachers to become more entrepreneurial if entrepreneurial learning should be improved among students' (Pihie and Bagheri, 2011, p.3310). To achieve this, it is necessary for teachers to model and apply innovative teaching methods while engaging students in the process.

Pihie and Bagheri postulate that greater teacher self-efficacy helps the 'teacher to apply innovative teaching methods' (2011, p.3310). This emphasis on an active pedagogical approach was first mooted by Ball in 1989 when he stated that 'pupils should feel that they have power over their own learning...cooperation with the surrounding community and industry/working life is a prerequisite for the education to be regarded as entrepreneurial' (1989, p. 21/22). Interestingly, he linked the active learning to external interaction thereby facilitating active learning experiences for students. This cooperation and linking with the surrounding community resonates with Man's third foundation explored in a previous section of the chapter.

Two decades later, Hattie (2009) highlighted the need for active learning in all classrooms, for students to be actively involved in their learning, and for this learning to be visible. Visible learning can only be achieved where students were active participants in the learning process (2009, p.36). What learners 'do' in the classroom matters, for Hattie active learning 'encapsulates directive, activating, and involved sets of actions and content, working with students so that their learning is visible and such that can be monitored, feedback provided, and information given when learning is successful' (2009, p.37).

Eva Leffler, a leading writer in the literature surrounding enterprise, supported prioritising of active learning in the enterprise classroom. 'Pupils should learn by doing', and it is critical they have an input in what activities they are doing. (Leffler, 2009, p.111). For her, it is 'a question of an attitude to learning and not of particular educational materials or special lessons' (2009, p.108).

This attitude to learning and Hattie's visible active learning may require a teacher to adapt their pedagogical approach and accordingly:

Break with ordinary patterns... [a teacher] who dares to break old habitual patterns and who is a driving force for change...act as a guide... [has the] courage to give pupils the freedom that is required in order for them to be able to develop their entrepreneurial skills...a shift of power...must hence dare to relax their control.

Leffler, 2009, p.110

Breaking the ordinary pattern in a classroom may demand a teacher to relax the control in lessons may be viewed as an anathema to many teachers, but for students to become active in classes, it will be necessary for many teachers to abdicate some power. Students must be involved in the learning process and become active participants, as opposed to 'passive recipients of teachers' lessons' (Hattie, 2009, p.37).

This activity-based approach by the teacher is matched by a learning environment where students are 'free to come up with ideas of their own and develop them into concrete actions...are willing to take responsibility and can cooperate...see opportunities rather than problems, pupils should learn by doing...encouraged to assert themselves' (Leffler, 2009, p.110). This describes active learning in the enterprise classroom, where the teaching approach and practice is engaging for students. They are active participants and have a voice in the learning. Such an approach necessitates that the enterprise teacher models the qualities of the entrepreneurial teacher displayed in table 2.3, where teachers are action-focused and harnesses ideas from students.

Basically, teachers model the behaviours and attitude they wish to see in their students. Behaviours such as risk taking are critical, however it can be difficult for teachers who may be 'caught in a dilemma between the push for innovation and the pull of the familiar', whereby the security of continuing with their established practice is greater than the risk attached to attempting something new (Ng, 2004, p.187).

To assist teachers in the Singapore programme with developing and augmenting their skills, there was an option of participating in the *Teacher Work Attachment Programme*, which gave teachers the opportunity to experience a commercial workplace. This provided teachers with real life business environment and experience, something that may be missing from their life experience. In Ireland, as in many countries, many teachers would have begun their teaching career directly after finishing college, and so would have no experience of real world business.

A significant part of this modelling is being aware and cognisant of the qualities required for the entrepreneurial endeavour as a teacher. An EU Commission report (2011) described the qualities for the entrepreneurial teacher and these are listed in table 2.3 below:

Table 2.3: Qualities of the entrepreneurial teacher

Qualities of the entrepreneurial teacher
Action-focused
Lateral thinking
Confident
Rule breaker
Flexible
Harnesses ideas
Listens well
Passionate

(2011, p.8)

The report acknowledged that no one person could have all the qualities listed, so it is important to consider the entrepreneurial school. This acknowledges that the promotion of enterprise in schools must be a collective endeavour and cannot be the responsibility of a single teacher. The report set out a clear vision for the qualities of an entrepreneurial school and support measures as described in Table 2.4.

Table 2.4: Qualities of the entrepreneurial school

Qualities of the entrepreneurial school
A school that values its community
Partners in the community
Good support from effective school leaders
Good initial teacher education
Quality continuing professional development

(2011, p.8)

The necessity for role models does not stop with the individual classroom teacher, school leaders and other influencers must also be role models of risk taking and innovation. Parallel with this all in the school must appreciate that to foster innovation and enterprise effectively will take time and there will not be quick results.

Everyone in the school have an essential role in creating a culture for risk taking and experimentation and ensuring all the qualities of an entrepreneurial school are developed (Ng, 2004, p.188). As with all modelling of anticipated behaviour, their actions must sing in harmony with the rhetoric, ‘if there is incongruence of word and deed, cynicism will set in and teachers will believe that innovation and enterprise is yet another fad’ (Ng, 2004, p.188). Equally important is that such an initiative is not seen as only relevant to some members of staff, it must be a ‘school wide implementation’ (Ng, 2004, p.196).

A particular resonance exists here for enterprise education, if it is to be implemented across the total curriculum and become a collective endeavour, then a school leader’s support and expectations will be a critical factor for success.

Leadership permeates everything in schools. While teachers themselves can have a great impact in, for example, engaging parents or exploring signature pedagogies for creative thinking in the classroom, support and direction from the leadership team can ensure the whole school is moving in the right direction.

Lucas and Spencer, 2017, p.96

Eyal and Yosef-Hassidim (2012) researched the impact of school leadership on the promotion of entrepreneurship in Israeli schools and what role, if any, they played as regards managing educational champions. Educational champions are teachers who introduce innovations in school, ‘someone committed to innovation and dedicated to fostering and promoting innovation in an organisation by going beyond job requirements’

(2012, p.216). The teachers who promote enterprise in post-primary schools and consistently achieve success in the SEA awards, even though there is no specific curricular obligation for their annual entry, exhibit the characteristics of educational champions. Eyal and Yosef-Hassidim investigated what role a leader's style may have on developing and managing educational champions. They asserted that 'principals can encourage teacher agency by supporting and setting the structure, routines and opportunities for its emergence' (2012, p.210/211).

School leaders have a critical role to play in the promotion and fostering of agency within their schools. Firstly, in providing supports and guidance and secondly the organisational structures which promote agency (2012, p.213). A significant activity of teacher agency is collaboration with others both within and outside the school and its importance is well documented in academic literature (Hargreaves, 1994). Eyal and Yosef-Hassidim also acknowledge the importance teacher collaboration and state that school leaders have three tasks: lead the development of collaborative cultures and combine this with an informal and approachable leadership style while also being tolerant of failure. Their study aimed to fill the void in the literature investigating the interaction between leadership or management style and champion/teacher agency within the context of entrepreneurship education (2012, p.221).

They concluded that formal education systems offer limited degrees of freedom for championing enterprise within the schools.

It shows that management and entrepreneurship are complex phenomena, where it is not always obvious whether schools manage champions or vice versa. Our findings demonstrate that educational champions act as if management exercises limited restrictions over their endeavours...become in-house educational entrepreneurs...study reminds us that human potential goes far beyond what systems plan for or allow.

Eyal and Yosef-Hassidim, 2012, p.247

This emphasises how some teachers operate beyond the confines of the explicit curriculum and take the initiative to promote enterprise within the school.

This section has explored the criticality of the teacher to the promotion and embedment of enterprise education within schools, where teachers and school leaders must model and exhibit a positive attitude towards enterprise which will be manifested and exemplified in the qualities of the entrepreneurial teacher and school as described by the EU Commission.

While the role of the teacher is critical to enterprise education, it is appropriate to investigate deeper this role and how it may be practiced in the enterprise education classroom, leading the researcher to describe the facilitator role of the teacher.

2.3.1 *Facilitator role of the teacher*

Recognising the need for an active learning approach, Hytti and O’Gorman (2004) state that the optimum approach of the teacher is as a facilitator of learning. A facilitative approach to teaching is described below:

Students are given control over their own learning, and so learn to teach themselves. The teacher’s role is to facilitate (help) this process, by ensuring that students really do take control and responsibility. However, help is given when it is really needed. Notice that the focus is on the learning *process* (how students learn) rather than exclusively on the *product*, and mistakes are seen as an opportunity to learn, rather than being reprehensible.

Petty, 2009, p.134/135

The facilitative approach to teaching promotes a micro approach to curriculum practice and perspective where the emphasis is on the process of teaching as opposed to the product of the teaching. A facilitator approach also ensures that students have a voice in the lessons and this voice is acknowledged and sought. Students are free to come up with ideas of their own and develop them into concrete actions, and are ‘willing to take responsibility and can cooperate both with other pupils and with actors outside the school’ (Leffler, 2009, p.110).

Jones and Iredale summarised this vista for teachers of enterprise tempered with cautionary words as follows:

Rather than imparting knowledge or passing on information in a situation where students are passive and uninvolved, a situation is created where the teacher acts as facilitator, guiding the students through a process, allowing them the opportunity to think and act independently. This can be difficult for a teacher/lecturer who has been accustomed to directing the learning process. The challenge for the teacher/lecturer is to develop a teaching style that encourages learning by doing, exchange, experiment, positive mistake-making, calculated risk-taking, creative problem-solving and interaction with the outside world.

Jones and Iredale, 2010, p.12

‘Clearly, the learning activities are based upon what the students do, not what the teacher does’ (Jones, 2006, p.343). The challenge for the teacher is ‘to determine what balance of discipline and freedom will support the greatest rate of progress’ (Jones, 2006, p.345; Petty 2009). It also demands that a teacher is confident and competent and exhibits self-efficacy

in their teaching though facilitating a holistic learning event that includes all the dimensions and elements of effective lesson planning and delivery as outlined previously in this chapter. At the same time a conundrum is presented, does the teacher leave students alone to experiment and perhaps fail, or do they provide useful and needful advice? (Hytti and O’Gorman, 2004).

Teachers need to be aware of and reflect on this conundrum, as this ‘is a critical element to the development of effective enterprise education initiatives’ (2004, p.19). Finding the balance between teacher support and student voice in a lesson is critical to an optimum facilitator approach.

This change from the more traditional role of the teacher was affirmed by Haase and Lautenschlager who reiterated, ‘the role of the entrepreneurship educator consists more in acting as a promoter, facilitator and manager, instead of being a teacher’ (2010, p.147). The salient issue is the need to move from learning ‘about’ enterprise to learning ‘for’ enterprise. This is the critical aim for enterprise programmes and will require a shift in pedagogical practice for many teachers and is recognised strongly within the literature (Edwards and Muir, 2012; Seikkula-Leino, 2011 and Lepisto and Ronkko, 2013). The latter call it a pedagogical revival and something that is essential for the survival of enterprise education.

In essence what is envisaged for enterprise education as an embedded element within the whole curriculum is the establishment of sustainable supports for developing creative teaching environments in all lessons. This pedagogical change ‘embodies elements of learning for the pursuit of some tasks; it involves learning through an articular pedagogy; it requires particular thinking skills, in learning about the subject matter’ (Seikkula-Leino, 2011, p.71). The focus of this pedagogy is based on ‘multidimensional knowledge development’ and as stated previously this is supported by a range of active learning strategies so as to ‘encourage students’ interactive learning and ‘reflections’.

The classroom learning activities listed below offer a small insight into the activity-based approaches required for the enterprise classroom:

- Cooperative learning
- Problem based learning
- Group and peer work
- Teamwork
- Learning by doing
- Pedagogical drama
- Learning diaries

(Seikkula-Leino, 2011, p.72)

Hytti and O’Gorman in their study ranked the most common teaching and learning approaches employed from 1 to 8 in the enterprise education classroom and these are summarised in the table 2.5:

Table 2.5: Alternative teaching/learning approaches adopted in enterprise education programmes

Ranking Order	Teaching and Learning Methods	Number of programmes
1	Traditional teaching methods	31
2	Business simulation	28
3	Workshops	24
4	Mentoring	21
5	Study visits	17
6	Setting up a business	17
7	Games and competitions	8
8	Practical training	8

Hytti and O’Gorman, 2004, p.17

Table 2.5 shows that there was some bias towards the use of traditional teaching methods despite the rhetoric within the literature. Achieving this idyll of creating active classrooms is fraught with problems. ‘The teacher’s role within curriculum reform is essentially self-educative and, in many ways, curriculum reform is more about educating teachers than students’ (Seikkula-Leino, 2011, p.74). The problem, if relying on the teachers own initiative for introducing new active methodologies, is the pull for what is known rather the push for innovation alluded to earlier within this chapter.

Van Gelderen (2010, p.719) may have presented a solution to the pedagogical conundrum and advocates that a key element of the new pedagogical approach must be about developing the autonomy of students. He believed that 'the capacity for autonomous action is essential to respond effectively to the demands of the world of work', and thus must become an integral part of entrepreneurship education. Teachers may view this as increased workload and so support for teachers is needed in promoting and developing autonomous learners.

This was tacitly acknowledged by Van Gelderen, adding that 'today's pressures on the educational system put severe strains on the individualisation of education', but to provide 'entrepreneurship education without a strong focus on autonomy is doing individual students and society a disservice' as the entrepreneurs of tomorrow face elevated levels of uncertainty and risk. They need a fully developed 'capacity for autonomous action to have a fighting chance' (2010, p.719).

Gilbert discussed the tension and paradox that existed in the teaching of enterprise, between the predicted learning outcomes and the fluidity of experiential learning that promotes learning for rather than about enterprise. Adhering rigidly to specified learning outcomes required teachers to 'approach the teaching of entrepreneurship and innovation in ways that are often incompatible with the dynamic and fluid nature of the activity itself' (2012, p.153). Added to this may be a situation where the teacher is an individual who in entrepreneurial terms has never 'walked the walk'. This paradox is also acknowledged by Gibb (1993, 1996 and 2002). He critiqued the most common way to teach enterprise in the USA and Australia was 'the ubiquitous business plan' and for him it emphasised a scenario where reality was largely divorced from the process.

For Irish teachers this paradox is reflected in the specifications and syllabi for their subject areas. Draycott and Rae affirmed this paradox, 'it is evident that the norming instinct of educational policy is to seek to impose through a prescribed curriculum, rules, order and planning, frameworks which are inconsistent with enterprise education which is inherently untidy, informal and deeply intuitive' (2011, p.137). They are concerned that the need to evidence learning and accountability will take precedence over the nature of the learning experience.

They contended that the 'most influential enterprise educators work with a flexibility and freedom which enables student learning through guiding the process, not by prescribing the outcome' (2011, p.137). Therefore, teachers need to have confidence in their approach to the teaching of enterprise and entrepreneurship.

This confidence translates into self-efficacy, which is required by enterprise teachers to implement an effective programme which is not explicitly supported through learning outcomes or any national framework documents. One way in which teachers can develop this self-efficacy and confidence is through education and training programmes specifically designed for teachers of enterprise and entrepreneurship. The 'quality of any educational experience, then, will depend to a very large extent on the individual teacher responsible for it' (Kelly, 2009, p.15). Therefore, the more knowledge and training that a teacher receives the better the learning experience for students. No training or continuous professional development (CPD) in this context can be regarded as wasteful or unnecessary.

2.3.2 Teacher continuous professional development (CPD)

A theme repeated throughout the literature is the importance of continuous teacher learning and development in curricular change initiatives (Kelly, 2009; Gleeson, 2009). In the case of enterprise education, the situation varies from country to country. In some countries, the training and education of enterprise teachers is prioritised more than others.

For instance, Scotland is advanced in this area with primary teachers being offered in-service with the aim of having at least two teachers in every school who have specific enterprise training. These teachers are provided with the appropriate knowledge and pedagogical strategies to effectively deliver enterprise in primary classrooms (Leffler, 2009, p.105). However, for many countries there 'is insufficient provision of training to the teachers' (EU Commission, 2004, p.7).

A more recent report from the EU Commission states:

It clearly seems that some efforts could be made to improve both initial education of teachers and the provision of CPD courses for entrepreneurship education in order to help teachers become familiar with the topic and the teaching approaches needed to develop their students' entrepreneurial skills and attitudes.

EU Commission, 2016, p.14

More than a decade earlier, an overarching finding of Hytti and O’Gorman’s research is that teachers must be fully trained to teach enterprise education, however for this to be effective, the concept of enterprise education must be clearly stated and understood by all participants. ‘To operate effective enterprise education programmes, policy makers and educators need a thorough understanding of the diverse and alternative aims and objectives of enterprise education intervention...and of the need to “train the teachers”’ (2004, p.12). The recurring issue of clearly defining the concepts of enterprise education and entrepreneurship is restated again.

Within the Irish context, a report entitled *Entrepreneurship in Ireland* (2014) cited a problem in the area of teaching enterprise was that the teachers themselves often lack the necessary skill or confidence to teach the topic of enterprise (2014, p.15). Therefore, teachers need to experience appropriate CPD in order for self-efficacy to flourish and effective role modelling within all enterprise education lessons to be realised across the Irish post-primary system.

It will also seek to promote a positive and confident attitude towards enterprise among all teachers and allow for enterprise education to become embedded into the curriculum. A possible starting point for the development of positive attitudes among teachers is within initial teacher education programmes.

Lepisto and Ronkko, both Finnish researchers, in their analysis of student teachers’ perceptions of entrepreneurship education describe three types of attitude towards the topic, the sceptic, the follower and the innovators (2013, p.646).

1. *The sceptic*: did not understand the role of entrepreneurship education in teacher education. Deliberated on why it was accorded such a significant role in teacher education and perceived the initiative as a waste of teacher education resources.
2. *The follower*: viewed entrepreneurship education and its goals in a positive manner. Considered it an important aspect of basic education. Typically they avoided the term ‘enterprise education’ as they did not see themselves as educators of entrepreneurs, but wanted to cultivate the enterprising spirit of students. The teacher’s task was to guide the students towards readiness for life.

3. *The innovator*: implements a constructivist approach to education which was referred to earlier in this chapter. Viewed entrepreneurship education as a natural part of education. It was a way of thinking, a teaching method and manner of operating. The teacher must be willing to accept failure, but these failures were viewed as problems to which solutions will be sought. (Lepisto and Ronkko, 2013, p.647-649)

The student teachers were also asked about their understanding of entrepreneurship as part of their future pedagogical work within the classroom. The data was collected from essays prepared by the student teachers.

They concluded that the discourse has moved beyond content and now is focused on the process, 'the focus of entrepreneurship studies has shifted from content issues to learning processes and pedagogical solutions' (2013, p.644). It is interesting to note that for these researchers, the issue of content was no longer the priority, rather they viewed the promotion of skill development and the learning process as key constituents for enterprise education. The possibility and reality of enterprise education for all teachers was acknowledged as a possible reality.

Lepisto and Ronkko proposed two key recommendations in the area of entrepreneurship education for the area of teacher training:

1. 'Teachers need to be clear on the concept and if enterprise education is for all students, the most important target in developing entrepreneurship education for teachers is the clear definition of this concept', this would create appropriate content and improve students perception of the topic (Lepisto and Ronkko, 2013, p.651)
2. Teachers need to be fully trained in how best to approach the teaching of enterprise. These researchers believed that enterprise education was for all subjects and students, and hence all teachers. 'Key idea is that a teacher does not need to direct every action in the classroom...teachers must educate in a way that enables students to acquire the know-how that they need...to learn from his/her mistakes' (Lepisto and Ronkko, 2013, p.647-649).

Given that such recommendations are relevant to student teacher perceptions of entrepreneurship education, it can be extrapolated that such recommendations may also be relevant to in service teachers unless CPD is provided to all teachers in the post-primary education system.

Professional development can present difficulties for teachers, as it may require a change to their existing practice. This need for the professional development of teachers has become a constant refrain over the years:

Training of teachers is a critical element to the development of effective enterprise education initiatives...teachers need in-career continuous training to support the introduction of new teaching methods.

Hytti and O’Gorman, 2004, p.19

Teachers need professional development, trust, and the space to construct personal praxis and passion for enterprise.

Draycott and Rae, 2011, p.138

The contemporaneous thinking on entrepreneurial teaching is now presented in table 2.6 and reflects a number of recurring themes already discussed in this chapter.

Table 2.6: The recurring themes relating to the current thinking on entrepreneurial teaching

Entrepreneurship education is more than preparation on how to run a business. It is about how to develop the entrepreneurial attitudes, skills and knowledge.
Teachers cannot teach how to be entrepreneurial without themselves being entrepreneurial.
Entrepreneurial competences require active methods of engaging students to release their creativity and innovation.
Entrepreneurial competency and skills can be acquired or built only through hands-on, real life learning experiences.
To give entrepreneurship education real traction, there is a need to develop learning outcomes related to entrepreneurship and related assessment methods and quality assurance procedures for all levels of education. These should be designed to help teachers progress in the acquisition of entrepreneurial knowledge, skills and attitudes.
The entrepreneurship education agenda should be promoted beyond teacher education institutions to business and the wider community
Teachers and schools will not be able to realise their ambitions without cooperation and partnerships with colleagues, businesses and other stakeholders.

(EU, 2013, p.5)

Many of the themes have already being expanded upon in this literature chapter, however, one area which is listed above and requires deeper analysis is assessment.

2.4 *Assessment of Enterprise Education*

Integral to any model of curriculum is the need for assessment. This was supported by Tyler with his fourth and final question displayed in table 1, which concerns curriculum design, how can we determine whether these purposes are being attained? (Tyler, 1949). How do we assess the purpose of the curriculum?

This necessity and importance of assessment is widely lauded and supported in academic literature, a view supported by Pittaway *et al.* who posited that 'assessment practice is seen in educational research to be an important part of academic practice...perhaps been neglected as a subject in enterprise education' (2009, p.72). This neglect is even more apparent at post-primary, Draycott *et al.* observed that 'research into the assessment of enterprise learning in secondary education has been neglected' (2011, p.674). Many researchers have noted the paucity of research in the area of assessment within the literature (Gibb, 2008; Draycott and Rae, 2011). The focus for much research is 'mainly on programme design...there is a paucity of work specifically addressing assessment practice in enterprise education' (Pittaway *et al.*, 2009, p.72).

This paucity of research does not only apply to assessment practice in enterprise education, but with the overall subject of enterprise education for post-primary schools, even before focusing solely on the Irish context, the research is not expansive. However, it does hyphenate the necessity for this research project.

The assessment of entrepreneurship knowledge with its foundations firmly rooted in business start-up and related business knowledge tends to be easier to assess. This is because the material is more definable being knowledge centred.

The area of enterprise education with its emphasis on the development of so called 'soft skills' is a more fraught in terms of assessment.

This has presented added difficulty for the field of knowledge and its development and is what Ng refers to as a 'tricky issue...the problem is that it is difficult to measure innovation and enterprise quantitatively' (2004, p.191).

Draycott *et al.* (2011, p.677) suggested a vacuum existed with regard to the assessment of enterprise education in the United Kingdom, and very little support available to teachers. This lack of guidance would suggest the imperative for teacher CPD on enterprise education and modes of assessment.

There is no specific developed assessment literature from academics or practitioners and very little available guidance from policy makers for enterprise education, leaving educators, especially those new to the field with little support.

Draycott *et al.* 2011, p.677

Broadfoot placed assessment as a central feature of all our lives, we make evaluations on every aspect of our existence, whether consciously or subconsciously. Therefore, it is logical that we evaluate or assess learning and our educational system's effectiveness as provider. However, she cautioned, 'one of the most highly charged evaluative settings is that of education' (1996, p.4). The writer contended that 'teachers need...to evaluate their own teaching in order to judge the value of particular teaching strategies and to discover to what extent the class as a whole has mastered a particular unit of work'. So, assessment of a teacher's own practice is equal in importance to assessing a student's performance, though typically when we talk about assessment issues we tend to concentrate on student assessment and this is the focus of the next section.

2.4.1 *Enterprise assessment*

Various researchers have sought to develop a test to measure the assessment of learning in enterprise programmes for participants. Such efforts and tests have been focused primarily upon entrepreneurship education. Despite these sporadic efforts, it remains as stated previously, a part of enterprise education which is under researched.

This view is supported by Davies and Hughes who state that 'given the amount of effort and money that has been spent on seeking to develop young people's capability for enterprise, it is surprising that the assessment of enterprise capability is still so underdeveloped' (2013, p.523).

Caird (1991) developed the General Enterprise Tendency Test which is essentially a personality test that measures five entrepreneurial traits; risk taking, creative tendency, need for achievement, need for autonomy and an internal locus of control.

This test is based on trait theory and its relevance has diminished in line with the importance attached to trait theory as today it is generally accepted that such testing lacks validity (Robinson *et al.*, 1991). Bandura *et al.* (2001) investigated three strands or elements of enterprise capability, aspiration, self-efficacy and understanding and Davies and Hughes (2013) have further built upon Bandura's work. Davies and Hughes (2013) designed an instrument for assessing enterprise activity in schools and concentrated upon the three elements of enterprise capability; aspiration, self-efficacy and understanding. They opted to broaden the base of the assessment beyond simply business start-up. This was to ensure that the assessment instrument was 'more in tune with recent trends in policy' of moving away from the narrow focus of viewing enterprise as just a means of developing entrepreneurs (2013, p.509).

A questionnaire was developed to assess each of the three elements. Data was collected from 800 students between the ages of 14-25 years attending 7 schools in the United Kingdom. They concluded that 'evaluating the effectiveness of schooling in developing enterprise capability requires judgements not only about impact on intentions towards enterprise...but also judgements about effects on students' capability in the sphere of enterprise' (2013, p.523). It was the first research project which addressed these three dimensions simultaneously.

They found that each dimension could be looked at individually as a student may report an increase in one, but not in the other two. The overarching message of this research stated:

Schools should be encouraged to use assessments which evaluate students' progress in relation to each of these elements...however much work remains to be done in developing appropriate tools for schools to use in assessing students' enterprise capability.

Davies and Hughes, 2013, p.524

Draycott *et al.* identified three key problems with assessment and enterprise education (2011, p.678):

1. Deciding what elements to assess from the wide range available
2. Assessing the origins of the learning
3. Deciding what form the assessment should take

The first problem raises the challenge of providing assessable learning outcomes for enterprise education.

A paradox exists between the prescriptive formal learning outcomes and the dynamic nature of the material. The paradox has been alluded to previously in the chapter. Draycott and Rae (2011) investigated the enterprise education framework of ten organisations developed by schools and colleges and Local Education Authorities. One of their conclusions was that 'competing frameworks exemplify a corporate-bureaucratic mind-set which seeks to standardise, prescribe and control what is taught and learned...there is a danger it may strangle the creativity...and flexibility which is at the heart of enterprise education' (2011, p.136/7).

The second problem relating to origin of learning relates to the assessment of 'soft skills'. The learning of such skills may have more to do with prior programmes than current programmes which a student is attending. This problem exists for all transferable skills which by their very definition are transferable and so will be developed in a myriad of learning environments.

The final issue of deciding on a suitable form of assessment is not an exclusive problem for enterprise education programmes. To reach a decision on which form of assessment is most suitable, it is imperative to have a clearly defined purpose for the assessment. Brualdi (1998) suggests that for selecting any form of assessment, you must be clear on the concept, skill or knowledge you are trying to assess and what should the students know. For enterprise education, skill development is an integral part of the learning, so any form of assessment selected will have to address this aspect of the learning. This will ensure that the form of assessment selected is authentic. Wiggins (1990) states that authentic assessments help students rehearse for the complex ambiguities of the game of adult and professional life. One form of assessment which attends to these prescripts is Performance Task Assessment. Chun stated that teaching and assessment should be approached similarly, declaring that 'teaching and assessment – so often seen at odds – instead become coterminous' (2010, p.23).

This would be achieved when both the teaching and assessment mimic how skills, knowledge and attitudinal learning will eventually be used. This also supports the use of authentic assessment in the classroom. To achieve this idyll, then relevant assessment activities need to be employed.

It is noteworthy that the *stratified model of enterprise education* reviewed earlier in the chapter may provide a possible answer as it provides a possible locus for the use of performance-based assessment in enterprise education. According to the American Research Council, performance-based assessment includes any activity that provides an opportunity for students to demonstrate their learning or knowledge as a performer (National Research Council, 2001).

Three variations of performance-based assessment are displayed in table 2.7:

Table 2.7: Three variations of performance-based assessments

Product-assessments	Assessments that result in tangible indicators of knowledge that resemble final products that would be produced in the real world. Examples include the development of a product in a Business lesson, writing a short story in an English lesson or developing a timeline in a History lesson.
Performance-assessments	Assessments that involve teachers directly observing the application of taught skills or information. Example may include a teacher observing a final speech in a public speaking lesson.
Process-focused assessments	Assessments through which teachers can evaluate the process of learning as well as the outcome. Examples include when a teacher has students show their work or think out loud as they answer questions.

(Adapted from Dixson and Worrell, 2016, p.157)

Performance-based assessment can be used in any lesson, as exemplified in table 2.7, and is considered the best form of assessment because it requires students to demonstrate their knowledge instead of simply ‘parroting back memorized facts’ (2016, p.157).

For Lucas and Spencer, they equate performance-based assessments as ‘real world assessment techniques’ which help us to see the difference between knowing something and ‘actually applying knowledge or actually doing things skilfully in context’ (2017, p.173). They also offer the potential to assess content-specific knowledge, the integration of information across subjects and decision-making skills (McTighe and Ferrara, 1998, p.46). Performance-based assessment is particularly appropriate to enterprise education which is immersed in skill development that can be modelled on the performance of a task.

Assessment tasks that align with these active learning strategies (called “authentic” assessments) present students with a complex, real-world challenge in which the scenario, role, process, and product are all authentic; they must then demonstrate that they have the skills and knowledge to complete the task. Thus, students actively participate in the problem-solving exercise rather than passively selecting answers.

Chun, 2010, p.24

This will ensure that the active learning for enterprise education which was addressed in a previous section is now supported by an active assessment approach. The design of a performance-based assessment task can take many forms and can be collaboratively designed for a school to suit the individual context. The collaboration can be based within the school or with outside partners also involved. In order to assess the individual performance, the teacher needs to develop a rubric that will clearly list the criteria or elements that the teacher is assessing, such as attitudes, skills and knowledge (Muijs and Reynolds, 2011, p.272/3).

The SEA awards is a type of performance-based assessment, where students are required to develop a product or service and bring it to the marketplace, using entrepreneurial skill. This programme and competition, though targeted at entrepreneurship, can inform the pedagogical practice and assessment of enterprise education with its wider application outside of the business world.

The competition is judged using a specific set of criteria, which serves as the rubric for the assessment and is exhibited in table 2.8. The SEA award’s marking scheme assesses the performance of students on the entrepreneurship task. This model for entrepreneurship assessment can be used to inform any proposed assessment model for enterprise education as it seeks to assess skills which can be developed across the curriculum, such as problem-solving and communication skills.

Performance-based assessments can be by their nature somewhat subjective, which is often a critique presented (Dixson and Worrell, 2016). However, for Dixson and Worrell, teachers who have a high self-efficacy will be aware of this and will make every effort to reduce subjectivity and bias. Another barrier to the use of performance-based assessment is the time and effort needed for both teachers and students if it is to be implemented effectively (Dixson and Worrell, 2016, p.157).

However, these barriers are easily outweighed by the potential of such assessments to measure behaviours in realistic contexts and to assess processes that cannot be easily measured on paper, for Muijs and Reynolds, it ‘makes this form of assessment potentially very powerful’ (2011, p.273).

Table 2.8: Marking scheme for SEA competition

Product/Service	
Quality of Product/Service	50 marks
Sub-Total	50 marks
Marketing	
Market Research	10 marks
Marketing Plan	10 marks
Understanding Customer Needs	10 marks
Sub-Total	30 marks
Innovation	
Idea Generation	10 marks
Innovation	20 marks
Product/Service R&D	10 marks
Sub-Total	40 marks
Sales	
Sub-Total	40 marks
Business Report	
Business Structure	10 marks
Business Performance	10 marks
Difficulties Overcome	10 marks
Sub-Total	30 marks
Finances	
Budgeting/Forecast	5 marks
Pricing	5 marks
Profit & Loss Account	10 marks
Sub-Total	20 marks
Exhibition Stand/Interview	

Literature Review Chapter

Visual Display	10 marks
Techniques Used	10 marks
Interview Skill	10 marks
Sub-Total	30 marks
Motivation/Learning Experience	20 marks
Final Score	#260 marks

(Adapted from www.studententerprise.ie)

The issue surrounding the role of assessment and its potential to powerfully impact on classroom practice is widely researched both in the Irish and international context (Trant, 2007). Pittaway *et al.* (2009) cited two challenges for developing effective assessment strategies in the area of enterprise, first was the issue surrounding the definitions and interpretations of the terms ‘enterprise’ and ‘entrepreneurship’. Secondly was the necessity for enterprise educators to be ‘innovative when thinking about new methods of assessment, especially where the aims of the educational activity differ from the norm’ (2009, p.75). This innovativeness is central to the role of the enterprise teacher, innovative in their vision for their teaching approaches and assessment is required.

In Ireland there is no model of performance-based assessment related to enterprise education in existence outside what is available in the SEA awards and competition. The SEA programme as already alluded to is in effect the *de facto* syllabus for entrepreneurship and the SEA competition its *de facto* assessment. Its popularity among post-primary schools in Ireland suggests that teachers and students find the programme and competition engaging and worthwhile, so there is potential to harness what is presently provided to inform a national framework for enterprise education.

Assessment is the most critical of all tasks facing the teacher, but the quality of this assessment can be poor and four key requirements for effective assessment are generally accepted. (Cannon and Newble, 2000). The application of these to performance tasks is exhibited in Table 2.9:

Table 2.9: Four key requirements for effective assessment and applied to performance tasks

1	Validity	Does it measure what it is supposed to measure? Content validity is the first priority of any assessment. It is a measure of the degree to which the assessment contains a representative sample of the material taught in the course.	Performance tasks can measure the attitude, skill and knowledge specific to the learning. They can be designed to measure skill development and are ideally suited to enterprise education.
2	Reliability	Does it produce consistent results? It is a measure of the consistency and precision with which it tests what it is supposed to test. The degree of reliability varies with the assessment format itself, the quality of its administration and the marking.	The creation of a rubric to aid the assessing of a performance task is recommended to ensure the reliability of the assessment.
3	Practicality	Is it practical in terms of time and resources? The assessment scheme must be practical. Need to consider issues such as your own skills to administer, mark and grade the assessment.	The practicality of performance tasks is often a critique directed towards this form of assessment. In terms of time and organisation (Chun, 2010).
4	Positive Impact on Learning	It is clear that how and what students learn is influenced more by our assessment practices than by any other factor on the curriculum. There are several assessment practices that can encourage and reward the kinds of learning that are highly valued today. These approaches include essays, learning portfolios, research projects, self and peer assessment, and (sic) regular and constructive feedback on learning.	It provides an opportunity for all students to excel, as a wider spectrum is assessed to include skills and attitude, as opposed to only knowledge.

(Adapted from Cannon and Newble, 2000, pp. 167/172)

Devising any effective assessment technique for enterprise education for any discipline will present a difficulty in satisfying the above four requirements. Pittaway *et al.* maintained many of our assessment processes encourage surface learning, and purposeful assessment ‘needs to be valid, reliable and transparent... [however] ...it is concluded that most assessment does not meet any of these criteria’ (2009, p.74). Draycott *et al.* concur with this summation and ‘suggest that there are complex challenges surrounding the assessment of enterprise education, but the field is ripe for new approaches’ (2011, p.682).

The development of performance-based assessment tasks as a mode of assessment for enterprise education offers a real opportunity to provide relevant assessment practice to match the active teaching approaches which are demanded for effective enterprise education.

Draycott *et al.* set down key principles for enterprise assessment (2011, p.682).

Enterprise assessment should;

- Be based on a flexible pedagogy, central to which is a student learning journey across a landscape of defined elements, which enables the learner to exercise choices in plotting their own course and defining their own targets.
- Should generate outcomes for assessment which are relevant to the learner, rather than being fixated on achieving pre-set learning outcomes.
- The assessment should be traceable and have the ability to account for learning from both within and outside the curriculum.
- Involve students understanding the rationale for the activities they participate in.
- May draw on all three assessment methodologies: 'of', 'for' and 'as' learning.

Draycott *et al.* (2011, p.682)

Achieving the above propelled the aforementioned researchers to acknowledge that 'a new conceptual model for enterprise education which would put the growth of the student at its heart and [would] encompass a wide range of skills and methodologies' is demanded (2011, p.683). However, much work and development remains to be done and this is acknowledged explicitly by the EU commission in a recent report in 2016.

One of its main findings stated that 'specific assessment of learning outcomes linked to entrepreneurship education is usually lacking, illustrating its limited embedding' across the curriculum (2016, p.13). Adding that:

There is not yet any specific assessment of learning outcomes linked to entrepreneurship education. At most, some learning outcomes are assessed in relation to specific subjects including entrepreneurship. This is a considerable limitation to the effective teaching and learning of entrepreneurship education, as both teachers and pupils tend to focus more on aspects of the curriculum that are subject to assessment.

EU Commission, 2016, p.14

This highlights the priority within curriculum delivery to the aspects which are assessed, and those aspects which are assessed, receive the focus of the teacher. Changing this bias towards knowledge and assessment will demand a cultural shift at system level and a shift of mind at local level. It is this issue of change and its associated paradigms which the researcher will address in the next section of the chapter.

2.5 *Challenges of a Changing Paradigm of Education*

Throughout this chapter the need for a shift in thinking or what Senge termed *metanoia* was raised at various junctures (1990, p.13). This shift in thinking is relevant to all the themes explored throughout the chapter. A change in how curriculum is conceived, managed and delivered together with a change in teaching approaches and the role of the teacher along with a corresponding change in assessment practice is evident from the review of the literature. The researcher is mindful of how difficult this change at all levels of the curriculum provision can be received as ‘change in education is easy to propose, hard to implement, and extraordinarily difficult to sustain’ (Hargreaves and Fink, 2006, p.1).

Nonetheless it behoves all stakeholders to reflect and embrace any change which will ultimately improve learner outcomes through the embedding of enterprise education across Irish post-primary education. Gleeson offers some cautionary advice suggesting that ‘international trends generally take some time to reach Ireland’ (2009, p.122).

Even when trends do reach our shores, vested interests can impact on the any proposed change. The composition of the NCCA curriculum development groups which the researcher has already referred to can impede the introduction of curriculum changes. Gleeson critiqued the lack of deep discussion around such matters, highlighting issues which are rarely debated as opposed to the issues which are frequently debated:

Table 2.10: Educational debate in Ireland

Debates that rarely happen	Debates which frequently happen
Teachers as facilitators of learning and researchers	Effectiveness of teachers as coaches and instructors for examinations
Models of curriculum development and evaluation	Syllabus content, curriculum materials and examination performance
Knowledge as integrated	The sacrosanct, ring-fenced nature of subjects

(Gleeson, 2009, p.138)

A decade later and the topics which were frequently debated for Gleeson still remain the focus for educational discussion today, a discussion which is centred on technical rather than critical educational issues (2009, p.138). Wider discussions about the teacher as facilitator and models of curriculum do happen, but they still remain overshadowed by the technical discussions surrounding examinations and the content of specifications.

For Slattery, 'curriculum development in the postmodern era demands that we find a way round the hegemonic forces and institutional obstacles that limit our knowledge, reinforce our prejudices, and disconnect us from the global community' and so restrict our discussions (2006, p.35). Slattery similarly alerts us to the need for change, and for educationalists to challenge our accepted thinking and begin the discourses which rarely happen.

The World Economic Forum published a report about the future of jobs in 2016. It highlighted one of the many drivers for change was the rapid developments taking place in the nature of work and jobs around the world, describing the phenomena as the 'beginning of a Fourth Industrial Revolution' (2016, p.1).

The report was unequivocal in its stance on the need for change to happen if economies are to capitalise on the opportunities presented by the Fourth Industrial Revolution:

The talent to manage, shape and lead the changes underway will be in short supply unless we take action today to develop it... For a talent revolution to take place, governments and business will need to profoundly change their approach to education, skills and employment... Governments will need to re-consider fundamentally the education models of today. As the issue becomes more urgent, governments will need to show bolder leadership in putting through the curricula and labour market regulation changes that are already decades overdue in some economies.

World Economic Forum, 2016, p.7

This urgent call for change is supported by a more recent report from the OECD in 2019 which states:

Education plays a crucial role in equipping people with the necessary skills, knowledge and attitudes to thrive in their modern personal and professional lives. As the world becomes increasingly digitalised, the education system must adapt and evolve.

OECD, 2019, p.11

One of the trends this report highlights is the development of creativity and entrepreneurship to meet the evolving needs of learners. It offers strategies by which the education system can 'affect these trends' (OECD, 2019, p.102). In relation to creativity and entrepreneurship the following are relevant:

1. Equipping students with knowledge, skills and attitudes to become entrepreneurs.
2. Promoting the teaching and learning of creativity and other skills that go beyond traditional distinctions between disciplines.

3. Practising collaborative problem-solving and teamwork through hands-on projects within and beyond the classroom (OECD, 2019, p.102).

Many of the ‘affects’ outlined in the above report have all being addressed in this chapter and all of the above ‘affects’ will require some change for more teachers, and more change for some teachers.

This inevitably brings the researcher to the ubiquitous educational endeavour that is change, and the challenges presented within a changing paradigm of education.

Fullan (2001) sets out three categories affecting the implementation of change in education. Within each of the category are factors which influence the dynamics of the change process, they are displayed in table 2.11:

Table 2.11: Interactive factors affecting implementation of change

Characteristics of change	<ul style="list-style-type: none"> • Need • Clarity • Complexity • Quality/practicality
Local characteristics	<ul style="list-style-type: none"> • District • Community • Principal • Teacher
External factors	<ul style="list-style-type: none"> • Government and other agencies

(Adapted from Fullan, 2001, p.27)

Any proposed change in education must be needed and this need must be acknowledged and supported by the main change agents, and according to Fullan this is the teachers. Even when the need is apparent, the goals and aims of the change must be clearly stated and agreed. This is a ubiquitous problem for all change innovations and described by Fullan as a perennial problem (2001, p.76). The complexity of the change will affect implementation and where people are positioned in relation to the change proposed. Yet there are teachers in the system who are innovators and the factors which supports and promotes these teacher innovators needs to be investigated and shared.

Over a decade later, Emo (2015) investigated teachers’ motivations for initiating innovations in their school contexts where ‘uncertainty is the norm in schools’ (2015, p.171).

She acknowledged the difficulty which these teacher innovators experience, such as needing extra time, having to justify the innovation to sceptical management, students and parents, and yet they persevere (Emo, 2015; Fullan 1999).

One motivation theory she proffered was that teachers want 'control-value and self-determination', teachers will innovate where they can control the innovation and use it in their own context. Teachers can also work as resistance factors if these factors are not available in a given innovation (Emo, 2015, p.173).

Simply stated, 'when teachers perceive control and also value the potential outcome of a change or innovation, teachers are more willing to take the risks of innovating' (Emo, 2015, p.173). Linked to having control-value is the concept of professional agency for teachers, the ability, motivation and opportunity to take action. Interestingly a factor which she identified as a motivator was teacher boredom, she asserted 'teacher boredom may be more influential than commonly recognised' for teacher innovation.

Teacher agency has become an important construct in the literature on education change (Tao and Gao, 2017, p.346). Vahasantanen, conceptualised teacher agency as 'individually varied...and both socially and individually resourced' (2015, p.1). In particular, industry experience emerged as an important factor that can be mobilised to enhance professional practices and can also enable teachers to seek and seize contextual opportunities to create what Priestley *et al.* referred to a 'rich and meaningful educational experiences for students' (2012, p.210). Tao and Gao call for more 'attention to teachers' CPD amid educational change' as only when educational reform is 'built into teachers' professional development can they make agentic choices and take actions in a way that sustains their dedication' (2017, p.346).

Van Heijden *et al.* (2015) declare:

The rapidly changing society of today requires from teachers that they are able and willing to cope with the many challenges of change. In today's schools, teachers are needed who are real change agents, thus teachers who are willing to learn and change from "inside" (internal drive to reflect and make sense of things) and "outside" (meeting external demands), both individually and in collaboration with others in their schools.

Van Heijden *et al.*, 2015, p.682

This contention is supported by many other notable writers in the field of educational change (Fullan, 1993; Hattie, 2012).

The focus of the Van Heijden *et al.* study was to identify the personal characteristics of teachers who act as change agents in their school appreciating that ‘teachers play a key role in realising successful changes in education’ (2015, p.681). They also note that this agency can be used to resist change.

Similar to this research study, Van Heijden *et al.* (2015) observed that ‘little empirical research has been done on what characterises teachers as change agents as they influence, change, or improve education in daily practice by using their agency’ (2015, p.682). One focus of this research study will be to examine the factors which support the embedding of enterprise education within some schools and what factors promote some teachers to exercise their agency in this regard.

Van Heijden *et al.* (2015) identified four characteristics of change agents who seek to improve education in their daily practice. The four characteristics are displayed in table 2.12:

Table 2.12: Four characteristics of change agents

	Characteristic of a teacher as a change agent	Description of the characteristic	Subcategories
1	Lifelong learner	Teachers as change agents may be characterised as lifelong learners who systematically reflect on their learning and who search out new information and are eager to learn. This characteristic is supported by Fullan (1993) and Hattie (2012). This study indicates that real change agents regularly reflect on the quality of their daily teaching practice and education at the school level and act accordingly.	Eager to learn reflective
2	Mastery	Mastery is important for being a change agent as it is described in terms of being an expert with comprehensive teaching knowledge and skill. Teachers continually strive to increase and develop their expertise in teaching	Giving guidance Accessible Positive Committed Trustful Self-assured
3	An entrepreneur	The change agent is an entrepreneur who responsibly takes risks, makes decisions, and motivates colleagues in the process of change within their school. This is supported by Le Fevre (2014) who believes that risk	Innovative responsible

		and risk-taking are tightly associated with effective innovation in school. Results of this study indicate that teachers as change agents are above all innovative – a characteristic mentioned most by participants. It is essential if teachers are going to dare to take creative initiatives when experimenting with new education approaches in their classrooms.	
4	Collaboration with others	Collaboration with other appears to be essential for teachers as change agents and has a positive effect on teachers’ learning and students’ learning outcomes. Teachers as change agents are aware of needing others to further develop themselves, their teaching practice, and education at the school level.	Collegial

(Adapted from Van Heijden et al., 2015)

Van Heijden *et al.* (2015) considering entrepreneurship as a characteristic of change agents notes that ‘being innovative seems to be a crucial personal characteristic and a distinguishing feature of teachers as change agents’ (2015, p.695). For many teachers in schools, the fear of taking risks may be a barrier to educational change and also, to some extent, not being appreciated by school leaders in a culture where external accountability measures are very dominant (Le Fevre, 2014).

Local context is another significant change factor, as implementation at local level is essential if substantial improvement within an entire educational system is the goal. A goal of this study is to investigate the embedding of enterprise education in the post-primary curriculum and how the schools work within their own local contextual constraints and needs.

One localised factor is a school’s unique culture. The culture of the school has the potential to imbue a spirit of entrepreneurship, ‘a child going to school every day in an environment of competition and innovation has an advantage in learning these entrepreneurial principles and applying them to their personal life’ (Sobel and King, 2007, p.432). Thus, the culture of the school is important to the learning of enterprise.

A further local factor is the location of the school. A school located in a large urban area may need to be more competitive to sustain and increase its enrolment. This competitiveness may manifest itself in developing innovative school programmes, imaginative school trips and events or simply more active teaching methodologies.

‘Students going to school in this type of environment, one in which their own school is in constant competition with other schools, are quite simply likely to become entrepreneurs’ (Sobel and King, 2007, p.436). Post-primary schools within the same catchment area may compete with each other in their success at various national competitions such as the Young Scientist or Young Enterprise competitions. Such competitiveness will not be an issue for a single post-primary school which effectively has a monopoly position in a rural area. This topic of overall school environment raises the issue that may exist between urban and rural schools surrounding enterprise.

For national whole system implementation of change, external agencies such as the Department of Education and Skills must be part of the change process and their role is described as follows:

Government agencies have become increasingly aware of the importance and difficulty of implementation and are allocating resources to clarifying standards of practice, to establishing implementation units, to assessing the quality of potential changes, to supporting professional development, to monitoring implementation of policies.

Fullan, 2001, p.87

Other external agencies can support and promote change at system level. The myriad of reports from the EU Commission describing how member state education systems need to evolve also can inform the discourse surrounding educational change. In Ireland, vested interest groups such as IBEC, which was mentioned in the chapter periodically, initiate research on educational perspectives and possibilities. These can shape the form of educational change domestically.

Local and national factors all coalesce to impact each individual teachers approach to educational change in their classroom. They interface with teacher agency and can act to promote or obstruct educational change. Distilling the antecedent and contextual factors which support and embed enterprise education is key to developing a strategy to ensure enterprise education is available to all learners in post-primary education.

2.6 Conclusion

A review of the literature has revealed a dystopian world for enterprise education where its conception and engagement sits uneasily within the existing curriculum provision in post-primary schools in Ireland. Its many merits are viewed with suspicion by neo-liberalist thinkers and its very existence on the curriculum depends upon the serendipity of teachers. This criticality of the teacher is central to the embedment of enterprise education who must embody and model the particular key qualities required for enterprise to flourish in the classroom. For some teachers, this will present a challenge and demand a change in approach and ideology. Only when all teachers and systemic supports are collectively supporting the embedment of enterprise education will the existing fragmentation be eradicated, thereby bringing the rhetoric espoused in line with the reality experienced by the students.

A recurring theme in the literature is the imperative of skill development to be a part of the learning for all students of enterprise education (Claxton 2002; Gleeson 2009; Leffler 2009 & Lucas and Spencer 2017). The *Stratified Model of Enterprise Education* presented in this chapter has skill development at its core while one of Man's three theoretical foundations for effective entrepreneurial learning was experiential learning to support skill development (Draycott *et al.* 2011 & Man 2006). The extant literature places enterprise education at the vanguard of skill development and it is this development of skill which is required by all students to support their success after they leave post-primary schools. The dominance of the technician approach within the Irish post-primary system has led to an examination led approach to teaching and learning (Gleeson 2009; Kelly 2009; Trant 2007 & Smyth *et al.* 2019). The impact of this dominance has resulted in a 'focus on rote learning' and has 'left students ill-equipped to meet the challenges of third level' (Hyland, 2011, p.8).

This contention is supported by an Economic and Social Research Institute (ESRI) report published in 2019 which analysed the existing Leaving Certificate examination as part of a senior cycle review process from the perspective of students, teachers and parents. Their overwhelming feedback was the need for greater skill development to be part of the curriculum, stating a 'need to embed life skills in the curriculum in order to better prepare young people for further/higher education, employment and adult life' (Smyth *et al.* 2019, p. iv).

The opportunity is now presented for change to occur with the reform of the junior cycle and a proposed reform of senior cycle. The promotion of enterprise should no longer be regarded as an add-on or extra-curricular activity (EU Commission, 2010), but instead be embedded in the curriculum across all levels. However, progress in this regard is highly variable among member states. Only a minority had well developed strategies. It tends to be delivered through broad frameworks for actions with specific targets and somewhat underdeveloped implementation plans, stating that 'in general there is a significant need for member states to embed and deepen implementation of entrepreneurship education' (2010, p.ii). The report continued by asserting that 'practice tends to be *ad hoc*...and has relied heavily on the enthusiasm and commitment of individual teachers and schools'.

An EU Commission report from a Thematic Working Group looked more deeply at what was required for the future and stated that 'a qualitative audit of what is already taking place is a resource-saving approach for further expansion in all education levels' (2014, p.33).

To assist in this endeavour it suggested that, 'identifying pioneer educators will underline that entrepreneurship education already takes place, as well as identifying the teaching methods that deviate from traditional ones. These educators can function as multipliers for other educators' (2014, p.33). It is envisaged that the activity of identifying these schools and their pioneer educators as part of this research study will achieve some of this objective.

It is also intended that a detailed analysis of each school's case story of enterprise education provision can inform future approaches to enterprise education within the post-primary system in Ireland. This contention is supported by the EU Commission report stating 'good practices and small-scale pilots should be taken to a broader scale at a pace that suits local systems and norms' (2014, p.33). This research study also responds to a statement within the report that, 'additional research is needed to understand how the key competence [entrepreneurship] is reflected in national curriculum approach's – alongside exploring small-scale good practice and translating these into scalable models of embedded curriculum practice' (2014, p.27).

Two revised versions of the research questions have emerged from this literature and policy review and these will guide the Research Design and Methodology described in the next chapter:

1. What are the antecedent and or contextual factors facilitating selected schools in the successful provision of enterprise education?
2. How can these factors inform a national framework of strategic policy and development of enterprise education in the Irish post-primary educational system?

3 Research Design and Methodology

The task of a methodology is to explain the particularity of the methods made for a given design... [it] requires researchers to *justify* their *particular* research decisions, from the outset to the conclusion of their enquiry.

Clough and Nutbrown, 2002, p.17/18

All research and particularly 'social research should be about understanding and improving the world' (Bassey, 1995, p.4). This social research project is concerned with investigating the antecedent and contextual factors which facilitate the pockets of successful enterprise education in post-primary schools, why are certain schools doing very well in the area while others are content with mediocrity and limited approach to enterprise education. This question lies at the heart of this research study, it is 'not so much to prove things – but more to investigate questions and explore issues' (p. 4). Other writers also contend that all research is about asking questions, exploring problems and reflecting on what emerges in order to make meaning from the data (Clough and Nutbrown, 2002, p.4). This research will seek to achieve all of the above, asking key questions pertaining to enterprise education in post-primary schools, exploring the problems which emerge and reflecting on the situation which facilitates successful implementation.

This study has been formed as a result of my own experience of teaching enterprise related programmes in post-primary schools for over twenty years. This experience has informed my positional stance and approach to this study and is acknowledged and affirmed by various authors (Clough and Nutbrown, 2002 and Bassey, 1995). They state that people drive research and the issues for research do not simply operate in isolation but rather the need to research particular issues grows from the context in which the researcher operates (Clough and Nutbrown, 2002, p.11). They further assert that researchers seek four possible aims from their endeavours:

- Policy development – this research will investigate if the factors identified in the selected schools in post-primary education can inform a national strategic framework for and curricular approaches to entrepreneurial skill and knowledge development.
- Improve practice – the pedagogical practice of the teachers in the selected schools will be analysed to investigate if common practices can be identified? If such

practices can be identified then these need to be acknowledged and emphasised as a model of good practice for all teachers involved in enterprise education.

- Professional development – what skills are evident in the teachers and leadership/management within the selected schools, if there a set of competences that predisposes certain teachers and principals to becoming champions in enterprise education. If this is uncovered or if any dimension of the competence deficit is discovered, then the professional development of all teachers and principals needs to be addressed.
- Stimulus for further research - given the paucity of research in this area of enterprise education at post-primary, it would be presumed that this research will precipitate further discourse in the area, particularly on what is happening as opposed to rhetoric espoused.

All research should have an overarching purpose and this ‘purpose should be to make a claim to new knowledge’ (Bassey, 1995, p.3) This research by attempting to satisfy the above constituencies will lead to the creation of new knowledge in enterprise education with explicit relevance to post-primary education in Ireland.

3.1 Rationale for the Research Design

The rationale for the methodology and selection of methods along with other related decisions is now explored for the reader. The selection of a case study as the methodological approach emerged from the research questions for this study:

1. **What** are the antecedent and or contextual factors facilitating selected schools in the successful provision of enterprise education?
2. **How** can these factors inform a national framework of strategic policy and development of enterprise education in the Irish post-primary educational system?

Permitting the questions to dictate the methodology follows the advice of Robert Yin, the foremost academic researcher in case study methodology (2014, p.10) It is the research questions which must decide the methodological approach and questions relating to ‘how’ and ‘why’, which demand greater explanation and levels of analysis will ‘likely lead to the use of a case study’.

The first research question centres on the word 'what' and this question highlights the exploratory nature of this study, such questions which are exploratory can fit with a range of research methods, but specifically this study will investigate the exploratory nature of the question using 'an exploratory case study' The other research question for this study centres on 'how', thus also suitably fitting the criteria for selecting a case study exploratory approach (2014, p.10).

The case study methodological approach is 'preferred when examining contemporary events, but the relevant behaviours cannot be manipulated' (Yin, 2014, p.12). This assertion is supported by Gilham who asserts that the case study approach is particularly appropriate to study human phenomena (2000, p.2). This study is about finding out what factors within the selected schools facilitate successfully enterprise education whilst also seeking to explore if these factors can be developed or replicated in other contexts or is it a case that the context itself is shaping the factors?

Such an analysis is possible using a case study as it will facilitate a process where we 'seek to find underlying reasons – in peoples feeling or perceptions or their experiences of what is going on' (Gilham, 2000, p.7). Perceptions and opinions of the key school stakeholders will be sought and an analysis of their perceptions and experiences will be crucial to understanding what are the antecedent and or contextual factors.

The stakeholder opinions in each case study school are:

1. The Principal
2. The Enterprise Teacher
3. Two Non-Enterprise Teachers
4. Parent

Students are excluded from the above list because this project seeks to explore the input in the provision and support of enterprise education. The students as recipients of the enterprise education curricular provision remain outside the scope of this research study. The primary concern for this study is to investigate the context and the environment that facilitates the effective provision and teaching of enterprise education. Thus, the emphasis for this study is on the classroom teacher, teaching and pedagogy, curricular provision and supports, both internal and external to the school.

Once the decision on the methodology and design is made, then the issue of limits applies. Limits may relate either to the timeframe or the amount of data to be collected. It is important that the researcher does set limits on the cases selected (Lichtman, 2013, p.93).

The rationale for selecting a case study methodology is further supported when we examine the definition for a case study supplied by Yin, who states it is 'an empirical inquiry that investigates a contemporary phenomenon in depth and within its real world context, especially when the boundary between phenomenon and context may not be clearly evident' (Yin, 2014, p.16). The overlap between the phenomenon and context was alluded to in the previous paragraph. Is it the phenomenon of being a selected schools who have certain capacities or internal factors for success because of their context or is it the teaching and other curricular factors, or are all inter-related. The use of a case study will allow for clarification in this moot issue.

Yin further asserts that 'you would want to do a case study research because you want to understand a real-world case and assume that such an understanding is likely to involve important contextual conditions pertinent to your case' (Yin, 2014, p.16). The research study followed two primary aims, the first was to identify and investigate the case study schools by means of qualitative interviews. The second was to inform the national narrative relating to enterprise education in post-primary schools.

To know if a case study approach is appropriate, Lichtman contends that it will involve a specific programme and the researcher is attempting the investigate what happened when the programme was developed. It is particularly suited when a researcher 'sets out to investigate a particular person, program, curriculum or technique' (2013, p.94).

3.2 *Research Paradigms*

The selection of a research method directly impacts on data, a view supported by Blaxter *et al.* declaring that 'different kinds of research approaches produce different kinds of knowledge about the phenomena under study' (2010, p.59). The authors also note the clear distinction between a research method and methodology, where the former relates to the tools of data collection or analysis while the latter relates to philosophical meaning and paradigm. They conclude that the paradigm is 'a way of categorising a body of complex beliefs and world views' (2010, p.60).

A research paradigm 'is a network of coherent ideas about the nature of the world and of the functions of researchers which, adhered to by a group of researchers, conditions the patterns of their thinking and underpins their research activity' (Bassegy, 1995, p.12). Alternatively, Cohen *et al.* contend that 'a paradigm is a way of looking at or researching phenomena' (Cohen *et al.*, 2018, p.8).

It provides the lens through which we seek to answer research questions. There are three research paradigms which may be applied to a social science research project. The paradigms provide an overview of how a researcher's approach to their research will be framed (Bassegy 1995, Clough and Nutbrown 2002, Cohen *et al* 2000).

The social research paradigms are:

- The Positivist Paradigm
- The Interpretative or Post-Positivist Paradigm
- The Critical Theory Paradigm.

3.2.1 *The positivist paradigm*

This paradigm is based on scientific measurement. Historically it is associated with the nineteenth century French philosopher, Auguste Comte (Cohen *et al*, 2000, p.8). Positivism according to these authors is modelled on the natural sciences. It is impersonal and objective. It seeks to explain behaviour and looks for causes. It is researching from the outside. Bassegy contends that with a positivist paradigm, the purpose of research is to describe and understand the world. It is investigating without disturbing or changing the situation (1995, p.6).

This paradigm is defined as pertaining to a 'view that social science procedures should mirror, as near as possible, those of the natural sciences. The researcher should be objective and detached from the objects of research' (Blaxter *et al.*, 2010, p.61). The aim of positivism is to offer explanations leading to control and predictability. The positivist paradigm believes we can measure all events in a scientific format. The methodology that is naturally associated with this paradigm is quantitative in nature, as this involves the use of figures and statistical notation.

Burns (2000, p.9) asserts that 'its main strengths lie in precision and control; control is achieved through the sampling and design; precision through quantitative and reliable measurement'. There are limitations to this contention.

Can the essence of research for the human sciences be measured in numeric form? Bassey summarises this point by questioning an approach where 'discoveries about of human actions can be expressed as factual statements' and wonders whether it is possible to assume that the entire world is rational where every phenomena and emotion can be labelled and counted like stock in a warehouse (1995, p.12).

3.2.2 *The interpretative paradigm*

This paradigm contends that 'reality is seen as a construct of the human mind' (1995, p.13). People perceive so we construe the world in 'similar', but not always the 'same' way. Here the 'purpose of research is to describe and interpret the...world in attempts to get shared meanings with others' (1995, p.14). The research is individual and is reliant upon the researcher's personal involvement. Consequently, this paradigm is subjective as the researcher endeavours to interpret the specific, tries to understand actions and meanings through their interaction with the research (Clough and Nutbrown, 2002).

The interpretative paradigm 'approaches to social research see interpretation of the social world as culturally derived and historically situated' (Blaxter *et al.*, 2010, p.61). They contend that this paradigm is concerned with *verstehen* (understanding) as compared with *euklaren* (explaining). It is a paradigm where researchers begin with individuals and set out to understand their interpretations of the world around them and employs a qualitative methodology (Cohen *et al*, 2000, p.23). This methodology is concerned with human explanations contained in words as opposed to figures. A limitation of the paradigm and the associated methodology is its subjectivity. The data yielded will be glossed with the meanings and purposes of those people who are their source (2000, p.23).

3.2.3 *The critical theory paradigm*

This final paradigm emanates from a political or ideological perspective. It is neither objective nor subjective, but rather seeks the collective (Clough and Nutbrown, 2002, p.16). It is not about understanding but challenging and seeking to bring change. Included with this paradigm are feminism, neo-marxism and participatory approaches (Blaxter *et al.*, 2010, p.62).

Another approach within this paradigm is in the pursuit of an emancipatory interest for social science research and often typically involves an action research methodology. This view is supported by Carr and Kemmis, 'action research is emancipatory in the sense that the process of reflection leads to action based upon a critique of the social milieu' (1986, p.300). As this approach is not being used in this project, deeper discussion and exploration of the paradigm is beyond the remit of this chapter.

3.2.4 *The paradigm selection*

Cohen *et al.* assert that 'the purpose and nature of the research may be clarified by drawing on one or more of these paradigms; the paradigms can clarify and organise the thinking about the research' (2018, p.9). When embarking on a research project, it is difficult to decide on a single paradigm that will provide the frame for the entire project. Both the positivist and the interpretative paradigm offer key components to a study. The positivist pursuit of scientific measurement through quantitative research methods and the interpretative paradigm with its rich detail through the use of qualitative methods are all equally appealing (Clough and Nutbrown, 2002, p.14).

For this study, the researcher considered the research questions and from these questions an obvious choice of paradigm emerged. The interpretative paradigm with its pursuit of meanings through interaction and seeking to understand actions was selected. This is what this research aims to uncover, focusing on the actions of people within the selected schools and why these actions are present. Such analysis involved qualitative descriptions and instruments which are within the interpretative paradigm.

The use of a survey or other more scientific methods would not yield the type of data this study requires for the research questions to be addressed and answered.

The positivist paradigm 'is less successful...in its application to the study of human behaviour; [with] the immense complexity of human nature'. These writers further expand, 'the contexts of classrooms and schools where the problems of teaching, learning and human interaction present the positivist researcher with a mammoth challenge' (Cohen *et al.*, 2018, p.10).

This challenge can be circumnavigated by selecting the interpretative paradigm, which acknowledges that the world is multi-layered and that the 'values, biographies, perceptions, theories, environment and existing knowledge of the researcher influences what is observed'. This latter point is pertinent to this study as the researcher has worked in enterprise education for over twenty years. Also, it is noteworthy that 'phenomena do not speak for themselves' (Cohen *et al.*, 2018, p.17). Thus, the researcher must interact and interpret the data and therefore the interpretative paradigm would appear to be a natural and obvious fit.

The researcher's biographical and professional background as a Business teacher would incline towards the positivist paradigm where order and control can be orchestrated to a greater degree than with the interpretative paradigm. However, the researcher was guided by the research questions for the study which best fitted the interpretative paradigm. This innate delectation for order and control may present a problem for the researcher, but it is important to be cognisant of the problem so it can be appropriately addressed and suitably circumnavigated during the research study.

This predilection for order and control would also incline the researcher towards a quantitative approach for data gathering with its provenance in the positivist paradigm. Quantitative research is regarded objective, in that the researcher is removed from the research and the data is analysed using impartial statistics (Blaxter *et al.*, 1996). However, the counter argument would suggest that it is not possible to convert the complexity of human perceptions and responses into numeric form.

Given the paucity of research in enterprise education at post-primary, the development of a survey was not deemed appropriate for this research study. The importance of gaining rich detail was demanded for the research questions and the development of a survey

would not have garnered the level of detail required. Also, the size of the study with 30 participant interviews was an additional consideration.

3.2.5 Qualitative research methodology

This approach is defined as:

Qualitative research is multimethod in focus involving an interpretative, naturalistic approach...study things in their natural setting, attempting to make sense of or interpret phenomena in terms of the meanings people bring to them.

Denzin and Lincoln, 1998, p.2

This definition highlights its association with the interpretative paradigm; however, it describes the setting for qualitative research rather than the actual process. Creswell captures the essence of this method when he defines it as 'methodological traditions of inquiry that explores a social or human problem'. It also 'builds a complex, holistic picture, analyses words, reports detailed views of informants, and conducts the study in a natural setting' (1998, p.15). Creswell sees qualitative research as allowing exploration of the multiple dimensions of a problem or issue. The issue that is the subject of this study, enterprise education and the aim is to explore its multiple dimensions as it is implemented in the five case study schools. Therefore, a qualitative research method is both needed and desirable.

In support of this conclusion, it is generally acknowledged that this methodology allows for deep and wide exploration of an issue. Gilham asserts that this methodology allows the researcher to focus primarily on the kind of evidence that will enable you to understand the meaning of what is going on (2000, p.10). This is the key benefit of qualitative research in this research study. Gilham identifies its main advantages as it provides an opportunity:

- (i) To investigate situations where little is known about what is there or what is going on. *Little research has been conducted on enterprise education in post-primary schools in Ireland.*
- (ii) To explore complexities that lie beyond the scope of other approaches. *To delve deep into the context that facilitates the particular schools to be successful and so understand what exactly is going on in these selected schools.*
- (iii) To 'get under the skin' of a group or organisation to find out what really happens – the informal reality which can only be perceived from the inside. *It is this*

informality that will hopefully yield rich data on what is happening within the selected schools, and not bland bureaucratic responses.

- (iv) To view the situation inside out: to see it from the perspective of those involved. *This study aims to involve the chief stakeholders pertaining to the provision and support of enterprise education.*
- (v) To carry out research into the processes leading to results rather than into the significance of the results themselves. *To look at the provision and support of enterprise education within exemplary.*

All the above are reasons for using a qualitative approach in and as outlined above, are applicable to the aims and purpose of this research project. However, one must be aware of its limitations.

As previously acknowledged and now recognised by Gilham (2000, p.10) who states that qualitative methods are based on personal descriptions and inferences and are often seen as 'soft', thus lacking a certain hard-core body of research evidence. In particular, issues relating to the methodology's validity and reliability continue to linger.

Silverman believes that these two issues are a key concern for the researcher, lamenting, 'I am less tempted to assure qualitative researchers that they need not be concerned about the reliability of their data or the quality of the interpretations' (2000, p.314). Hence, it is often advised, a researcher should always endeavour to use other or many methods and sources to triangulate and support findings and hypotheses.

To this end, the researcher has investigated five units of analysis in response to the contention that it is desirable to have greater than one single unit of analysis. Five case study schools produced 30 participant interviews. The data analysis followed a three-step process of coding, categorising and concept development, which is expanded upon later in the chapter (Lichtman, 2013).

3.3 Research Strategy or the Methodological Approach: The Case Study

Case study as a methodological approach has been defined as 'an empirical inquiry that investigates a contemporary phenomenon in depth and within its real-world context, especially when the boundary between phenomenon and context may not be clearly evident' (Yin, 2014, p.16).

An alternative definition is furnished by Lichtman, proclaiming that 'a case study approach is an in-depth examination of a particular case or several cases' (2013, p.90). The primary purpose of designing research is to help to avoid the situation in which the evidence does not address the initial research questions (Yin, 2014, p.29).

To assist the researcher five components are to be carefully considered in the research design stage

1. The case study questions
2. Its propositions
3. The units of analysis
4. The logic linking the data to the propositions
5. The criteria for interpreting the findings

3.3.1 (i) *The research questions*

The two primary research questions for the study have emerged after a process of deliberation, a process which is paramount to all research studies, as 'framing good questions is the most important part of the research procedure' (Gilham, 2000, p.17). A case study is most appropriate for exploratory questions. The two primary questions for this research study are exploratory, thus the choice of a case study was the natural fit for the two research questions:

1. What are the antecedent and or contextual factors facilitating selected schools in the successful provision of enterprise education?
2. How can these factors inform a national framework of strategic policy and development of enterprise education in the Irish post-primary educational system?

3.3.2 (ii) *Its propositions*

The research questions may not sufficiently point to what you should study and when stated will point to where the researcher should look for evidence. However, such propositions are not always relevant particularly about exploratory case studies and in this scenario a specific purpose needs to be explicit. This study seeks to explore the area of enterprise education in post-primary schools and what is facilitating the selected schools to be successful in enterprise education. Is there a commonality within the selected cases or schools and can such a commonality be replicated in other schools once the similar supports and structures are provided? Or is it possible to replicate such contexts?

3.3.3 (iii) *The units of analysis*

The units of analysis refer to the actual cases or schools for this study which are selected for examination in the cases study analysis. The selecting of the cases presents a fundamental problem, both in defining the case and setting a boundary to the case (Yin, 2014, p.34). Defining the case will be related to the research questions, other issues will involve bounding the case, which is setting the context for the case study as this will determine the scope for the data collection. Yin defines the desired case as one which has 'some real-life phenomenon that has some concrete manifestation' (Yin, 2014, p.34).

3.3.4 (iv) *The logic linking the data to the propositions*

The use of theory to generalise from a case study is a moot point. Yin cites two types of generalisations, analytic and statistical. Statistical generalisation is the most popular but is not relevant to a case study as we are not using sampling logic or units. This he believes to be a fatal flaw for a case study and rather we must be concerned with analytic generalisation. This type of generalisation may be used whether a case study involves one or many cases. Analytic generalisation is where there is an opportunity to shed empirical light about some theoretical concepts or principles. Its aim is still to generalise to other concrete situations and not just to contribute to abstract theory building, where lessons learned from a case study may potentially apply to a variety of situations (Yin, 2014, p.40/41).

3.3.5 (v) *The criteria for interpreting the findings*

The choice of case study design centres on various decisions, the decision for which design best fits a study will depend upon the nature of the research questions and the data which is anticipated. This aspect of the case study was reviewed and emphasised in the previous section.

Four tests exist for assessing the quality of the 'empirical social research', each of these tests are expanded upon and applied to this research in a later section of this chapter relating to the analysis strategy and approach.

3.3.6 *Typology of case study*

1. Holistic or an embedded case study design
2. Single or multiple case study design

The holistic case study design is analysing a unit of analysis from a global perspective. The danger here is that the data may be too abstract. An embedded case study uses layered levels of data analysis which are ‘embedded units of analysis’ (Yin, 2014, p.56). The embedded case study allows for greater opportunities to deepen the analysis with the selected site. This embedded case study design may be applied in a single or multiple case designs, which now emerges as the best area for consideration in this study.

The use of many cases or a multiple case study is preferred over the single case study design as the ‘evidence from multiple cases is often considered more compelling, and the overall study is therefore regarded as being more robust’ (Yin, 2014, p.57). The issue for how the multiple cases are selected is decided upon by either selecting on the basis where similar results are predicted or they may be selected for the predicting of contrasting results. The former selection will anticipate a literal replication while the latter selection will anticipate a theoretical replication (Yin, 2014, p.57). It must be noted that cases in this study are selected based on replication purpose and not using sampling logic.

This point has been discussed previously about generalisations. It is recommended to have where possible and relevant to have more than one single case. The process and approach to the selection of the cases for this study are outlined in a later section of this chapter.

3.3.7 *The case study protocol*

The development of a case study protocol is recommended so as to increase reliability, ‘having a case study protocol is desirable under all circumstances, but it is essential if you are doing a multiple-case study’ (Yin, 2014, p.84). Another advantage is the guidance it provides for the researcher through full elaboration of its four constituent parts as illustrated in Table 3.13.

Table 3.13: Four parts of the case study protocol

Number	Name	Explanation	Application to this case study
1	Overview of the case study	The purpose of the case study, key issues: <ul style="list-style-type: none"> • Mission • Goal • Substantive Issues • Rationale for selecting the cases • Proposition 	Explained in the various sections of this chapter

		<ul style="list-style-type: none"> • Policy relevance • Relevant readings 	
2	Data collection procedures	Need to be cognisant that you may not have full control over the data collection environment as with other research methods. May have to adjust to the organisations ways, the nature of the interview will need to be flexible and open-ended to reflect this fluidity.	Applied in the five selected case study schools
3	Data collection questions	The substantive questions the researcher must ask themselves which reflect your line of enquiry	Contained in the Ethical Approval Document
4	Guide for the case study report	General outline for the case study report and its intended audience.	Research Thesis

(Yin, 2014, p.84-93)

The benefits to completing the case study protocol is that it keeps the researcher on target with the topic and can anticipate problems.

3.3.8 *Selecting the cases*

The selection of the specific cases to be analysed is a crucial factor in case study methodology. There is a myriad of ways in which cases may be selected, 'It is up to the researcher to identify the case and to set limits or boundaries and to consider one of three types of cases: the typical, the exemplary or model, or the unusual or unique' (Lichtman, 2013, p.90 and 92).

For this case study the sites to be selected will be based on their exemplary or model practice in enterprise education. We will define exemplary as a case or school displaying 'the best or most outstanding in a specific area' (Lichtman, 2013, p.92).

Yin supports this contention that the selection of the cases is of paramount importance to the case study methodology. It may initially involve speaking and querying people knowledgeable' while collecting 'limited documentation'.

The need to 'have defined a set of operational criteria' for selecting the cases that best fit your replication design is demanded (Yin, 2014, p.95). The development of these criteria should follow a two-step process. The initial step is 'collecting relevant quantitative data about the entire pool, from some archival source'.

Once this step is completed then it is necessary to 'define some relevant criteria for either stratifying or reducing the number of candidates' or cases as is appropriate (Yin, 2014, p.95). Using the above knowledge and practical advice in site selection, the selection of cases for this study followed the processing outlined below.

The five schools for the research study were selected through identifying the top 10 performing schools in enterprise education by their success in the annual national 'Student Enterprise Awards (SEA)' competition. Each county organises a school's enterprise competition and a county winner is selected in three categories they are: senior, intermediate and junior. Thus, three schools qualify for the national final from each of the counties. The researcher tracked the three winners from each county over several years, and identified which schools are consistently qualifying to the national final. This allowed the researcher to ascertain what schools were performing consistently in the enterprise competitions. The selection for entry to the national competition was compared with the overall national winners. The approach used through identifying the county winners allowed for a broader base for research study sample. Tracking of the national winners only each year would have been too narrowly defined.

The use of all county tracking allowed for the emergence of the consistent schools who are successful in enterprise education to be identified as a possible sample for the study. There was also an analysis of certain documentation relating to the top qualifying schools. Such documentation included, school inspection reports relating to the subject of business, whole school inspection reports and school related material such as its prospectus and school website.

The following table explains the stages in the identification and selection process for the case study schools.

Table 3.14: Process for selecting the case study schools

Step 1	Gathered the names of all qualifying schools over a six-year period in the SEA competition.
Step 2	Identified the names of each school that qualified in the Senior, Intermediate and Junior category for each county.
Step 3	Collated the information gathered in step 2 and identified the top ten performing schools over the six-year period, they being the ten schools whose name appeared as a winner most frequently.
Step 4	For each of the ten schools identified in step 3, background information was gathered in the form of relevant inspectorate reports and school's literature. A further screening occurred to select five schools based on diversity for type and location.

3.4 Limitations of the Case Study Methodology

It's human and normal to come to the research process with prejudices

Gilham, 2000, p.27

Some academic researchers look upon the methodological approach of the case study with 'disdain'. The disdain emanates from the concern over the 'traditional concerns' associated with doing case study research (Yin, 2014, p.19). These concerns which fuel such disdain and how they can be ameliorated by employing the following:

1. The need for greater rigour when carrying out case study research, this presumed lack of rigour Yin believes originated from the lack of methodological research texts relating to case study research and thus this lack give rise to a dearth in specific procedures to be followed. This issue can be circumvented by following very specific systematic procedures. There is a need to avoid any equivocal evidence and not to allow such evidence to influence the direction of the finding and conclusions (Yin, 2014, p.19/20).
2. Case study research can be confused with case studies used in teaching where the substance is altered to demonstrate points. This would be absolutely forbidden. All evidence will be reported fairly. The researcher must work hard to ensure all evidence and findings are reported fairly. This will be expanded upon further in the section of ethics.

3. The issue of generalising from case study research. It is crucial to note that unit of analysis are not samples, 'your goal will be to expand and generalise theories...and not to extrapolate probabilities' (Yin, 2014, p.21). This moot issue of generalising is discussed in greater detail in the next section and has been alluded to previously.
4. The unmanageable level of effort involved in case study research is a further concern directed at this methodological approach. However, the researcher must be mindful that this is not an ethnographic study or a participant observation study which would involve a greater time allocation. Here again the issue of limits emerges and the use of the case study protocol will assist by ensuring the researcher remains focused on the actual issues related to the research questions for the study.
5. The final concern is related to comparative advantage and the inability of case study to be able to be compared in a controlled trial scenario. This is related to generalisation and is explored in the next part of the chapter.

3.5 Generalisations in Case Study Research

Bassey believes that 'the search for generalisations and the study of singularities represent two quite different forms of research inquiry and probably constitute the most important dichotomy in social science research' (1995, p.7). Generalisations or what is also referred to as external validity, require an investigation of large populations with appropriate sampling leading to statements which can be used to predict what will occur in other situations whereas the study of singularities is investigating something quite small or based in a single location. For a small-scale research study, investigating a single site and generalising is a 'thorny' issue (Robson, 1993, p.51).

Bassey opines that a 'small scale research– will be in the form of study of a singularity' due to limited resources (1995, p.9). The researcher must be mindful not to attempt to formulate generalisations as a result of research into a singularity. This concern is valid if one were simply investigating a single school. Robson affirms this view on the use of multiple sites, 'a study may be repeated with a different target group or in a deliberately different setting to assess the generalisability of its findings' (1993, p.73). This use of multiple site locations also tests the reliability of the findings and aspires to gain 'exact replication' or 'total reliability'.

In this study, the sites are not selected using sampling logic, so it is not appropriate to apply statistical generalisations to the data. The sites are selected for their success in enterprise education using the criteria identified earlier. Purposive sampling was applied to best fit the research questions as the researcher wanted to identify the factors facilitating certain schools to be successful, it would not be appropriate to randomly select the schools as this would not have identified the required sample schools. Rather the schools were purposively selected. Yin describes the use of statistical generalisations in case studies as a 'fatal flaw' (2003, p.40). The cases involved are not sampling units, but rather should be viewed in terms of multiple experiments.

In this situation, Yin states that 'the mode of generalisation is "analytic generalisation", in which a previously developed theory is used as a template with which to compare the empirical results of the case study' (p.41). Furthermore, this writer claims that where two or more cases are shown to support the same theory, then replication may be claimed. A case study researcher should try to aim toward analytic generalisation in doing case studies as the goal is to expand and generalise theories and not to extrapolate probabilities (p.21).

As the case study sites are selected for their success in enterprise education, this is not a representative sample nor does it wish to be. The selection of the sites is to determine the factors evident in these sites and to distil these within the tight parameter of enterprise education provision. It is not the intention of this study to calculate or develop any probabilities in enterprise education generally.

3.6 Research Instruments and Methods of Data Collection

The methods or techniques for data collection pertaining to this study emerged after deep reflection upon both the research questions and the methodological literature already discussed in this chapter.

3.6.1 Qualitative semi-structured interviews

Qualitative methods allow a researcher to view a situation from the perspective of those involved and 'to investigate situations where little is known about what is there or what is going on' Gilham (2000, p.11). This captures the precise essence of what this study is seeking to achieve, to find out what is going on in the selected champion schools and what are the antecedent and contextual factors facilitating champion status.

Gilham concludes that 'how people behave, feel, think, can only be understood if you get to know their world and what they are trying to do in it' (2000, pp.11/12). This final point captures the essence of what an interview aims to achieve; to ascertain the real thoughts and feelings of the key stakeholders.

The interview is a popular method of qualitative research. One reason for its popularity is that it 'can reach parties which other methods cannot reach' (Wellington, 2000, p.71). Cohen *et al.* contend that interviews enable participants to discuss their interpretations of the world in which they live, and to express how they regard situations from their own point of view (2000, p.267). This confirms Gilham's contention that interviews are especially suited to viewing situations from another perspective. He describes the quality of data obtained in terms of 'richness' (2000, p.62).

The type of interview used in qualitative research will depend on the degree of structure contained in the process. The major difference lies in the degree of structure. Where there is no list of questions, the interview is unstructured. This type of interview demands a high level of interviewer expertise, as the fluidity of the process could be very challenging as regards sustaining focus (Wellington, 2000, p.74). Alternatively, if the interview is too rigidly focused on a set list of questions, this would be described as a structured interview. This type of interview can lead to inflexibility and reduces the interview to little more than a face-to-face questionnaire (2000, p.74).

A semi-structured interview aims to counteract the negative aspects of a structured and an unstructured interview. Wellington calls this type of interview a 'compromise' and believes it is 'often the most valuable' method of research (2000, p.74). It provides 'flexibility... [within a] loosely defined framework'. Gilham asserts that a semi-structured interview is the most important form of interviewing as it can provide the 'richest single source of data' (2000, p.65).

3.6.2 *Semi-structured interview design*

The interview schedule is the list of prepared questions which provide the focus for a semi-structured interview. Wellington describes how the schedule will 'start with one single, key question to act as a trigger for the rest of the interview' (2000, p.75). Cohen *et al.* examines the three types of questions which may be employed in an interview schedule (2000, p.54).

1. Dichotomous questions – these involve selecting choices such as Yes/No/Other. They allow for uniformity and easy measurement, leading to greater reliability. However the information garnered may be superficial and therefore I choose not to include them in my own schedule.
2. Open-ended questions – these offer ‘no restrictions on either the control or manner of the interviewee reply’. They offer flexibility, allow probing and encourage co-operation and rapport. A note of caution is offered, as they allow the unexpected.
3. Scaling questions – this type allows the participant to indicate their degree of agreement or disagreement using a scale system (Cohen *et al*, 2000, p.275).

Gilham asserts that the framing of good questions is the most important part of the research procedure (2000, p.17). This statement adds an element of pressure when formulating the questions to include in the schedule, as the quality of the data collected hinges on the quality of the questions. The semi structured interview questions for this study were formulated after much rumination and deliberation. Extant reading around enterprise education was essential as well as reading in literature pertaining to research theory (Appendices 4-7).

3.6.3 *Use of pertinent documentation*

Documents from a research point of view ‘can have a number of features...documents may refer to particular individuals, as with school records and reports’. Jupp asserts that ‘documents may have been produced for purposes other than social research but none the less be of interest to researchers, in which case they are sometimes termed “unobtrusive measures”’ (1996, p.299). The key benefit of this measure is that a researcher has no effect on the data, ‘thereby improving internal validity’ (p.299). The use of documents and their application to this study is expanded upon in the section relating to the criteria for selecting the case study sites.

3.6.4 Profile of the selected schools

The five selected schools for this study are profiled below in table 3.15:

Table 3.15: Profile of the five case study schools

School	Case Study School 1	Case Study School 2	Case Study School 3	Case Study School 4	Case Study School 5
School Classification	Voluntary Secondary School	Voluntary Secondary School	Voluntary Secondary School	Voluntary Secondary School	Educational and Training Board (ETB)
Post-primary Schools in locality	6 schools	3 schools	2 schools	5 schools	1 school
Regional Base	South	West	North	East	West
Urban/Rural Location	Urban	Urban	Rural	Urban	Rural
Number of Students	255	456	566	455	373
Gender	Mixed	Boys	Mixed	Mixed	Mixed
Number of full time Teachers	23	46	52	51	29
Publicly/Privatey funded	Public	Public	Public	Private	Public
Language Medium	Irish speaking	English speaking	English speaking	English speaking	English speaking
DEIS* Participation	No	No	No	No	No
Predominant Socio-economic grouping	Middle-class	Middle-class	Middle-class	Upper Middle-class	Middle-class

(* DEIS or Delivering Equality of Education in Schools is the Department of Education and Skills action plan for educational inclusion and reducing the effects of social disadvantage in schools)

3.6.5 *The pilot interviews and case*

The pilot process will 'help to refine your data collection plans with respect to both the content of the data and the procedures to be followed' (Yin, 2014, p.96). The selection of the pilot case may be based around issues such as ease of access or location, a view supported by Yin who posits that the selection of pilot cases may be centred on 'convenience, access, and geographic proximity can be the main criteria for selecting a pilot case or cases' (2014, p.96).

The importance of piloting all the research instruments is paramount. Oppenheim eloquently opines that research instruments 'do not emerge fully fledged, they have to be created or adapted, fashioned and developed to maturity – after many abortive test flights (1992, p.47). In fact, every aspect of a research instrument has to be tried out beforehand to make sure that it works as intended'. The importance of conducting a pilot is reaffirmed by Cohen *et al.* when they consider 'a pilot [to have] several functions, principally to increase the reliability, validity and practicality' (2000, p.260).

For this study, the first case study school performed the role of piloting all the interview schedules with ongoing refinement of the questions. This involved conducting all interviews with the draft schedule of questions and a full transcription of the text.

After completing the process for school 1, and upon inspection of the transcription, I was disappointed with the level of detail ascertained by the draft questions. This provided the stimulus for deeper thought on the questions and the development of appropriate additional prompts for some of the questions in the interview schedules. This need for additional prompts was applied to all the interview schedules used in the remaining four schools allowing an iterative process to develop.

Another area for consideration, is the amount of time needed for each interview and allowing the participants time for thinking and developing their thoughts. This was apparent after the first set of interviews was completed and fully transcribed in school 1. Allowing participants time to consider their response to questions and giving time for the prompts to ruminate and trigger deeper responses was evident (Appendices 4-7).

3.7 Validity and Reliability

Cohen *et al.* define validity as ‘essentially a demonstration that a particular instrument in fact measures what it purports to measure’ (2000, p.105). Issues surrounding the validity of a qualitative research project can be addressed through ‘honesty, depth, richness and scope of the data achieved’. In a quantitative project, data validity can be improved through careful sampling and appropriate statistical treatment. Cohen *et al* contend that perfect validity is impossible in qualitative studies, believing that validity ‘should be seen as a matter of degree rather than as an absolute state’ (2000, p.105).

Cohen *et al.* assert that reliability is essentially a synonym for consistency and replicability over time, over instruments and over groups of respondents (2000, p.117). It is about precision and accuracy.

Essentially it contends that if the research were to be carried out on a similar group, in a similar way, then a similar result would be found.

Yin cites four tests relevant to case study research and I have applied each of these four tests to my own research in the selected four selected schools (2003, p.47).

Table 3.16: Yin's four tests for case study research

1. Construct Validity	<ul style="list-style-type: none"> -Use of five sites of study in the research -Will possess a chain of evidence, with all transcriptions and documents available. -Data collection method used in the study was piloted and had synergy with the research aim and purpose
2. Internal Validity	<ul style="list-style-type: none"> -Use of pattern matching and member checking -Full explanations given at all stages in the research process -Unobtrusive measures are provided and stored such as relevant documents pertaining to each of the research design stages.
3. External Validity (Generalisation)	<ul style="list-style-type: none"> -Use of multiple sites, five in total
4. Reliability	<ul style="list-style-type: none"> -Use of research protocols -Document all procedures followed -Aimed to ensure that at all times that my interview approach and style was consistent.

3.7.1 *Researcher bias in interviewing and during the data analysis process*

'It is good medicine, we think, for researchers to make their preferences clear. To know how a researcher construes the shape of the social world and aims to give us a credible account of it is to know our conversational partner' (Miles and Huberman, 1994, p.4). This researcher's background was discussed in the introduction chapter, and consequently was an aspect to be mindful of throughout the data collection and analysis processes for the entire research study.

Bias is particularly prescient during the data analysis process which will be described later in the chapter. The choice of data to include is almost inevitably personal, and at all times this choice has to be fair to the phenomena under investigation and to the participants (Cohen *et al.* 2018, p.648).

This issue of researcher bias is further explored by Cohen *et al.* positing that, 'the issue here is that great caution and self-awareness must be exercised by the researcher in conducting qualitative data analysis, as the analysis and the findings may say more about the researcher than about the data' (2018, p.666). This view is supported by Gibbs, stating that 'inevitably qualitative analysis is guided and framed by pre-existing ideas and concepts' (2007, p.5).

Throughout the data collection and analysis processes this researcher was acutely aware of this bias and always endeavoured to approach the process with an objective lens, insofar as it possible. From my own experience as a teacher of enterprise education for over twenty years it is not surprising that I would have held some bias. During my career, I have interacted with other teachers from other schools who would have participated in the SEA. I would have heard their opinions and attitudes towards the teaching of enterprise. My role as Business Studies team leader for a Department of Education and Skills support service would also have been shared with the participants during interviews. Despite reassurances given to teachers that this research was in no way connected to this role, there is a concern that they may still view my interest in enterprise education as connected to the Department. No participant overtly stated this concern, but one must be cognisant of perceptions. Two of the selected schools are based in the West of Ireland. One of these schools is in the same county as where I reside, and one of the enterprise teachers was an alumnus of the researcher.

All these factors were considered both during the interview process, when appropriate probes search out the meaning of answers, member checking was employed to check authenticity of transcripts and during the analysis process as described above.

3.8 Ethical Issues

The study of a “contemporary phenomenon in its real-world context” obligates you to important ethical practices akin to those followed in medical research.

Yin, 2014, p.78

3.8.1 Ethics concerns

A paramount concern when conducting all research is the issue of ethics, every decision and action undertaken must be pre-empted by the following question, is it ethical? The one characteristic that every method and strategy of research must adhere to, ‘is that it should be ethical’ (Wellington, 2000, p.54). He continues by asserting that it is important for every researcher to place it foremost in the planning, conduct and presentation of his/her research. Ethical considerations override all others. This criterion for educational research is integral to the design and planning of all the documentation and decisions taken relating to the research process (2000, p.54).

The researcher was at all times guided by the BERA guidelines (<https://www.bera.ac.uk/researchers-resources/publications/ethical-guidelines-for-educational-research-2018>). Gall *et al.* emphasises the absolute necessity for having procedures for protecting human subjects or participants (1996, p.87). Five procedures are prescribed:

- I. *Selection of subjects* – all must have a fair chance for selection. *In this study the selection of subjects will be based on the stated criterion provided earlier in this chapter.*
- II. *Informed consent* – each participant is fully informed, giving a full explanation with the right to withdraw at any time. *This is circumscribed in the drafting of documentation that clearly informed all participants (Appendix 3).* One technique to ensure that ethical procedures are fully adhered to is by preparing carefully crafted documentation. Gall *et al.* (1996, p.103) believes that ‘having these documents available demonstrates your professionalism’.

- III. *Privacy and confidentiality* – it is crucial that ‘no unauthorised persons have access’ to the information. ‘Confidentiality must be further protected by not using the names of individuals or locations in any publications that result’. *This is guaranteed to all participants and the schools selected. Their identity will be simply coded under School 1, 2, 3, 4 and 5. This guarantee was clearly visible on all related documentation and clearly explained in the participant information sheet (Appendix 2).*
- IV. *Assessment of the Risk/Benefit ratio* – this seeks to evaluate, ‘is the balance between how much risk the participants will be exposed to and how much good is likely to result from the study’. *This particular issue is not overtly relevant in this case study.*
- V. *Safeguards when using deception* – if deception is required such as ‘telling lies or using accomplices’, then serious ethical issues are brought to bear on the study. *However this consideration is not relevant in this particular situation.*

(1996, pp.91/93)

The letter of Invitation is inextricably linked to acquiring informed consent. The concept of informed consent involves four key elements; competence, voluntarism, full information and comprehension (Cohen *et al.*, 2007, p.52). A properly constructed letter of invitation must address all these four issues. The researchers own competence and expertise must be stated. The participant must freely enter the intended research.

This includes:

- A fair explanation of the procedures and their purposes.
- Description of the associated discomforts and risks to be expected.
- Description of the benefits reasonably to be expected.
- Offer to answer any inquiries concerning the procedures.
- An instruction that the person is free to withdraw consent at any time.

The final key element is comprehension. This refers to the fact that participants fully understand the nature of the research project.

All the criteria were considered when preparing the documentation to gain access to the five selected schools and consent from the participants. In the appendices, copies of all information letters (Appendix 1) and consent forms (Appendix 3) for all participants and schools may be viewed.

Ethics is not just concerned with the planning of research. Gall *et al.* inform us that ethical issues are ubiquitous to all stages of a project (1996, p.95). While conducting the research, ethical issues emerge and also in the reporting stage of the process. Full publication of all data gathered is demanded, even when it may not substantiate or correlate with other findings.

3.8.2 Access

Lichtman cautions all researchers that gaining access is often very difficult, where schools can be 'very difficult to penetrate and often receive more requests than they can handle' (2013, p.226). Cohen *et al.* ascribe one reason for this being the potential for intrusion and disruption to the school to be considerable while scrutinising various aspects of school life may not be relished by all (2018, p.134/135). Gaining access to the five case study schools did pose a significant challenge and the rationale for selecting the top ten schools from the selection criteria proved to be wise. This gave the researcher some flexibility if the specific top five could not be accessed for the study. After some negotiation and using contacts to gain entry and an initial meeting with the principals, four out of the five top schools were accessed for the study. The researcher was reminded during some of the protracted negotiations that 'access problems can kill the research, or can distort or change the original plans for research'. Fortunately this scenario did not arise, but the issue of access cannot be underestimated and is correctly described as one of the most formidable issues to be faced by a researcher (Cohen *et al.*, 2018, p.158).

3.8.3 Storage of data

Once all interviewees had reviewed their transcript and it was analysed by the researcher, the storage of the data became paramount. All the data collected was never shared with any other party, the participants right to privacy and confidentiality was guaranteed always and explicitly stated to the participant at every interaction (<https://www.bera.ac.uk/researchers-resources/publications/ethical-guidelines-for-educational-research-2018>).

The deletion of all identifiers was carried out with all data collected and the use of pseudonyms was employed where appropriate and has guaranteed the confidentiality of all participants always during the study.

The researcher was the only person who accessed or interacted to the data. This ensured participant confidentiality, all transcription of interview transcripts was completed by the researcher; this greatly affirmed for participants that the researcher was the sole viewer of the data at all times during the process. Original audio, transcript, and survey data was compiled in electronic form, and all files were individually password protected and stored on the researcher's personal computer, which was also password protected. The choice for private storage of data was because the researcher was a part-time PhD candidate did not have access to secure storage opportunities at the University.

Following suggestions from the document *Introduction to the Responsible Conduct of Research*, data was backed up and saved in a secure place that was physically removed from the original data (Steneck, 2007, p.93). For the purposes of the study, this physically removed location was a locked filing cabinet in the researcher's personal place of residence. Any hard copies or written files of data were also kept under locked conditions.

3.9 Data Analysis

The methods of data analysis are closely associated with the research paradigms. Both the positivist and interpretative paradigms are aligned with a research methodology. This methodology is concerned with the families or approaches to the data collection and analysis; they are either qualitative or quantitative. The process of data analysis consists of 'examining, categorising, tabulating, testing, or otherwise recombining evidence, to produce empirically based findings' (Yin, 2014, p.132).

Lichtman contends that when approaching the process of data analysis 'you can either conduct an analysis in which your goal is to identify themes or conduct an analysis in which your goal is to provide an interpretation of the data by telling or retelling a story'. The chosen approach will 'depend on your research questions' (2013, p.309). Ever mindful of the research questions and the literature in the field, the purpose of this research study analysis is to identify themes that will help identify the antecedent and contextual factors and the focus of the research questions.

Lichtman concurs 'with many writers who say that qualitative analysis is the least understood and most complex of all aspects of conducting qualitative research' (2013, p.262). This complexity in data analysis will be smoothed by extant reading in the area, as she also contends that 'analysis is an integral part of the process of qualitative research'. However, put simply 'qualitative data analysis is not straightforward' (Cohen *et al.*, 2018, p.643). The latter contend that 'qualitative data analysis focuses on in-depth, context-specific, rich subjective data and meanings by the participants in the situation'.

Endeavouring to reduce the data without 'violating it, catching the essence of the situation' is part of data analysis (2018, p.643). This researcher has conducted 30 interviews in five case study sites, therefore much data has been gathered and there is a need for reduction. However, the imperative was to catch the meaning of what the data is reporting on enterprise education in post-primary schools.

The data analysis process selected for this study was always informed by the two research questions, along with being mindful of the various suggested processes for qualitative data analysis in the literature. However, the process, no matter which is decided upon is not simple or straightforward, 'the process of data analysis is recursive, non-linear, messy and reflexive, moving forward between data, analysis and interpretation' (Cohen *et al.*, 2018, p.644). This researcher discovered this to be a salient truth over the months devoted to the data analysis process, a process which is still ongoing, reflecting the recursive nature of the process and one ponders if it is ever truly completed.

Cohen *et al.* opine that an initial decision must be made about how the data will be presented. For this case study we will not be presenting the data in an individual by individual or role by role way. This decision is based on the two research questions which seek to identify commonalities between the schools rather than contrasts. Seeking to identify the contextual and antecedent factors for the complete school as opposed to the actual individuals working in the selected schools. The researcher will be embarking on a conglomerate approach to the data analysis from each of the five schools. Cohen *et al.* specifically refer to this approach where 'researchers will need to decide...whether to present data individual by individual and then, if desired, to amalgamate key issues emerging across the individuals' (2018, p.647).

This is the approach taken by the researcher in the data analysis of the five selected schools, where each story from each of the five case study schools will be relayed individually. The Discussion chapter will explore the commonalities which emerged from the individual stories. This approach is supported by Cohen *et al.*, citing that 'a series of individual case studies can be followed by an analysis that draws together common findings from the different case studies' (2018, p.603).

This decision will have an impact on how the data is written up in the final project, 'deciding the purpose... determines the kind of analysis performed on the data... [and] influences how the analysis is written up' (Cohen *et al.*, 2018, p.647). Remembering at all times that the 'goal of qualitative analysis is to take a large amount of data [30 interviews for this research study] that may be cumbersome and without any clear meaning and interact with it in such a manner that you can make sense of what you gathered'.

The final point being that there 'is no right way to do this' and the process as discovered by the researcher is not straightforward (Lichtman, 2013, p.250).

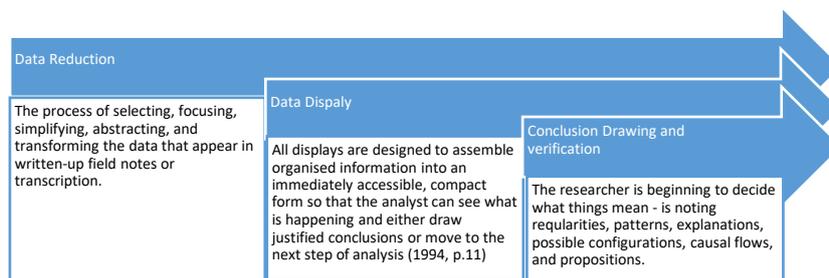
3.9.1 Approach to the data analysis

Cohen *et al.* view the process of data analysis as moving from data to explanation and possibly to theory, hence the systematic content analysis approach is viewed as a best fit (2018, p.645). They continue stating that, 'content analysis can process through a systematic series of analyses, including coding and categorisation' (2018, p.647). This type of analysis is what this researcher performed with the data gathered. Lichtman sees the process of data analysis as something which begins when the first piece of data is collected, 'your analysis should cover the life of the project and should begin as you begin collecting your data' (2013, p.307). For this study the data analysis began when the first interview was conducted for the pilot process and has continued at a pace. The application of open, axial and selective coding adopts a method which is commonly referred to as constant comparison. Here the researcher 'compares the new data with existing categories, so that categories achieve a perfect fit with data' (Cohen *et al.*, 2018, p.719).

3.9.2 Organising and sorting the data

As the data for this qualitative study ‘takes the form of words, not numbers’, the process of data analysis and the seeking to reduce this quantity of data is aided using appropriate tables and displays (Lichtman, 2013, p.307). Their use in the data analysis is supported by Miles and Huberman (1994). They offer a flow model for qualitative analysis consisting of three components (1994, p.10). The three concurrent components are outlined in the following figure 7:

Figure 7: Components of Data Analysis



Adapted Flow Model from Miles and Huberman (1994)

There are various computer software packages which can aid the researcher in the data analysis process. CAQDAS or Computer Aided Qualitative Data Analysis Software is prevalent in and popular packages exist such as NVivo, AQUAD, ATLAS.ti, MAXQDA or C-I-SAID. The researcher for this study has opted to use a paper-based form of data analysis, as ‘software does not analyse material; humans do’ (Cohen *et al.*, 2018, p.650). The software is very effective in organising the data and ‘organising data files’ (p.652).

However, the use of such software will not ‘do away with “the human touch” as humans need to decide and generate the codes and categories’, essentially CAQDAS will not do the thinking and reflecting for the researcher. Thus, its use for this study was not required.

Another concern is in the realm of reflexivity. It can also be a concern that the use of such software ‘can over-simplify complex issues’ and the amount of data collected did not merit the use.

As alluded to previously in this chapter, many researchers have developed steps or frameworks to assist the researcher in the process of data analysis, while also cautioning that no one process is correct. Lichtman's Three C approach to data analysis (2013), Gibbs' Framework for Data Analysis (2007) and an adaptation of Charmaz's Constructivist Model of Grounded Theory (2006) are all frameworks which contributed to the decision making relating to the data analysis process.

In the figures below is a display of the data analysis process enacted by this researcher using the three 'C' approach and how this this approach is mapped along Gibbs' framework for data analysis and the main stages in a grounded theory approach, specifically the constructivist model of grounded theory from Charmaz in figure 10 (2006).

Figure 8: Lichtman's Three C's of Data Analysis

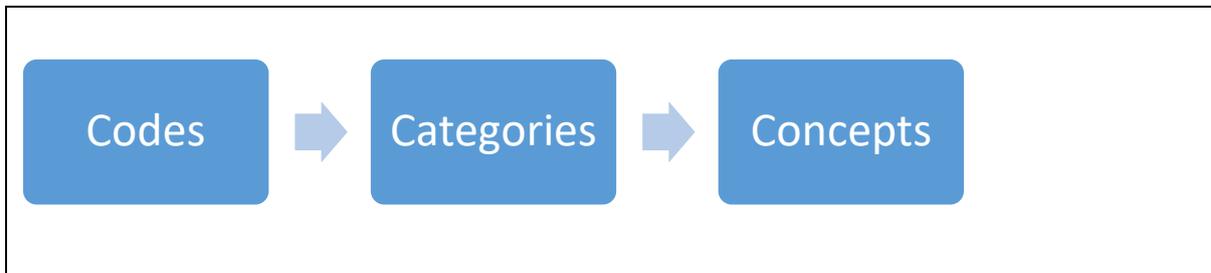


Figure 9: Gibbs' Framework for Data Analysis

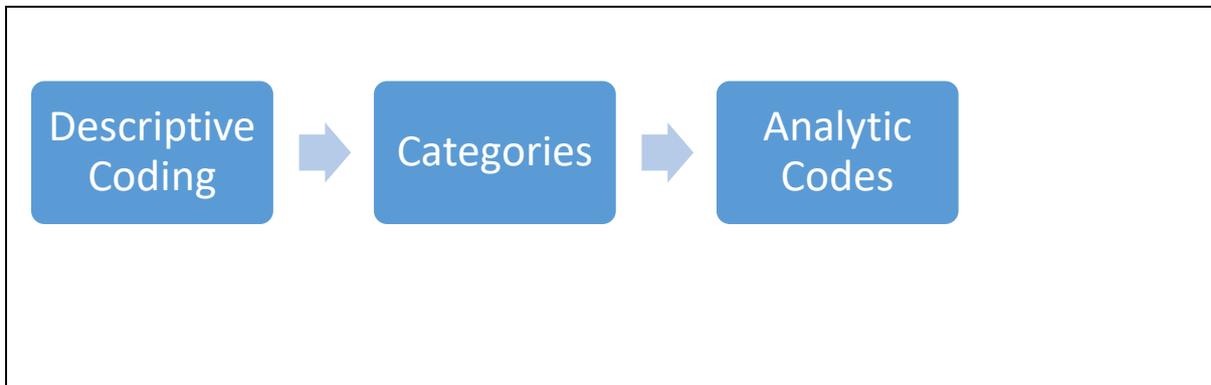
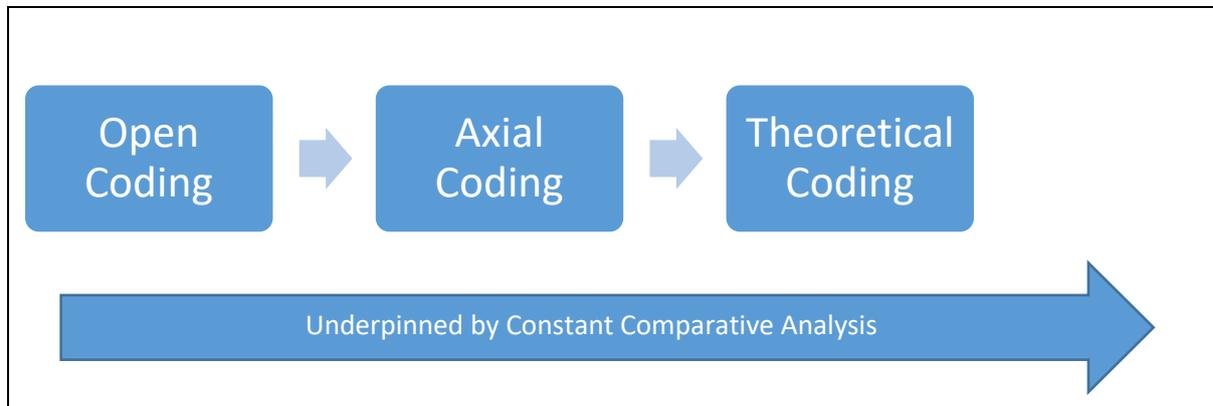


Figure 10: Grounded Theory Analysis Process



The development of the analytical process will always be reflective of the research questions and which process is best ‘fit for propose’. For this study the researcher has selected Lichtman’s three C framework.

Though similarities exist between the frameworks, this one was selected because it offered a perceived simplified three stage approach. However the researcher is acutely aware that the process of data analysis is far from simple. Lichtman’s framework is built around three steps which are immediately identifiable for the novice analyst.

The framework provides the opening for accessing and developing more complex reflexivity to the process, but tough complexity will inevitable arise, the process for this researcher is best instigated using a simplified three step approach offered by Lichtman. She advocates a ‘systematic approach’ to data analysis, albeit there ‘is a lack of standardisation and few universal rules’ (2013, p.306).

Lichtman advocates a systematic approach based on three C’s:

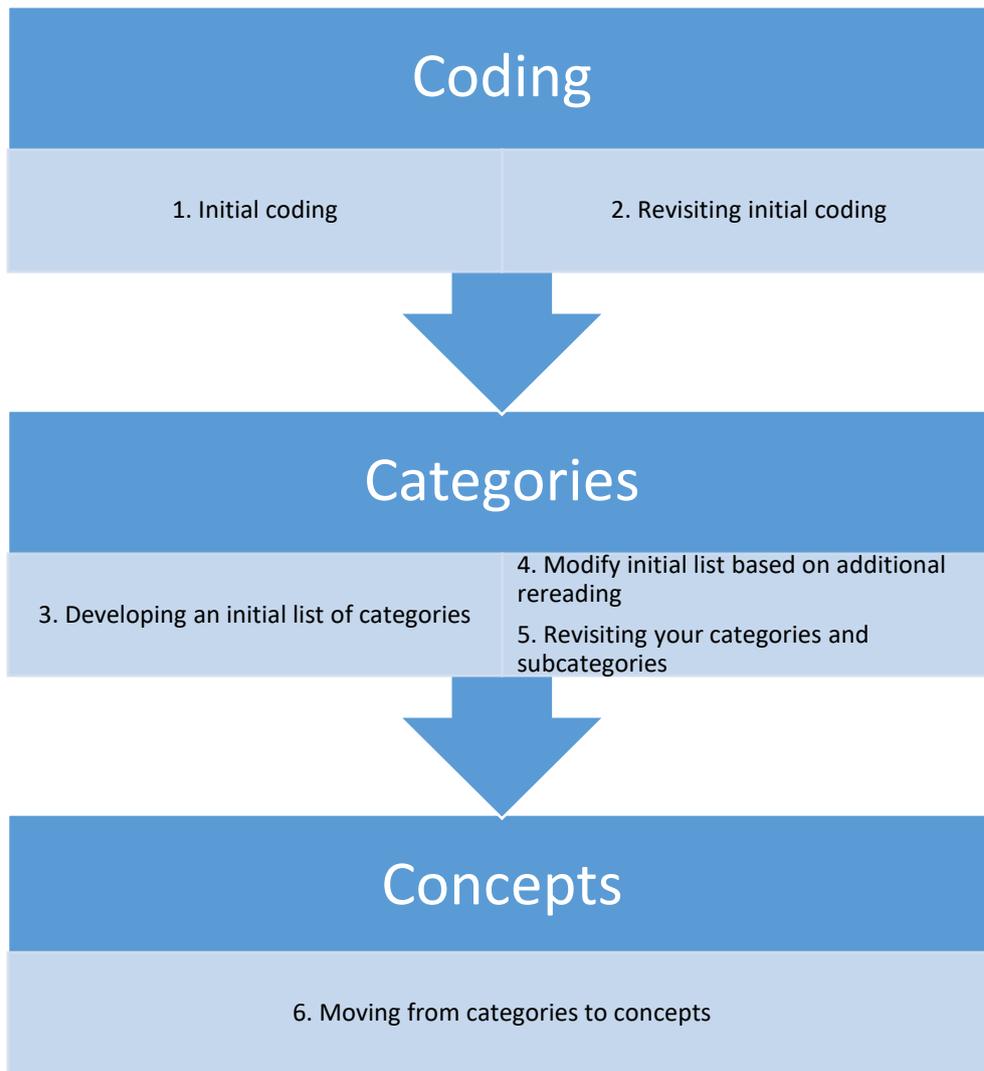
1. Coding
2. Categorising
3. Concepts

Figure 11: Lichtman's Three C's of Data Analysis



This three C approach can be instigated using a 6-step approach to data analysis. Put simply this process she advocates involves the initial organising of the data, and then the coding of the data. Once the data is coded it is then categorised and finally from the categories key concepts emanate. These three actions are expanded in the 6-step process in the figure 12.

Figure 12: Lichtman's Three C Model with Six Associated Steps



3.9.3 Coding the data

This first step involves ‘how you define what the data you are analysing are about... several passages are identified and they are then linked with a name for that idea – the code’ (Gibbs, 2007, p.38). This process of coding is best and easiest using a transcript (2007, p.40). It involves ‘intensive reading’ and rereading and a complete immersion in the interview transcript. Here the value of the researcher transcribing their own interviews is exemplified. Each interview transcription is put into codes, it is an ‘iterative process’ which demanded constant reviewing and deep reflection on the passages. It is continued until all the interviews are coded (Lichtman, 2013, p.308).

Step 1: Initial Coding

This step involves going from the responses to the interview questions to a summary of the ideas in the responses. For the researcher it involved intensive reading of each of the five case study interview transcripts as they were transcribed. Many times, the transcripts were read with the intention of identifying an appropriate initial code. This process was carried out over many weeks, with each reading the codes new codes were identified. The code can be 'a word, a phrase or the respondent's own words' (Lichtman, 2013, p.252). It 'enables the researcher to identify similar information' (Cohen *et al.*, 2018, p.669). Careful and intensive reading of the transcripts was and is demanded to arrive at the initial set of codes for the data. See table 3.17 below for the initial set of codes.

Step 2: Revisiting initial coding

Many initial codes may and did emerge from step 1, therefore it was necessary to revisit these codes and seek to refine or 'collapse' the codes where possible. The importance of having the physical transcript for this step was essential for this researcher. It allows for the intensive reading and analysis to happen alongside the creation of memos which can be pinned to the sheets. Gibbs sees memo making as integral to the data analysis process. They are 'essentially notes to yourself' and are 'a way of theorising and commenting as you go about thematic coding ideas and about the general development of the analytic framework' (2007, p.30).

This second step is concerned with removing redundancies, renaming synonyms or clarifying terms (Lichtman, 2013, p.253). Some of the codes did 'decay' while other did 'flourish' (Miles and Huberman, 1994, p.61). The initial codes that emerged from steps 1 and 2 are displayed in the table 3.17:

Table 3.17: Initial codes selected and refined from steps 1 and 2

Time and other supports for programmes	Importance of the teachers	Passion of the teachers	Success is celebrated	Importance of TY as a stimulus
Collegial support of colleagues	Liaising with other national competitions	Facilitator role of the teacher	Preferred methodologies	Support of management
Evolving programmes	Parental support	Location of the school	Support of the Local Enterprise Organisations	Support of external business
Keys skills across the curriculum	Restricted access to the enterprise programmes	Public profile of the school is boosted	Personal background of the enterprise teacher	CPD training in enterprise or lack of same
Teachers perceptions of enterprise	Like to see happen in the future	Power of the points system	School Inspections	Government policy in enterprise education

3.9.4 Categories emerging

The next step in the six-step process is the development of an initial list of categories:

Step 3: Developing an initial list of categories

Once the codes have been refined as displayed in the previous table, the researcher now sought to organise the codes into an initial list of categories. This involved careful consideration of the codes and developing appropriate categories for the emergent codes whilst being aware of the research purpose and aims. This part of the process again involved careful and intensive reading of the data (Lichtman, 2013). Careful consideration of the initial codes and eventually the provisional selection of categories for the initial codes. Essentially endeavouring to link codes under a relevant category. This step took much time and rumination before moving on to step four.

Step 4: Modify initial list based on additional rereading

This step follows from the initial creation of the categories, here again some categories were collapsed through a process of removing redundancies and renaming the categories. It again exemplified the iterative nature of the process with constant reflection and revision being an integral part of data analysis along with time to reflect purposefully on their selection.

Step 5: Revisiting your categories and subcategories

Categories are again reviewed and considered carefully following a process of deliberation and re-reading of the transcripts with related codes. Cohen *et al.* state that ‘the analysis is a construction of meaning rather than a complete reflection of reality and, in this, reflexivity is an important feature’ (2018, p.665). However, we must again be conscious of researcher bias at this stage and at all stages. This is the essence of step 6, to reflect and use reflexivity to create meaning from the data.

It involves much more than simply reporting on the data gathered. Again, time and reflection on all aspects of the research study are demanded, particularly prescient are the research questions:

1. What are the antecedent and or contextual factors facilitating selected schools in the successful provision of enterprise education?
2. How can these factors inform a national framework of strategic policy and development of enterprise education in the Irish post-primary educational system?

In consideration to the answering of these questions, thematic concerns or concepts arose that helped to determine answers to the questions and the development of a framework for future enterprise education in schools.

Step 6: Moving from categories to concepts

The final step in this process was to move from the categories to identifying the key concepts ‘that reflect the meaning you attach to the data’. Lichtman believes strongly that ‘fewer well developed and supported concepts make for a much richer analysis than loosely framed ideas’ (2013, p.254). She continues by suggesting that ‘five to seven concepts should be the maximum’. This final step takes time and much revision along with reflection for the researcher, as ‘sometimes your initial thoughts are quite superficial’ (Lichtman, 2013, p.255).

The importance of moving from superficiality was paramount for this researcher. The development and evolving concepts were eventually decided upon, again after many weeks of rumination, reflection and purposeful reading of all data material. The codes evolve as the process of data analysis does not stop because the sixth step is completed.

The six-step process is helpful at providing a framework for the data analysis process, but the researcher is cognisant that the process is not linear and is recursive. Thus, the concepts will evolve over more time and thought. The six emergent concepts are displayed in table 3.18:

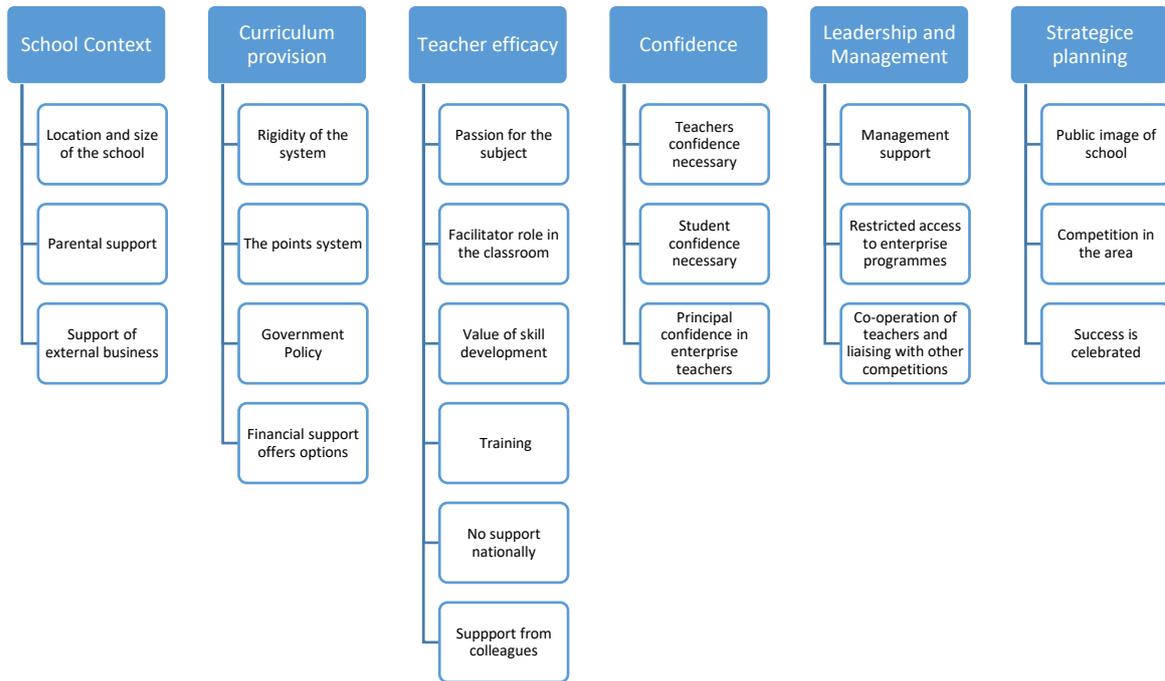
Table 3.18: Concepts derived from step 6

School context
Curriculum provision
Teacher efficacy
Confidence
Leadership and Management
Strategic planning

3.9.5 Final comments on the data analysis process

Lichtman asserts that the ‘meaning from qualitative data is a process that moves between questions, data and meaning’ (2013, p.255). The emergent concepts from the data analysis process are displayed in figure 13 along with extended analytic codes. These provide a lens through which the data from the case study schools was analysed and formed the basis of the stories which are described in the next chapter while also speaking to the emerging antecedent and contextual factors arising from the composite analysis of the five schools.

Figure 13: Emergent Concepts with Extended Analytic Codes



3.10 Conclusion

Considerations regarding ethical obligations were a paramount concern for the researcher at all times. The steps and safeguards to uphold these ethical obligations were described in the chapter.

Using the two research questions to guide the research design and methodology, an interpretative paradigm was selected. A case study methodological approach was decided upon so the stories from the five selected schools could be described and analysed, and the emergent antecedent and contextual factors could be identified. Lichtman’s three C approach using six steps to data analysis was employed. Arising from this process, six concepts with extended analytic codes was developed in an iterative process as the data from all case study schools was analysed. It is these six concepts and analytic codes which were used to structure the narrative for the descriptions of the data findings for each case study school in the next chapter and how they inform the emergent and developing antecedent and contextual factors arising in the research study.

4 The Case Studies

This chapter reports on the findings from the five case study schools for this research project. Each case is presented as an individual story of enterprise education in order to support the reader in identifying commonalities and differences as they presented in the schools. The six thematic concepts of strategic planning, school context, teacher efficacy, leadership and management, curriculum provision and confidence are evident to varying extents and these formed a guide for the researcher as each case was compiled. It was attempted to structure the chapter around each of the six thematic concepts and discuss each school under each concept, however this was found to be very repetitive and confusing to the reader as each concept was common to all schools to varying degrees. It also obstructed the rich narrative pertaining to each school emerging from the data gathered. The findings from the case studies as a composite are discussed in the next chapter.

It is also important to be cognisant that the five schools discussed in the chapter represent exemplars of successful practice in enterprise education. The researcher is focused on the schools exhibiting successful practice as research question two for this study will seek to develop a framework based on the antecedent and contextual factors identified within these schools. Selecting schools which do not met the selection criteria for this study as a comparative exercise would not have aided the answering of the two research questions.

The research participants' identifiers are displayed in table 4.1 and are applied for each of the participants in each of the five schools in the chapter.

Table 4.19: Research participants' identifiers

CODE	PARTICIPANT INTERVIEWED
CS1/ET1	Case Study 1: Enterprise Teacher 1
CS1/ET2	Case Study 1: Enterprise Teacher 2
CS1/NET1	Case Study 1: Non-Enterprise Teacher 1
CS1/NET2	Case Study 1: Non-Enterprise Teacher 2
CS1/PL	Case Study 1: Principal
CS1/PT	Case Study 1: Parent

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CS2/ET1	Case Study 2: Enterprise Teacher 1
CS2/ET2	Case Study 2: Enterprise Teacher 2
CS2/NET1	Case Study 2: Non-Enterprise Teacher 1
CS2/NET2	Case Study 2: Non-Enterprise Teacher 2
CS2/PL	Case Study 2: Principal
CS2/PT	Case Study 2: Parent
CS3/ET1	Case Study 3: Enterprise Teacher 1
CS3/ET2	Case Study 3: Enterprise Teacher 2
CS3/NET1	Case Study 3: Non-Enterprise Teacher 1
CS3/NET2	Case Study 3: Non-Enterprise Teacher 2
CS3/PL	Case Study 3: Principal
CS3/PT	Case Study 3: Parent
CS4/ET1	Case Study 4: Enterprise Teacher 1
CS4/ET2	Case Study 4: Enterprise Teacher 2
CS4/NET1	Case Study 4: Non-Enterprise Teacher 1
CS4/NET2	Case Study 4: Non-Enterprise Teacher 2
CS4/PL	Case Study 4: Principal
CS4/PT	Case Study 4: Parent
CS5/ET1	Case Study 5: Enterprise Teacher 1
CS5/ET2	Case Study 5: Enterprise Teacher 2
CS5/NET1	Case Study 5: Non-Enterprise Teacher 1
CS5/NET2	Case Study 5: Non-Enterprise Teacher 2
CS5/PL	Case Study 5: Principal
CS5/PT	Case Study 5: Parent

4.1 School 1

School 1 started as a small co-educational school in the early 1990s with only 67 students. It is a Gaelscoil serving a city location in Ireland, the school has an enrolment of 255 students. The school has grown significantly over the last decade and now employs 23 full time teachers. The school had performed consistently for a number of years, but their success had declined in recent years. The past successes ensured its position in the top ten schools selected for the study. Research Interviews for this study were carried out with four teachers, the principal and a parent.

The small size of the school provided the teachers and students the opportunity for the development of an obvious team spirit among the students and the enterprise teacher 2 recognised this:

The fact that it's a small school maybe they group better themselves they make friends very quickly and they have a group that encourages team work and business work that's involved. (CS1/ET2)

The principal in the school also viewed the size of the school as a positive, as the small size allowed for less structured programmes to evolve and the flexibility to facilitate their involvement, such as allowing the students time to engage with the different elements of enterprise. This can happen when you have 15 students in Transition Year as opposed to 115 students. The principal concurred that this flexible approach would not be possible in a larger setting:

This has worked for us because we are a small school, as we grow it tends to get harder (CS1/PL)

The principal acknowledged that as the school had increased in size, it was harder to work with the programmes that require flexibility. The size of the school also impacted on the relationship the school has with the parents. With a small school, a positive relationship can be developed as the interaction between parents and the school is less formal, this was particularly true in its initial years. This contention was supported by the parent who was interviewed:

I would say there is a far more open-door policy in this school and I'd say that in turn leads to knowing more about the parents, knowing what parents are involved in what, knowing where we can draw the strengths of parents from. So, I believe it is the open-door policy and probably the small numbers in the school (CS1/PT)

The school enjoyed great support from its parents and this support helped by its small student population aided their endeavours with enterprise education. This will be described in detail later.

The context and situation of the school was a consideration for the initial decision to become involved in the Student Enterprise Award competition (SEA). Enterprise teacher 1 was on a 12-hour contract when she began teaching in the school and so had the time and flexibility to give to the developing enterprise in the school and the programme.

At the time, she was also aware that success in the competition would reflect well on her and improve her chances of securing a permanent contract in the school or at least a contract with additional teaching hours. When asked if this was possibly a motive for her becoming involved initially with the competition she replied:

Oh yes, Oh definitely, Oh yes, that was to keep my job in the school until I got more hours. Oh definitely, yes, yes (CS1/ET1)

What is interesting here is that this decision to become involved in enterprise was taken despite the fact that the teacher had no related or specific training in the area. The SEA competition provided her with an opportunity or platform to display her competence as a teacher and interest in the school.

The two enterprise teachers interviewed both said that they received no formal training in how to teach enterprise, while they may have learned about enterprise and how to become enterprising, they did not learn how to teach others to become enterprising. This lack of specific business training was evident when both enterprise teachers were questioned on the difference, if any, between enterprise education and entrepreneurship.

The enterprise teacher 1 had a confused understanding of the terms, enterprise education and entrepreneurship:

Enterprise education can be anything. So, I suppose you are teaching them about businesses, how they operate and set up businesses but without, say the mini company's involvement there it is not real practical where they actually have to do it themselves. So rather than kind of trying to explain to them what problems they are on they can figure it out themselves through the mini companies in a way (CS1/ET1)

A confusion in the terms is also suggested in the responses from enterprise teacher 2:

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Enterprise education involves students and allows them to know that there is that aspect out there that they can innovate and can come up with their own products and service and makes them explore that option (CS1/ET2)

However, the non-enterprise teacher 1 was not familiar with the term of enterprise education at all, he stated:

To be honest I have never heard of it but I suppose probably it relates to business studies as it may be and teaching students how to set up a business or what is involved in a running of a business. (CS1/NET1)

Exploring the concept more with this teacher and with further probing on the actual meaning of the term and its relevance within his own subject, language teaching, he continued:

I nearly would have said no, but thinking about it and speaking about it with you I can...yea...I would have now to say yes, but not over the start of the interview... As I thought about it a bit more it changed my thinking (CS1/NET1)

Through the interview and discussion, he appeared to have an epiphany moment when he said:

I suppose looking at the aspects that they develop within enterprise education and how those can transfer across the board into the different subjects even just as you mentioned critical thinking. Of course, that's hugely important (CS1/NET1)

Limited qualifications, experience or opportunities in the area of enterprise did not deter the teachers' involvement with the students' award:

I did a degree in UCD, an Arts degree in Maths and Economics in 2002, and then I finished in 2005 and I took a year teaching and then I went back and done the DIP in UCD again with Economics and Maths, they are my two teaching subjects so I have no business training or degree. Nothing about running a business or how to start up a new business, not part of my background. So, I suppose I never had any exposure to business or how it works before I started in the school here. It has been a steep learning curve (CS1/ET1)

The second enterprise teacher did have a business degree, but no formal training in how to instill or develop enterprise skills in other people:

I'd say we got help and maybe there was a module on entrepreneurship itself but there was no module on how to encourage people to push that forward, enterprise education would have been the same...the same would have applied up in college we would have been taught entrepreneurship

and we would have been given that aspect of it, but not how to encourage more people to do it (CS1/ET2)

The Principal in the school who was cognisant of the teachers' level of education in the areas bemoaned the little continuous professional development that was available to teachers:

Very little CPD for teachers, take time for these [key skills] to be embedded (CS1/PL)

This lack of any formal education or continuous professional development is compounded by a lack of support nationally. However, despite these limitations, the school had engaged successfully with the SEA.

The relative newness of the school in a large urban setting also provided other reasons for involvement in the SEA. The competition for student enrolments within the catchment was particularly relevant to this school which had just been founded and was aiming to make its mark on the local educational landscape.

This point was addressed by the non-enterprise teacher 2:

Historically I have been here in school it's a very small school until about 6 years ago, there was only 90 or so in it and so our participation would be very important for getting the story out there that there was holistic education going on here that we could compete with other schools, something that we could call ourselves centre of excellence (CS1/NET2)

The principal was acutely aware of the competitive situation in which the school was operating, opining:

Within the city there are 7 schools and outside in the local county you have another 3, 4, 5 different schools, so there is huge competition in the town never mind outside the town (CS1/PL)

The competitive enrolment situation and the small size of the school had implications for what niche the school could succeed in and so develop a reputation for success. The school needed to make an imprint on the local scene and promote itself as a pioneer in some attractive and recognisable extra-curricular activity. Sporting success is typically enhanced if a school has a large cohort of students. Therefore, a small school would find it difficult to compete with the other larger schools in the catchment area. The principal was aware of this reality, stating:

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Yes, well when you are in competition with other schools, you get involved in all these things. You can't compete in the big sports because you don't have the numbers to field hurling teams for example in City X or whatever else. So you get involved in those things that you can compete in (CS1/PL)

As well as having some advantage over larger schools in the area, and perhaps even the advantage of having a small student population, the enterprise programme did not require large funding. Finance for the enterprise programme was not a significant issue for the teachers or the school principal. In fact, their location in the large urban setting and proximity to all the required resources and competitions was an advantage.

The principal stated:

More or less we'll support it anyway we can, but anything they want they'll get but to be fair in that particular case we haven't had to do much supporting financially in particular in it at all its self-running more or less and teacher time (CS1/PL)

The principal did in his comments allude to the significant effort and consequently time resource given by the teachers directly engaged with the programme. The cost efficiency of the enterprise programme was one of the many benefits associated with the school's involvement along with developing close links with the local business community. There is also the added advantage of variety in the learning experience in for the students. This was observed by the teacher when the LEO representative visited the school to support the students and whose contribution was viewed as valuable and helpful:

The students don't like listening to teacher's a lot as well. If someone comes in, if [LEO representative] comes in and talks about something that I could talk about, they listen to her (CS1/ET1)

The Enterprise Office they are the best now and they have a book and they have made it available in Irish and all for us here but they have a book but [LEO representative] is basically available once you give her a little bit of notice at any stage, so if I am stuck a bit and there is a company and I am not sure about it, even will it work or can they do it, you know you can ask and get help (CS1/ET1)

Well, we have [LEO representative] who is the enterprise board here, she'd come in and she's also sent us various emails and USB key with some of that stuff (CS1/ET2)

When probed on what other external contributors and supports the school had received, the enterprise teacher 1 described how they have used some local businesses in the area:

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I used to get a person in from [name of business] and they come in and talked ...as it was local... I just think you can also get people in the local business areas to come in and talk about their business (CS1/ET1)

While is it something they had done in the past, when pressed if it was a regular occurrence, it would have been on a random basis, but it was something that the enterprise teacher 2 thought could be developed in the future and perhaps they were not tapping into its full potential together with the large urban setting and the opportunities this provides:

Now I don't know if that's a fault of our own that we haven't branched out and asked or I mean no and that is something I would like to see (CS1/ET2)

This potential was revisited by the teacher at a later stage in the interview:

If there were more schemes in place with local, I mean there is several local places here in [town name] itself whether it be business or restaurants, simple things...Guest speakers into the classes, we don't have enough of them, we have [Local LEO representative] who is put in place and she oversees how they are doing the report (CS1/ET2)

This desire for more outside involvement and contribution was echoed by the principal:

I think that needs to be tapped more by the schools ...I would feel that even if you had some kind of module in 1st year certainly with the flexibility in the new junior cycle, between maybe the chamber of commerce or something developed there to build the school a connection between the school and the local community or local business community in particular because that's what we are talking about the entrepreneurial thing. They could learn from each other's ideas, so I know that's not as simple as it sounds, but at the same time there is a connection there (CS1/PL)

When the principal was asked why this did not exist he stated:

I think it's time and everything else, it's time, [enterprise teacher 1] is running between here and the PLC centre for classes. There is very little classes here now, so it gets harder and harder for her to do that work with them. So, and this is the same with anything and apart from anything else she may not know these people, she may not know the business community herself (CS1/PL)

This issue of time and the 'everything else' suggested by the principal as a barrier to activating additional resources and contributions through bringing in outside businesses precipitated a discussion on other themes which are either barriers or supports to enterprise education in the school's curriculum.

It is a point of note that the principal saw the limited level of outside support received by the school as a direct result of the teacher not having the time to give to the programme now that she is in full employment.

One of these supports raised by the principal was parental support for the school. It was noted by the researcher in the field notes that the school had a noticeboard for parents in the reception of the school with information about all the current events happening in the school and a section of the noticeboard was exclusively for enterprise activities.

Parents in the school had input into the programme at various times over the years. Many of the parents in the school came from business backgrounds and their knowledge and skill was used to develop some of the ideas for the mini-companies in the past which delivered success in the SEA. Enterprise teacher 1 recognised the parents' contributions as a valuable resource:

We have had a group here before ...that the parents were in business backgrounds and I did not have to do much at all, the parents were keeping them going you know, and I suppose it is different for them (CS1/ET1)

This contribution by parents in guiding the students is important, as the students needed guidance and a parent with a business background could provide quality supports to students, this point was further expanded upon by the teacher:

I suppose they don't know where they are going with it, so though it is a combination and I am not saying it is just me, but someone needs to be driving them, so [LEO representative] comes in from the Enterprise Office and she, you know she is a driver, the teacher would be a driver but the parents, if the parents are involved at all, the company is much better (CS1/ET1)

The involvement of the parents allowed for a richer enterprise experience, where practical advice was available to the students when required and also they had access to high-profile people in the area to aid their market awareness:

There was also one of the parents who had a restaurant so they were able to have a big opening with the Mayor and he came for the opening of the business (CS1/ET1)

The parents are a rich resource in this school. The parents had access to people who could provide quality enterprise experiences for students which could not be provided by the teachers.

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...if all the parents in the school were to go into a room and we were to discuss well what can you bring to the school in terms of enterprise, I would say we'd fill a year's calendar, because this is a very diverse school as well, we have everything from potters to politicians... (CS1/PT)

This parental resource was used by the school and developed over the years to aid their success in the enterprise competitions.

Yes, absolutely I mean I know both my daughters did art and it was parents who initiated artists and potters to visit the school (CS1/PT)

This parental support was viewed positively as contributing to the school's success in enterprise competitions. Parents were happy to provide this support as the benefits to the students were obvious. The parent interviewed reported that her children as a result of enterprise competition success were 'not dependent on me anymore' and highlighted the development and critical importance of confidence in her children and generally in students which is a trait that is required for life and success in the future.

The skills I would see as a parent is their ability to make phone calls even something like that, that they are not dependent on me anymore, they have got used to sourcing information themselves and the confidence to do these things. The use of the internet and where to find material what they are after (CS1/PT)

The appreciation of skill development was expanded upon by enterprise teacher 1 demonstrating her concern with the learning process rather than the learning product, it being success in the competition. Students learned skills through their participation. During the interview when asked to discuss her focus when teaching enterprise, she replied:

More skilled development. Yes, because even if they don't come up with a product at the end of the year or they haven't decided to sell it, they still have to advertise, do a poster, not only business skills. You know that they need say personal skills but also computer skills and stuff like that, that we kind of get them to go through (CS1/ET1)

A contention supported by the parent, who viewed enterprise as the development of life skills. Again the focus is on the process and not the final product of the learning:

I would always view education as a general education not totally based on academics and enterprise gives it another dimension it gives it we'll say an opportunity for practical and they learn so much from working together and being together even if it's that they fall out in business to me and that's a learning curve (CS1/PT)

This focus on holistic life skill development was also evident with the non-enterprise teacher 2 interviewed. As a Science teacher with a PhD, he was adamant in his promotion of skill development, while the other non-enterprise teacher in the school was more anodyne.

Non-enterprise teacher 2, a Science teacher exhibited a high level of confidence along with being a highly qualified professional. He appreciated the cross over in the skills acquired in enterprise and how they were used for the young scientist competition. He could 'really see the people who have, especially in senior years', he continued by stating that it was 'so much easier to deal with a senior class..., not expecting to be spoon-fed'. He viewed it as an opportunity for all teachers to support one another, as the skills developed in one subject area would support the learning in all the subjects. His awareness of this potential for skill development came from his own experience as a postgraduate scientist:

I suppose my background would be that I wasn't planning on being a teacher and I went away and did a PhD and worked as a scientist and in a way found that experience to be very different to learning science in school and coming back to school and expecting that they were just going to learn the bunch of facts and stuff, didn't strike me that it was a very related to courses of college. So from the start from 1st year I would rather than give them instructions on how to do the experiment I'd be looking for them to try and figure it out... (CS1/NET2)

His experience outside the classroom increased his appreciation for developing skills and how this could be achieved in his own teaching, he acknowledged that this focus is now being embedded across all continuous development programmes and the Junior Cycle reform:

I'm finding that in the last 3 or 4 years all the continuous whatever development that we are going on and these education gurus that are being...they are pushing this thing. So it's all just about getting out of the way and getting the kids to do more and... (CS1/NET2)

This system change at the Junior Cycle with its focus on self-determination is required in his opinion, as he reflected on his own educational experience, stating that:

I was funded by the state for seven or eight years of university education and at no point in that had I trained in any way towards the skills for developing a business or for generating a return income to the state (CS1/NET2)

He considered this to be a great opportunity missed for all, both for himself and the Government. This missed opportunity is not something he wishes for his own students. In

his approach to teaching Science, he very clearly saw himself as an enterprise skills teacher also, and this belief is reflected in how he planned for all his classes. While he liked the new junior cycle science, he would have liked to have seen more innovation in the assessment tools. For example, getting the students to design an experiment. He could see the benefit of this approach coming through into the senior cycle:

As regards 5th and 6th year it makes a massive difference, a massive difference it's the kind of thing that I suggested there that I might have to tip out to my chemistry class there, you can literally suggest that they would look up the experiments themselves and run it themselves and they are just...I can't...it makes it so much easier to deal with a senior class when they have that experience of directing themselves and working in groups and not expecting things to be spoon fed (CS1/NET2)

The second non-enterprise teacher stated that the skills developed by the students in the enterprise programme can be seen across the board in other classes. It gave students confidence, he saw it in his languages classroom where students will be asked questions orally about themselves and were happy to talk out in front of the class. This is key learning and he believed in the enterprise skill development allied with Junior Cycle reform.

This teacher also talked about the development of critical thinking skills, yet he was not aware of enterprise education or a possible role for him in the development of enterprise within his own classes. His limited knowledge of the definitions of enterprise education and entrepreneurship was an issue here. While he could see the benefits of skills developed in other classrooms and subjects, he did not identify himself as part of this general skill development and saw no role for him in enterprise education. He did not see any link between his role as a language teacher and the promotion of enterprise education. They were for him separate areas.

For the teachers involved in enterprise education, it was a personal journey of learning, especially on some of the hidden elements of teaching and learning. Enterprise teacher 1 who had to learn quickly how to teach enterprise soon discovered that the creative process cannot be rushed:

When I started the school were doing it in transition year so I had it as a taught subject and I had no experience in it at all and I found it very difficult, they would sit in class and it would be like an idea, the idea part was the most difficult for them to come up with ideas. You are trying to, but you can't rush them then as they are developing ideas so I found at the end of the year that they were still

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developing idea. But when it came to the 1st years and I was more aware. I was on my own, and I was not on full hours, and I was only young in teaching, you know young, in my 20's, unmarried and with nothing, so I put a lot of time into it. (CS1/ET1)

Her commitment and deep engagement to the enterprise programme involved her having to learn quickly how to teach enterprise effectively and so time and energy were big factors:

I suppose they are given time on their timetable to participate in modules in relation to mini companies and enterprise and then outside of school teachers are involved in it. Put in a lot of effort and students would spend time after school in their own free time... It is great at the end of the year that they succeeded but it is, I find it is the one class that is very, very tiring, you come out with no energy and you have used all your energy in the class (CS1/ET1)

This energy sapping and her additional time input was all part of the reasons for the school's success and this is explicitly acknowledged by the teacher:

What I put down to the success of that is my time...Yeah, my time. You have to sit down and go through their business plans and make sure they are doing the work, whereas if you have too much going on you do not get to meet with them as regularly or get kind of work back from them that you want (CS1/ET1)

This commitment of time mirrors the deep engagement required by the two teachers involved in the programme. Enterprise teacher 2 said:

We provided lunch time help for them so there is time extra time outside classroom time (CS1/ET2)

Principal also recognised the importance of their time and their deep engagement with enterprise in the school:

...it wouldn't happen without the teacher's involvement. The initial push may or may not have been the management I would guess that it was a combination of both and then the interest of the teacher and students after that (CS1/PL)

And later said:

I suppose the flexibility of the staff and other teachers and even the students and some of them tend to be very motivated (CS1/PL)

This recognition of the time and level of commitment from the teachers was also acknowledged by the parent interviewed, who stated that deep engagement was required on behalf of all involved, but primarily from the teachers:

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My girls would have been introduced to things through their teachers, yes as a parent I was very supportive and willing to do the lifts and do the after schools, but it would have initiated with the teachers. The students themselves certainly have to have a certain amount of motivation ...the primary mover to me would be the teacher (CS1/PT)

The dedication and youth of the staff was another contributor:

I think the young staff as well contributes high, energy being one and they are coming with new ideas all the time, maybe college has been different to them and has offered them more of an enterprise background and they are willing to share and get on with it (CS1/PT)

This dedication and commitment from the teachers was not sustained in the case of enterprise teachers 1, who had decided for personal reasons to reduce her input into the programme:

So, I suppose I spent maybe 6 years doing it and I wanted a break as well. You know I did want a break. I have gone back to it this year, transition years, but I don't have the same motivation as well, I just, I think you need to, you really need to be motivated to get the students motivated, so I suppose my own interest, I would I put a good lot of work into it for a couple of years and then I kind of was happy when Ms. X took it over and was happy doing it (CS1/ET1)

She continued by stating:

I was only teaching Maths here, but I was still doing the mini company, introducing it with the new teacher. So that is Ms. X. So both of us done it as a club at lunch time and then Ms. X was the business teacher, so then she kind of took it on, I got married, had kids, so she took it on and I was out of it altogether and then Ms. X left for another job and we got a new teacher in for business so I had to try and bring back in the continuity, so I have been involved in the last couple of years, but not as intensely as I was at the beginning (CS1/ET1)

It is interesting to note that this school's success in the enterprise competitions has reduced over the last 5 years. Their greatest success was achieved within the last ten to five years. This was when the enterprise teacher 1 was involved fully with the programme and had the time available to her as she was on a reduced contract.

It could be countered that when she achieved her full time contact in the school, her motivation for involvement reduced. This was explained by the teacher because of a change in her personal situation, but equally it could be viewed more cynically. Once her commitment and deep engagement was reduced, the school's success in the SEA reduced also.

Albeit the enterprise teacher 2 still is actively involved, mainly at the behest of enterprise teacher 1. The diminished success can be directly tracked to the level of engagement from enterprise teacher 1. What is interesting here is that there is no evidence of any provision being made in the school to sustain the success or develop the programme in interim. Likewise, no local or national support was in place to sustain success in any school at this time.

Within the interviews, all the enterprise teachers and the school principal openly derided the level of support at national level. The general feeling was that they operated in splendid isolation. This isolation was felt in all aspects of enterprise education, from funding through timetabling and to teaching resources. Its success depended on the teachers own volition and how much time and effort was channelled into the enterprise programme.

Never receive any supports from the Government, in any way shape or form that I am aware of the only support we get is from within the school and local area (CS1/PL)

Enterprise teacher 2 replied in a direct manner when asked about any national or Government support:

No. never heard of any Government policy (CS1/ET2)

Both enterprise teachers reported that for effective enterprise education programmes, time and continuous effort was essential. Yet time or other resources are not included in the supports to schools at a national level, such as concessionary hours to help effect implementation of enterprise education and programmes. This isolation and dependence on a single or group of teachers supports the concept of voluntary and *ad hoc* provision within schools.

Also, the teachers reported no prior or continuous professional development in enterprise education, they relied on their own knowledge and skill development and their innate commitment to its presence in the curriculum.

School 1 is the smallest and newest case study school, so it operated in an extremely competitive environment. The school used the SEA to raise its profile in the area and harnessed the abundant parental support it had available. The school enjoyed such a high level of parental support that there was a suggestion that more links could be developed with the local business community through parental support.

They had used the parental support for guest speakers to the classroom and to provide specific business acumen to lessons in the past. This was particularly beneficial when the two enterprise teachers had no specific training in enterprise education.

The promotion of skills within the students was paramount, but teachers also had ulterior motives for participating in the programme. The main enterprise teacher used the success to display her pedagogical skill to secure a permanent position in the school. The school too had its own specific motives, to boost enrolments and its reputation in the local area.

The commitment of the teachers to the enterprise programme was acknowledged by all participants, especially given to dearth of national support available. However, the success of the school in the SEA was closely aligned with one teacher's commitment, and when this waned, so too did its success.

4.2 School 2

School 2 is based in a large town in the West of Ireland. It is an all-boys religious run school. The school operates in a competitive environment with an Educational and Training Board (ETB) post-primary school situated beside them. The enterprise programme was introduced with the Leaving Certificate Vocational Programme (LCVP) in the early 1990's and at this time the enterprise module was also introduced into the Transition Year. This historical journey was described by the teachers in the school.

I'm only four years here, but I know, from speaking to the other teachers it would have been the mini company sort of through transition year and twenty years ago. I suppose, I definitely, say even from my experience in other schools, LCVP was the huge thing I think. That's where the real drive towards enterprise education came from (CS2/ET1)

The year that transition year was introduced in the school. I suppose that really was the first introduction, and I wasn't involved with it at that time, a different teacher was doing it and she was involved with the mini companies. I suppose that was the key stepping stone (CS2/ET2)

Well, where the whole area of enterprise started I'd say would be TY and bringing in the module from the Leaving Cert LCVP and the winning, the going to the various competitions and doing so and the mini company is really, really, really strong (CS2/NET2)

The enterprise programme operated in the school during the 1990s without any major success in the SEA. Then the school decided to prioritise certain subjects after they received a school inspection. It was decided to focus on three specific subject areas:

We would have had a tradition in the past of trying every subject and then whatever is the demand, accommodating that. I remember before that business was an option subject. It wasn't compulsory for everybody and after some reviews and inspections, we decided, ok, we're a boy's school, what are going to be the drivers going forward. And we decided business, science and technology and that they were going to be three key subjects that were compulsory for everybody up until Junior Cert. We decided to prioritise these subjects (CS2/PL)

This push in the three subjects included Business, it was considered valuable in the context of it being an all-boys school. The principal continued:

We just reviewed the way we did things and we just decided that business, just you know, in a boy's school, needed to get more credibility and more push on it then (CS2/PL)

One way to increase the profile of the subject and the school was by entering national competitions. Teachers of the three subjects concerned were all active participants in

national competitions relating to their subject area. Their success in these competitions over the past decade is interesting and now they enjoy regular success:

*We're winning All Ireland's for fun in the bond traders and the Young Economists in the last five or six years and an awful lot of that is just the initiative that is coming from the business department.
(CS2/PL)*

While the principal considers their participation in the competitions as student driven, it was from the school leadership that the initial push came. However, as they enjoyed regular success, this encouraged students to seek out other competitions. What is interesting here is that all three subject departments were involved. The Business department participated in the SEA and the Young Economist of the Year. They also linked with the engineering department for the Formula 1 competition. The Science department was involved in the Young Scientist Competition and the Maths Olympiads. The school's decision to participate and prioritise the three subjects very much falls in line with the national STEM policy of encouraging greater participation in STEM subjects at post-primary. This issue for schools will be discussed also in the context of school 3.

School 2 had enjoyed repeated success in the SEA competition and it was generally acknowledged that the awards were used by the business department in the school to encourage student's participation in the subject and as a result the awards played a central role in teaching and learning within the classroom. There was advantage for all from involvement with the awards.

The school used the competition to develop the business department, the students developed their enterprise skills, while the teachers got to develop their own capacity as enterprise teachers within the classroom.

I don't have TY Enterprise now but going on my experience, I would have had it there two years ago. Definitely it does, it dominates the teaching, but it's a goal for them and I suppose if you look at enterprise, you know and for some of these students, may not have done business for the Junior Cert when they are in TY so they are learning an awful lot in a short period of time from coming up with a business idea, how did they cost it, how did they market it, where do they get finance (CS2/ET1)

The competition has now become a central part of the Business module in the Transition Year:

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It's viewed as an integral part of the Transition Year programme in particular because when I was managing that, there was a huge focus on work experience and a huge focus on mini companies and participation in enterprise awards and enterprise competitions (CS2/NET1)

This non-enterprise teacher could also see the merits of being involved in the enterprise programme from the different perspectives and levels:

I suppose from the student's point of view, the benefit is that it is a different approach. I obviously don't teach it but I would imagine they get a different style, I suppose, to chalk and talk as it used to be called. They get a different approach from it. They're out interviewing people, working with people, actually implementing policies as opposed to sort of learning about policies. The teachers, again, it's a break from the more, I suppose, traditional approach where we have information we need to pass on to the students, they get to, you know, encourage them to do different things and from the school reputation point of view, there is no doubt about that. I am actually of the opinion this school has benefitted hugely from enterprise over the last year in terms of reputation (CS2/NET1).

Another competition which the business department was involved with is the Young Economist of the Year. They became involved when the enterprise teacher 1 was no longer teaching enterprise to transition year students, so she decided to participate.

She was seeking another outlet for her knowledge and capacity as she moved from direct involvement with Transition Year students and the enterprise programme. Through her involvement with the Young Economist competition she could see the cross over in the skills developed in the other competitions and how the students were better equipped for entry in 5th year after having completed Transition Year:

I would be more so involved in the economics. I suppose them winning the Young Economist of the Year, you know it's fantastic for the students. The skills developed in the other competitions really helped them with this competition..., they were able to bring it, you know, they were able to take ownership of it, you know, the teacher only had to be the facilitator, (CS2/ET1)

The students could now transfer the skills across to another competition and so the teachers could adopt a facilitative approach in her classroom. It also had the effect of encouraging the students to become involved in more competitions. A culture of success and achievement was developing in the school which had a domino effect on further engagement and participation by the teachers and particularly the students. An example of the latter is demonstrated in how the school became part of the Formula 1 competition. The motivation for involvement came from the students themselves.

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Like the students came into me two years ago last September and asked me to be involved in the F1 in Schools competition and they were trying to sell it to me...I knew the competition existed, what it was. . And I always looked at it and said, oh my god, that's all engineering really. I know there's a bit of business but, I thought, right, ok, so new challenge for me as well and we just took off. We went with it (CS2/ET2)

The teacher enjoyed the challenge of the new competition, and although she had no engineering knowledge this did not deter her. She knew that her teaching colleagues in the engineering department would support her for the competition and as a result they had considerable success in this competition also:

We ended up in the world finals and being on the podium, third place and winning the best display award for how we had marketed and sold our business. That was in Singapore. But that's formed success in a sense that we have a team this year as well and they have just qualified three weeks ago to represent Ireland again at the World Finals out in Kuala Lumpur in Malaysia this time (CS2/ET2)

This success is replicated across the various national competitions that the school entered. The Science department were part of the Maths Olympiads and the Young Scientist competition and they too had enjoyed significant success. A culture of success and achievement was developing in the school with an evident growing competitive culture.

We've been doing it like in science projects. We've had young science projects for, going back, we've had several gold medals in this school in chemistry, several gold medals in the Maths Olympiad. We have a knowledge maybe on the Leaving Cert level. I've had students representing Ireland in Montreal, in Copenhagen, in Moscow and now I have another fellow in Copenhagen in May...in the young scientist, we had the three groups up this year, three groups this year in Dublin. Which, you know, for one school, is very good. They're going to the Sci Fest now in Sligo later on so that permeates the people doing the TY in the various companies (CS2/NET2)

The competitions provided a mechanism for the school to promote itself in the local area along with promoting the subject areas of Science, Technology, Engineering, Maths and Business. The success was celebrated within the school and outside also. The teachers were happy when the success was celebrated in the school. The non-enterprise teacher 2, a science teacher talked about the absolute necessity of winning in the competitions. It was evident that his identity was deeply connected with winning:

Well, I would be always, I suppose, competitive really. I play bridge. I play golf. Oh, I do anything to win, you know. So, it's all about winning and the competitive spirit and the drive and lots of people

would play bridge just for the social and going out and meeting people. I like that too but I want to win as well. It's about winning to me. A lot of it is about winning (CS2/NET2)

He was passionate about winning at all costs. He appeared to view the success from his own perspective primarily, yet, he could see the benefits for the students, but he was adamant that he absolutely wanted to win at all costs. When he was successful in the various competitions, his success was celebrated in the staffroom. He spoke about winning for him in the first instance and then how such wins benefited the students involved. However, the researcher's observation was that winning for him was an adrenaline rush, as it appealed to his own personality and his competitive spirit of 'win at all costs'.

Successes would be announced on the intercom. You know, nice to have your name coming out that you did this that you did that (CS2/NET2)

The principal was also eager to celebrate all the success in the school and he talked about how it mattered to all in the school community.

Everybody rejoices when the students do well and I think, I think it's just a whole staff thing that we know that we're here to serve the needs of the students. The students aren't here to keep us in jobs and make up numbers and I mean like, this formula 1 thing, I mean, that came from the students (CS2/PL)

When asked how this competitive and winning culture had evolved in the school, he spoke about the parity of esteem that existed in the school for all successes and how all are celebrated, no matter from where they emerged:

I'm not quite sure how it has happened but we have managed all of us to achieve this kind of environment of learning and that learning is good and that it is admired and that the guy who achieves, wins the young economist, he's just as admired within the school and the class as the guy who is captain of the senior football team or rugby team (CS2/PL)

The researcher's field notes for school 2 describe the school corridors adorned with numerous pictures of winning school teams and a packed trophy cabinet in the reception area of the school. A large silver trophy from a recent school win was also placed in the centre of the staffroom table on the day of the visit.

The researcher then looked to the two enterprise teachers in the school to probe the enabling factors of their success in the SEA. Their background, knowledge of enterprise and personal traits of the two teachers in the school were significant factors.

Enterprise teacher 1 came from a business background, as she was raised in a public house and was exposed to the business world from a very young age. She saw how her parents worked hard and long hours and that there was no guaranteed income. Talking with her, it was evident that she herself possessed many skills of entrepreneurship, such as perseverance and risk taking. She was not afraid to take a risk, be it with her own career or how she taught her classes.

This goes back to personal circumstances. I suppose, I know about risk in the sense of, had my job in the bank. I was going into teaching, no guarantee I was going to get a job. But I did take the risk because I thought I will be rewarded (CS2/ET1)

This risk taking and willingness to try different approaches to teaching was evident when she spoke of her style of teaching:

They [students] were able to take ownership of it, you know, the teacher only had to be the facilitator... Normally we would start off with group work, you know, there would be, you know, either in pairs or we would do a bit of group work that their sort of coming up with the ideas first. Then we tend have a class discussion, you know again, I have mentioned there are guest speakers also (CS2/ET1)

Where does this deep engagement for the enterprise programme come from? An interview with an entrepreneur was the trigger. She described herself as a very proactive person and after she spoke with the entrepreneur who had visited the school, she remarked:

He said never give up, and don't allow, you know, negative people to pull you down and I suppose I very much subscribe to that type of theory in life (CS2/ET1)

She followed this with:

I think now, an awful lot of it is to do with personality with me. I'm a cup half full person and I enjoy work and I enjoy meeting people and I enjoy working with students and I suppose in business, especially in year TY, or even you know with your first years, you get the opportunities to do different things. You might not necessarily get it in Maths but I can bring my first years to the local bank. I can get them to do, let's do a big poster up on global brands (CS2/ET1)

In essence, she could identify in herself the qualities of an entrepreneur and used these qualities in her teaching. She also exhibited the risk-taking approach associated with entrepreneurship. This was evident when she left her job in the banking sector for a teaching career. She was creative in other tasks within the school. For example, when she was part of the open evening team preparing for prospective first year students there is an emphasis on different approaches to learning and the importance of allowing the students look outwards towards possibilities.

All this creativity in her teaching and the risk taking in her own career choice was focused on the promotion of the students' skills for life and work:

I know myself and I think with kids even in enterprise, teaching them, if they know themselves and they know and are aware of their abilities and what they are good at, they will see that you can take a risk and it will pay off, school is not all about learning things off for exams, we have to teach kids the skills for life and for business (CS2/ET1)

Enterprise teacher 1 was passionate about developing skills in the students and placed this as a priority in her teaching and yet like other teachers within this study, she never interrogated the distinction between the terms enterprise education and entrepreneurship.

All this success and the nurturing of a culture of success was built within the school, yet five out of the six persons interviewed displayed a confused understanding of the terms enterprise education and entrepreneurship, only enterprise teacher 2 was clear on the distinction between the two terms. This lack of understanding regarding a basic definition of the terms did not diminish their involvement in enterprise education and the development of life skills. Although they were unable to clearly see or elucidate on the terms, they fervently believed in the inculcation of life skills in their students and the value of student participation on the various competitions in achieving this goal. It was a fluid and challenging situation of teaching that required constant monitoring and leadership from the teachers.

I never know what I'm going to meet from one class to the next or from one year to the next. From one Transition Year to the next and I know I'm mentioning them more so because I suppose it's where we do a lot of the activity with them and it's where they have the freedom and the opportunity to do it. You find that they may have different interests, they may be very motivated, they may not be. So

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it's all down to reading the room and finding out what will work best for a group. It can be difficult to let go and let them take the lead. Not what I was used to in school or when I would have started to teach way back. But you learn, you have to... (CS2/ET2)

Since this teacher of enterprise had started to teach, she had received no specific education in entrepreneurship. When she was asked to expand on where her interest and engagement with the programme had originated, she replied:

It's just been really interesting and I absolutely love to see the students grow and the skill sets they acquire, the confidence they build up, it's just marvellous (CS2/ET2)

She continues:

I don't know. Now, I think, I suppose, at the end of the day, you have to have an interest and you have to want to be able to encourage them. As I said to you earlier, I actually think it's fantastic. I love to see when they grow and they develop. For me sometimes, it's not the child who gets the A1 that will give me satisfaction, it's the child that has struggled blood, sweat and tears and maybe gets a D or maybe gets a B and that B would have been blood from a stone effort and I love to see that. I always feel that it's great to see the progress they make and the skills they learn (CS2/ET2)

However, her involvement and participation was dependent on her time and if she could give enough time to the students and the programme. Personal circumstances dictated the level of engagement she gives to the enterprise programme in the school.

She stated:

That's why every student does TY in business and various years I've given them the opportunity to do the student enterprise awards, you know working with me through lunch time, sometimes it was after school. If they were my business students, I wanted them to do it. However, I haven't done it every year because it's extra and I don't always have time. There's a lot of other commitments outside of schools so from year to year, it would vary as to whether I could offer that opportunity to them (CS2/ET2)

One life skill which is actively promoted in this school is communication. Students were facilitated with a specific communications course within the transition year programme. Once students had completed the course, they may sit an examination certified by City and Guilds. The examination had a cost implication and was therefore optional to students. This passion for promoting communication came from one of the enterprise teachers:

I have always felt that presentation and communication are really important in business and no matter what area you go into now, communication, teamwork is enormously relevant. The ability to

actually speak to individuals in a meeting, to speak to people as a presenter of something or to actually stand up and deliver a speech, a talk about a topic are all things that they need to be able to do, whether it's college or in their working life (CS2/ET2)

This prioritising of communication in the transition year programme is interesting given the emphasis placed on competitions from the different subject areas. The teachers involved in the competitions easily recognise the benefit of enhanced communication skills than the teacher who were not. This point was exemplified by the two non-enterprise teachers interviewed.

One non-enterprise teacher was an English teacher who was not directly involved in any of the big competitions which the school entered whereas the other non-enterprise teacher was a Science teacher who was involved in national competitions with his students. The English teacher saw no link for him with speakers coming into the class and speaking with enterprise students:

Specific from a skills development point of view, hearing the man speaking fluently. Seeing a man who is at the top of his profession, I suppose, you know, a reputable man coming in and speaking fluently and articulately, that could be one way I could link it but in terms of inspiring well certainly a man like that would inspire them to go ahead and achieve. That's one way I could look at it but frankly from cross curricular links viewpoint, I can't see how it could be relevant to something like English bar the ability to communicate (CS2/NET1)

There is evidence of some opening up to broader educational outcomes and specifically lifelong learning.

There's a couple things about that [Key Skills poster]. It informs our planning and we put it into our schemes of work and our own department plans. They are in there. But I guess by, the way we go about our business in my department and in all the other departments would kind of take for granted that these skills are being developed as a matter of course (CS2/NET1)

He did not see the cross-curricular element to the skills and the general application across the curriculum. He was only interested in his own subject area and not the skills which can be transferred across the subjects. His primary focus was on teaching his own subject content. He failed to see the holistic aspect of learning and skill development.

I think these skills are not really integral to English and I must focus all my attention on that rather than thinking, would the business students have any use for them (CS2/NET1)

This perspective was not shared by the second non-enterprise teacher, a Science teacher with over forty-one years' experience of teaching in the school.

And a good student and so we try to get them tuned in. Not just to the news world but the business world and whatever is happening out there and not to be living in their own little cocoon and you know be aware of what's happening and we were talking about the chemical warfare in Syria and so on in the last class, you know. But get them talking, discussion and, you know, authoritatively. Be able to speak out, it's very very important. Communication skills, very important really (CS2/NET2)

The importance of communication as a life skill for students was further stressed along with critical thinking.

Being able to think. Like, it's not just recollection but giving information and how you decipher it and being able to utilise your knowledge to solve, problem solving I suppose essentially... You would give students problems and you would always, you don't tell, you don't tell them. You'll always have to see how you would get, and talk to them, and how you would get around the problem, you know. And try and lead them to solutions to it. But it must come from themselves, from their own knowledge and their own, you know, sort of, critical thinking, I suppose to repeat the word again. And just by working with them and giving them examples (CS2/NET2)

His appreciation for communication along with other life skills was based on him having students entered in competitions and he could see the value of students being able to speak and talk about their experiences and learning. This priority for skill development was also remarked upon by the parent interviewed:

I think it's important that they, say, it's important that they learn all of those life skills, that they can go out, that they can speak to people and that they don't sit back and that they know how to approach people (CS2/PT)

The teachers were supported in their endeavours by the school principal. This was not surprising as it was a school level strategic decision to prioritise certain subjects which consequently had achieved national awards. Both of the enterprise teachers acknowledged the support they received from the principal.

I have to say we are very lucky in the school. We have a very very supportive principal, you know, in terms of whenever we want anything (CS2/ET1)

I suppose, with support from management. They've always been very proactive in helping us in anything we need (CS2/ET2)

The principal was equally effusive in his acknowledgement of the input of the teachers into the successful competitions and the culture of winning developed within the school. The researcher enquired from the principal as to where he thought the drive for success originated, he replied:

Well you would love to think it's driven from the top but that's not all of it, I mean, what does come from the top is you create an environment where teachers and students are happy. One of the things I love to see in the mornings and when I'm walking around corridors is lots of laughter, teachers, when they're walking around stop and chat to students. And like, we accept that as the norm (CS2/PL)

When probed further on how he thought it may have developed, he ascribed their success to a culture of hard work and long hours, many of which were beyond the last school bell in the evening:

Just create a culture of people wanting to do things. Look, I leave here most evenings about 6.30pm. I start at 8 o'clock. By 8.20am there will be seven or eight teachers in the school. Not sitting drinking tea in the staff room. In computer rooms, printers, getting stuff ready for the day's classes. They do that. When I leave, there will be a lot of teachers just leaving at 6 o'clock. Like you come back here at 5.55pm, you'll see still 12 or 13 teachers' cars here (CS2/PL)

This work ethic was imbued with a culture of collaboration among the staff in the school. A point acknowledged by all the teacher participants in the study:

There are four of us who have been involved in the LCVP programme but even within that, I suppose, we ask other teachers lots of times for assistance and help whether it's a project to do with agricultural sector, the teacher doing biology around science, could be a physics teacher, could be a chemistry teacher, could be the technology teacher, art teacher, you know, they've been able to approach all of those so they've all come on board in a sense and given little bits of feedback to myself or the other teachers or to the students if it was necessary (CS2/ET2)

I have seen a lot of cooperation, thinking specifically now of the Technology department and thinking specifically us of the Science departments because there seems to be a lot of collaboration between them (CS2/NET1)

The support for the teachers did not only come from among their colleagues and the principal. They were also supported by parents and local industry. The makeup of the parent cohort, was largely from the business people in the town. This allowed for parents' support to the school directly from the platform of the Parents Council, or indirectly through supplying guest speakers to the school along with being able to offer access to

local businesses in the town. It also nurtured in students an interest in business and enterprise as they could see it in action in their local area and home and so had grown up with it.

Enterprise teacher 1 could see a big difference between this school compared with the last school she had taught in which was in a rural location:

Compared with the last school I taught in, there are more children from business backgrounds. Which I think helps students in the seeing entrepreneurship in action and not just reading from a book. Also, can see the difference when looking for examples from students in the class. They have a point of reference (CS2/ET1)

The context and presence of parental support was not only confined to enterprise education, it was given in many different guises. As a way to highlight this point the principal spoke of how the parents willingly painted the classrooms in the school recently.

Like the support from the parents association have been huge. Like, I mean, two Saturdays ago, we had 22 people between parents and teachers in painting the corridor there. Last Tuesday night at 7 o'clock until 10 o'clock, we had 18 parents and teachers in finishing off that corridor. That's impressive. That does not often happen in schools (CS2/PL)

A possible reason for the support from the local business community was that many business people were past pupils of the school and so a culture of support was embedded within this community as well as with parents, even if it was more *ad hoc* than organised and resource linked.

The local business people have been absolutely brilliant. And they have been absolutely brilliant because an awful lot of them are past pupils. Even ones that aren't past pupils. Like the amount of help we've gotten has been phenomenal (CS2/PL)

Links to businesses because sometimes I know, we have links here and we are developing and we are trying to work and develop stronger links with our chamber which would be a fantastic resource for the school to have. A much stronger one than we currently have. We are looking to do that and they have been proactive with us in that whole approach as I think sometimes, we may not be able to get information on certain types of businesses because they are not around here. We are disadvantaged hugely geographically and I do think it's a pity that sometimes there isn't a financial resource. I know I'm mentioning money but I wish to God sometimes there was a bit of financial resource that, for the schools that are disadvantaged in terms of being able to have opportunities to have access to things that are going on. There were some wonderful things happen at times in some of the cities but it's a long way away. It costs a lot of money to get a bus load of students to these things, never mind all

of the time but they don't really get those opportunities because you can't keep asking parents for money for this, money for that and money for the other and I do think, I genuinely think the students are disadvantaged because they don't have the same opportunities to access these things (CS2/ET2)

The principal here describes very well the influence of location. Every location has advantages and constraints and this leads to different perspectives on the extent and influence of location on the available support to the schools. Location was not the only constraining factor for school 2. The shackles of the curriculum and syllabi was another issue raised and how it militated against the flexibility and creativity required for an enterprise programme.

Learning outcomes have to be learned and you are going to prepare for an exam because parents won't remember if I had a class of 20 E's in business and yet they were brilliant communicators and you know, they had good organisational skills. They won't remember, you know, they'll be thinking, my son didn't get his points (CS2/ET1)

Enterprise teacher 1 was content to follow her own style and methodology, but was acutely aware that she was swimming against a tide of curricular demands and the terminal examination.

The demands from parents and students who seek entry to their preferred college course was an important consideration as she realised that they ultimately only valued points in examinations. While the promotion and development of soft skills in students is valued somewhat and is viewed as important, it will always be trumped by the need for points for college entry.

This issue becomes extremely relevant in the context of the senior cycle review process which is currently being initiated with a view to potentially changing the content and assessment features of senior cycle. A point succinctly addressed by enterprise teacher 1:

Students sitting in front of you who want their H1 in business and the way that the Leaving Cert course is at present, that's what you've got to do. It's a marking scheme, it's, you get two marks there, you lose four marks here, you don't put a label on it. So do you get me, it is, your gearing towards the exam and I would love to have the opportunity, you know, to be doing different projects with them. But these guys want their top grades and you can forget any skill like enterprise when all that matters is learning off material to write in an exam hall in the middle of June (CS2/ET1)

The primacy of the examination is central to all that occurs in the classroom. Examination preparation is prioritised above all other aspects or foci of teaching and learning.

This point is also significant in the context of the development of an entrepreneurship education policy for post-primary schools as cited as one of the aims in the Action Plan for Education 2017. Neither of the two enterprise teachers interviewed were aware of any national or EU policy for entrepreneurship education. Yet they laboured valiantly with their own understanding of what was important and valuable in enterprise education.

When asked what they would like to see happen in the future, the ubiquitous issue of time and effort was again raised as an issue for concern:

Say your teaching banking, they love stuff like the night safes and all that, but bringing them up and letting them see how it works in the bank, this is what happens in a bank, that's where the real learning happens. Business is all around us so there's so many opportunities for them to go out there and to get hands on experience of it but I think time wise we're restricted by a syllabus. Simply isn't the time. (CS2/ET2)

Time for developing enterprise is an issue considering the syllabus demands along with examination preparation. But time is also an issue from the perspective of preparing for the classes and the competitions. Students left on their own will not perform:

They don't tend to do it unless I have done it with them. They don't do it on their own but because, they don't, they can't do it without a teacher. You have to have a teacher. If you want to do it in the Junior Sections, you have to have a teacher that's available to do it and it is an enormous time commitment and I know some teachers would never do it because it's all their own time (CS2/ET2)

This teachers input and having to be there for the students was affirmed by both the non-enterprise teacher 2 who is very successful in the Science and Maths competitions and the principal:

The business teachers would be very good, you know, I think they're very good really. I think they do create that, that get up and go sort of attitude that needed for any success in competitions. It wouldn't happen without the teacher's involvement and their commitment to the programmes and the competitions. Students need to be supported during the year and for them to succeed. It a lot of work for the teachers and time too. Most of it outside of the class timetable and never seen by anyone in the school (CS2/NET2)

The F1 competition it boiled down to like, the business, the science, which was very cross curricular. The work I remember, you know, business teachers, science teachers in here at meetings maybe once, twice a week all through the summer because the competition, the world finals were on in September. This year, it has been a collaborative effort across because there is so much of it, like it's

the STEM subjects but there is so much of it a business thing, like a business plan, raising money, all of that kind of thing (CS2/PL)

School 2 had decided to prioritise three subjects in the school. Business Studies was one of the selected subjects. This facilitated their entry into the SEA and a culture of winning developed over time in the school reaping reputational benefits. A culture which was promoted and supported by the students, teachers, parents and leadership of the school.

The development of skills was prioritised teachers and supported by the parents who were highly invested in the school. The primacy of examination preparation, while acknowledged by the teachers as important was not the overriding objective for their pedagogical practice. Teachers exhibited and modelled the enterprising characteristics which served them well for achieving success in numerous national competitions over many years.

4.3 School 3

School 3 is a co-educational school located in the northwest of Ireland. It has a student population of 566 with 52 full time teachers. The school is one of two post-primary schools in the rural town. It has a long history of participation and success in the SEA, and uses the success as a competitive advantage over the other post-primary school in the town. Both schools are co-educational which adds an additional frisson to the competitive relationship which exists between the two schools.

The location of the school was raised by many participants within the interviews. The rural location and its isolation from larger towns and cities was perceived as a disadvantage by some and an inverted advantage by others.

If you were in Dublin maybe you'll see different opportunities for different business ideas that they mightn't think of here. We are seen as a disadvantaged area and we are! (CS3/ET1)

This view was shared by the parent interviewed. However, her perception on the issue formed a different perspective. She believed that the location provided an impetus for the students and the inhabitants to achieve in every area of life and strive to be the very best.

Parents, they know the children if they want to succeed they'll have to be educated, because we are rural. There is not much opportunities locally. So that's the added drive for a lot of people to perform and achieve whether in school or in the workplace (CS3/PT)

The desire and need to achieve was also identified by the non-enterprise teacher. She was from another town in the county twenty miles away. However, since living and working in the town for the last decade she too could relate to this need for achievement among to local people, a need she did not see in her own hometown.

It's a town where they are always doing different initiatives and so on to get new businesses started up, as opposed to even my own hometown. I know it's a greater population and so on, but there is always something going on within the community here (CS3/NET1)

She continued:

I feel like Town X has always been in the more forefront of that, I don't know if it's because it is closer to the border or what the situation is. But I think just in the mindset the kids pick up on that as well. And I found that there is a real want even with our kids to do really well. And to be successful and to have that idea, they would frequently talk about being millionaires and I see that there is an ambition in the kids (CS3/NET1)

This need to achieve also was also reflected by both enterprise teachers interviewed. Both originated from the town and from business backgrounds. Enterprise teacher 1 came from a retail business and still worked in the business during the school holidays.

I grew up in a family business and it's still up and going on Main Street. It's a department store, so I have been working in it since I was 8, 9, 10 so that culture is there with me to begin with. And then I went on and did retail management in University and then I went to work for Revenue and I ended up doing the H-dip in Limerick (CS3/ET1)

This experience of working in the family business is something she had not reflected on in great detail heretofore, as she had viewed it as part of her life.

It's something that I have been brought up with, it's comes easy for me to actually participate and encourage enterprise, lovely to see people succeed. Never really thought about it before, but it does affect me and my teaching (CS3/ET1)

The second enterprise teacher in the school also had come from a local family business. This too had instilled in her a love for business and a deep interest in enterprise.

Basically, I had an interest in business because I had been brought up in a business background, my father always stated that this is education for life, working in the shop on a daily basis (CS3/ET2)

She did not come to teaching immediately after leaving school and qualified as an accountant, she began her working life in London.

I wasn't going to be a teacher, I wasn't particularly fond of school. I enjoyed some subjects, but by and large I would have found it boring to be honest (CS3/ET2)

After working for ten years in London, with IKEA the international furniture retailer and for a short while with Sir Richard Branson, the international airline mogul she decided one day out of the blue she wanted to become a teacher. This she did and was fortunate to secure a job in her *alma mater*. She began teaching in the school twenty year ago. LCVP was still in its infancy and she was asked to coordinate the programme. She loved teaching the LCVP. It offered her flexibility and an avenue for her to explore and apply her knowledge, creativity and imagination.

I was given LCVP and because it wasn't a structured programme per se at the beginning there was an enterprise section. I was the new girl and nobody else wanted it. And I absolutely loved it (CS3/ET2)

It afforded her the opportunity to develop active learning among the students and not to be constricted by a textbook or a highly detailed syllabus document. The specific learning outcomes for the LCVP were ideally suited to provide flexibility and the promotion of student-centred teaching and learning. One of the modules for the LCVP is entitled Enterprise Education.

I do get great enjoyment myself out of it, but it was a way of fulfilling this piece of report that had to be done, and it was an opportunity for all the kids to set up a small business of their own. And I thought the learning that students get from doing something, they retain this information. Particularly the weaker kids, and I always seem to have the weaker kids. But the weaker kids are always, not always, but generally always seem to have a business background and if you tap into that they react immediately, they are with you. So, I suppose in teaching that class it's about guiding students and active learning (CS3/ET2)

This active learning approach to her teaching of enterprise was about getting students to become involved in their own learning and providing the opportunities for them to unpack this learning in the classroom.

Active learning, very busy, quite noisy, excited kids, but they are generally very interested in what they are doing. They form their own groups and a leader emerges. A person responsible for production emerges and then a person to look after the accounts will emerge. If you actually set the seeds and let them at it, but you have to give the kids the freedom to do that, in that you can't stick rigidly to a very structured lesson plan (CS3/ET2)

The researcher field notes for school 3 describe the learning environment in enterprise teachers 2's classroom, where the student seating was arranged in group formations and the rules for effective student group activity were displayed on the classroom walls along with an array of past and present students enterprise projects. She appreciated that this approach can be challenging to some teachers. The idea of having to allow the students to dictate the pace of the learning can be difficult. She had the experience of where another teacher simply could not make the connection or implement the active teaching approach effectively, however she had remained committed to the approach.

I think to be honest not to slate anyone else, but other teachers prefer a more structured environment and they have defined learning outcomes, but it's very rigid teaching and personally I would feel unless you have real life examples of speakers who are actually involved in business, you have lost them (CS3/ET2)

This appreciation for the role of the teacher to create active teaching and learning experiences for enterprise students was paramount. It had to connect with the students in the classroom and this involved bringing the business world into the classroom and to draw out the experiences of students for all to learn from in the classroom. This is a fluid process and is difficult to articulate in a lesson plan. This belief was shared by the enterprise teacher 1 who had created an environment in her classroom where open discussion is promoted as 'it's more freer the talking' (CS3/ET1).

Enterprise teacher 2 could now see that the activity-based approach was only now becoming more normalised. In the past there were times when she felt alone. Now it is the preferred option for all teaching and learning as it is a central element of the Framework for Junior Cycle document.

I suppose I make it happen for LCVP and now I'm delighted that it actually is in the new junior cycle (CS3/ET2)

It was through her engagement with the LCVP that initially pioneered the schools link with enterprise education. As part of the LCVP students were required to complete a long report on an enterprise visit.

Enterprise Teacher 2 organised a trip with her LCVP class to Dublin to visit a trade fair taking place in the RDS. On her trip home she decided to organise a trade fair within the school at Christmas time.

And I remember getting back on the bus and thinking, got it! I'm going to have a mini trade fair in the assembly hall (CS3/ET2)

This was the first step for the school's initiation into the promotion and nurturing of enterprise culture.

So, herself and the former principal really went with the idea of the trade fair to start up the wee enterprise in the town. And it went from there really (CS3/PL)

The trade fair was and is open to all students in the school, irrespective of if they study business or not. Such was the success of the first trade fair in the early 1990s, that it has become an annual event for the school and the local community and local people along with parents are involved.

Well that trade fair was something because that happened every single year and it was a big event on our calendar and it happened before Christmas. We also involved...you see we had past pupils

that lectured in the IT and we use them to bring sponsors and local people and businesses to contribute and to give prizes. So, it has become an event when there was nothing going on and no national or local competitions (CS3/PL)

The school trade fair facilitated other external partners to become involved in the enterprise programme with the school and so external engagement from local businesses and schools in addition to the internal support of the teachers was available to the school. This local engagement provided visible modelling of entrepreneurship in the area and examples for students.

The children loved it, and it was a great way to link with the community because we brought the primary schools in and so it was a marketing thing, it was a whole plus for the town, because we would be historically a DEIS school, so historically nothing happening, so we were trying to promote ourselves as well. And I think the fact that we had the community partnership in Town X and we have friends in the county enterprise board and it was just a combination of all and them all and then we had the interested teachers as well, a few business teachers that were interested (CS3/PL)

The trade fair provided the school with a platform to market themselves in the local area and to build a narrative relating to their unique selling point as a leader in enterprise education.

Gives the school a good name that's one and that's a big thing for us, because we are in a very strong marketing environment, so that's a big thing for us (CS3/PL)

Internally also in the school a collegial support network emerged amongst most of the teachers for the enterprise programmes. Enterprise teacher 1 said:

I think our school is very good at pushing enterprise facilitating it, example being a few would use the woodwork or metal work rooms and teachers are very good allowing that. But you might get the wrong teacher and say no it's nothing to do with my subject why would I do that (CS3/ET1)

However, the support of colleagues could not be taken for granted and the enterprise teacher appreciated that it could be taken away from one year to the next. Yet, collegial support was essential to their success. This point was acknowledged by the principal who was aware that no single teacher could deliver the full enterprise programme on their own.

It just so happens those teachers who are business teachers but we would have Art involved and we might have English involved, helping out with presentations and speakers and then there is one of the wood work teachers that has helped in the past. So, there is a cross group element that's sort of way...they can't do it on their own (CS3/PL)

A primary reason for the support offered by the many teachers in the school was because they recognised the benefits for students. All the participants interviewed for the study in school 3 lauded the skills developed by the students through their participation in the

enterprise programme. However, the teacher was essential to nurturing these skills in the students.

The students may have the talent but it definitely has to be nurtured. If you don't, it doesn't matter what students you have, if you haven't someone pushing them from behind to develop the great skills that are developed by participating in the competitions (CS3/PL)

The non-enterprise teacher identified communication as a skill which was hugely important for the SEA, this emphasis on communication is redolent of case story of school 2.

If you are not a good communicator you are not going to sell products (CS3/NET1)

This focus on skill development was welcomed and supported by the enterprise teachers particularly within the transition year. But they encountered difficulty outside of this year as the constraints of a knowledge driven syllabi in the different subject curricula and the emphasis on exam performance was a constant reality. The knowledge content focus of the curricula impacted on the teaching and learning strategies employed. A reality aptly described by the enterprise teacher 1:

But in TY you are not under any pressure with exams. That's the reality of it. The whole structure of the Leaving Cert course doesn't lend itself to any practical work or skill development... No, I honestly think that the Leaving Cert or the normal curriculum doesn't lend itself to skills, now I don't know what way this new Junior Cycle is going to go (CS3/ET1)

The parent was also supportive of skill development and had seen her daughter develop essential life skills in transition Year, but she could see that exams dominated the system outside of this year.

It's a lot of pressure I know they have got to hit the marks to get into the colleges if they want, but it would be lovely to see a bit more skill development and not all exam focus, I loved the relaxed attitude where the student can flourish without the pressure of exams (CS3/PT)

Enterprise teacher 2 and her life experience before she began teaching really affected the way she approached her teaching. She was very strong in her belief in the importance of giving students life skills for themselves and the workplace:

Making it live and relate it to real life, everything has to be realism, education needs to be realism and I suppose what I feel is I had my degree, I went to London, no one had taught me any life skills, I learned how to do an interview through going in and making a mess of it. I think the education system and that's part of enterprise should do that for the kids, they should be educated in that sense, they should be educated how to communicate well with other people, to work as a team. Not the right balance in the system at the moment, now it's all about exams, not life skills (CS3/ET2)

Curricular constraints were evident in the practice relating to the school's operation and timetabling of the enterprise programme in recent years. Owing to the larger number of students in the Transition Year programme a decision was taken to offer enterprise as an optional area of study.

I set up TY about 10 years ago and then we put an enterprise module compulsory in TY. So it was...now there is too many there is 80, so we have made it optional. But at the start it was compulsory (CS3/PL)

This policy within the school is contrary to a view articulated by the enterprise teacher 2 who believed that enterprise education should be for all students in a school and be part of all subject areas.

It's very rigid the system. To do enterprise well in a school is quite time consuming, you need the resources, I do think that we would need to or the department would need to integrate like a plan that enterprise in itself is not a stand-alone subject, it has to filter through the whole organisation (CS3/ET2)

The time and energy which is invested by the teacher in the enterprise programme was a factor in their success. Time was always referred to either explicitly or implicitly by the interviewees. Time for guiding the students, as no matter how entrepreneurial the students, they always required the guidance of the teacher to nurture the skill. This effort by the enterprise teachers was referenced by principal and the non-enterprise teacher.

It's hard to manage enterprise programmes unless you are very very dedicated teacher. Thankfully we have [the teachers] (CS3/PL)

When asked what she attributed the success of the school in the SEA, a non-enterprise teacher responded:

Really dedicated staff members who are prepared to go the full mile to go to the competitions to go down the country to give up their time, that they are so encouraging to put extra hours after school as well if they need. What else, definitely staff and secondly, I would say the different activities we run like the trade fair is a massive factor behind it, the encouragement from management as well, would be...but I think it goes back and I know I said it before it's just the mindset around the town (CS3/NET1)

Key factors in the school's success are cited as the time from the teachers, the annual trade fair, the support of management and the spirit of enterprise which this teacher believes existed in the locality.

The first two of the factors are directly attributable to enterprise teacher 2, who received the support of management and was from the locality herself. However, neither of the enterprise teachers had received any education in enterprise or entrepreneurial education.

A situation recognised by the enterprise teacher 1:

First day back and I remember saying, sure we don't know, sometimes we sit as if we are paddling along, we hope we are doing the right thing, because we don't know. And as I say the local, student enterprise awards, they have a good manual and I do base my enterprise around that (CS3/ET1)

As well as no specific education in the area, the school reported no knowledge of any Government policy or assistance. However, one of the enterprise teachers was aware of the latest research and international practice in enterprise education. She appreciated the distinction between the terms of entrepreneurship and enterprise education, and how different jurisdictions approached embedding them in their education systems.

I know nothing about Government policy. To be honest, I actually do all this, I do research myself what they do in other countries. Although they have started doing enterprise in this country and I admire the work that they are doing and I really enjoy it, I know we are not as progressive as other countries and like England, Sweden, they all have policies in place to encourage this enterprise to be across the board but also to have enterprise as a subject in its own right. So it's basically about teaching children to think differently to be aware of everything that is around you and all the resources that you have, and how to make best use of everything and to become more flexible (CS3/ET2)

Enterprise teacher 2 was deeply passionate about the teaching of enterprise in the curriculum, this passion originated in her own business background in her father's business. She has on her own volition researched best practice internationally and used this to great effect in her school and classroom.

This research had also given her a vision for what she would like to see happen in the system level support for enterprise education in the future. It's promotion as a valuable educational experience within the system.

Put it on as a senior cycle enterprise project or short course, as opposed to Business, enterprise in its own right. Experience enterprise in the real world, allow their teachers to go out, we are sedate really in our thinking, be progressive, send us out for one week, one week and put us into industry and actually change your outlook. You are more in touch with reality, you know those functional skills that the employers actually want (CS3/ET2)

The value attaching to enterprise programmes within the existing system is something the principal would like to see addressed in the future. Presently the value placed on enterprise is recognised locally rather than at system level. Something systemic is required for enterprise education. Something which values the effort of students and teachers and offers accreditation or legitimacy to the programme.

Like to see funding and time for the coordinator and then maybe the whole idea that yeah, if it was...like they are putting on all these short courses and if it was like a short course that was valued, we value it because we are given prizes, the most entrepreneurial student in the school that gives it a credence so they...this thing about enterprise might happen it may not happen it's like....it hasn't happened yet. So it needs to get points, if you want it to be successful in the leaving cert it's going to need some form of accreditation and points (CS3/PL)

Perhaps the greatest accreditation comes from the reward that winning brings to the school and is something that cannot be valued, but is of supreme benefit:

Good for students and great for the school and great feel good factor when they win something, it's a great feel good factor for everybody (CS3/PL)

School 3 ascribed their location as a factor for developing enterprise, as they could not expect to receive any national assistance or support, thus they had developed a culture of self-reliance and enterprise.

Both enterprise teachers came from a business background and promoted the key characteristics for entrepreneurial success. They were not afraid to try new methodologies and to free themselves from curricular shackles in their promotion and embedment of enterprise within the school. They embodied and typified the local culture and dedicated themselves to the skill development within their students at a cost to their own time and energy. Key to their success was harnessing collegial support and local business support for the promotion of enterprise, though at times it was not the popular endeavour. Yet, they preserved and endured once again modelling the key characteristics of entrepreneurship.

4.4 School 4

Case study school 4 is a large co-educational boarding school operating in the North East of Ireland. It is a private school with 55 full time teachers and 455 students. The researcher notes for school 4 describe the abundant facilities available for students on the school campus, such as tennis courts, gymnasium, playing fields and manicured gardens framing an impressive school building. This school was placed at the top of the ranking using the selection criteria outlined for this research project.

The enterprise programme was introduced into the school in the early 1990's as part of the Transition Year programme. Over the years it has evolved and now the enterprise programme is available to first year students along with transition year students.

Transition year started in the early 1990's. I think that was the key. So, you were encouraged to do something different or whatever. So, because I was a business teacher the idea of setting up your own business came about and I remember the very first, let's call it a mini-company we had in the school. All 56 students were involved and it was to run a school shop. Now how that happened was a miracle and yet everybody was motivated and interested and seen to have a role to play whereas now they'd consider 56 people running a little business altogether would seem impossible and then that's where it started. It developed from that and then students started to break up into smaller groups as the years went by and came up with their own ideas and it seemed to just take off (CS4/ET1).

The Programme has now grown and extended beyond the Transition year and includes the 1st years.

Over the years it has progressed into other year groups as well. So, it would have gone from the transition year and now it's part of the first-year business (CS4/PL).

The enterprise teachers could see the benefit of having first years involved, as when these students arrived in Transition year, they were fully ready to engage with the programme and their experience of enterprise in first year provided a fertile platform for programme at thrive.

There was a belief among the enterprise teachers that in the first-year programme students could try out their initial ideas, this experience and the added maturity would mean they came to the programme in Transition year with valuable experience and knew what is required.

The enterprise teachers were ambitious and interested in developing the sustainability of the programme as well as the quality, hence they saw the advantage of introducing it into 1st year.

Transition year would be the main thing. If it wasn't for transition year it wouldn't have happened but interestingly we did evolve into bringing in first years and we were the first school in the area to get first years involved in enterprise and we've since evolved that into having a first year trade fair as well as our transition year trade fair, so we thought we'd give them a taste in first year, then when they go into transition year they'll be thinking about it and they can develop a little bit more (CS4/ET1).

There is evidence of future planning for enterprise programme and structure within the school. Giving students experience of enterprise in first year, so they would be aware of its significance for later years. Also, students could be thinking about ideas for their enterprise during the intervening years.

However, among the enterprise teachers, there was an opinion that the enterprise programmes were not for all the students in the school, due to both interest and numbers.

I think it didn't quite connect with all students. We began to see that and take note of that and we felt that it was not for everybody, even though you could argue, you never know what flare you have in you so we would encourage everybody. But maybe as well the numbers started to grow in the school. We were dealing with say 50 or 60 students in the early years, now we're dealing with 100 and physically, staff wise, we just couldn't cope with that. It wasn't that it wasn't connecting with a large majority of students but because the numbers were growing physically the logistics of it (CS4/ET1).

In the interest of quality and sustainability, a selection process was introduced. It ensured that only the committed students, the students who opted for the programme are involved. This ensured that all the participant students are interested in enterprise. This school policy impacted on their success rating in the SEA at Transition Year level.

It helped with our success in the competitions as you now had the ones who really wanted to be there, the committed students and you could work with them a little bit more (CS4/ET1).

The school's success in the SEA was welcomed by the principal of the school, who was cognisant that the school was a private fee-paying school and therefore it must deliver a broad learning experience and opportunity for the students.

It had provided the school with a niche where they could excel and use it to promote the school in the region. It had earned a reputation for being very entrepreneurial and successful in the SEAs.

I suppose a school like ours which is a fee-paying school, we are very conscious of the fact that we need to be out there all the time, that we need to show something a bit different from the other schools that are around us, that's a challenge for us anyway (CS4/PL).

The students in the school were predisposed to the concept of enterprise, primarily due to their early involvement in first year. This may also be due to the profile of the students who attend the school. Many of the students were from business backgrounds and had parents who were involved in successful businesses in the town. This provided a valuable resource for the students when setting up their own mini-companies. Parents were happy to support the students and *apropos* the school.

The nature of the student we have in the school helps us a lot as many have business backgrounds, I like to say that I think the culture in our school is very encouraging towards enterprise (CS4/ET1)

Both enterprise teachers could see the benefit to the students of having a business background down through the years and how it was used.

I think that some of the students here are in a position that they have good contacts, they do come from maybe a business background. So, it might be easier for them to source materials, coming up with the idea, because they see mummy or daddy or perhaps a relation in their family from a business background. So, it certainly helps I suppose in Ireland sometimes it's who you know (CS4/ET2).

As well as supporting the students in their endeavours, parents who were from local businesses were also available to the school as guest speakers or business advisors.

We get guest speakers to come in and talk to the enterprise classes. We get people who come in from local business who act as consultants (CS4/ET1)

This is a significant resource for the school particularly when the school is based in a large county town. It was noted in the field notes that a list of school sponsors was displayed in the school reception area which included many local businesses in the town.

Many of the parents were involved in the business support networks in the town.

It's a big business town and the Chamber of Commerce is very helpful, the Enterprise Board, whatever and people are always available to come in and the Chamber of Commerce have actually got together in the town now to really tap into this and to lend their support to what's going on and I may say as

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well, we pride ourselves and I don't mean this in a boastful sense, we were probably ahead of a lot of schools at our time, probably slightly ahead of our time when we brought in this whole area of the external business supports, trade fairs, 1st years getting involved (CS4/ET1)

The support from local business is echoed by the second enterprise teacher and the principal in the school.

We do have a lot of support even from the local Chamber. We have business advisors that come in as well that lend their advice and facilitate the students which is great (CS4/ET2)

We get a lot of support from local business; the two teachers bring in local business constantly to talk with the classes. We are very close to the chamber of commerce in the town (CS4/PL).

The principal continued stressing the importance of connection with the local community:

[Enterprise teacher 1] would be very passionate about his own subject of business but also economics and I suppose one of the things that he has is a huge connection with the local area (CS4/PL).

The explicit support of the school leadership was recognised by all the research participants. This support was given from the very early years and continues today under different management.

But we do get support. The school does see the benefit of [enterprise] and they do support us. For example, you might need to get a bus to go to a trade fair event up in Northern Ireland or whatever. There's never an issue with the school on that. They'll support us and again, it's part of the cost issue for transition year as well. In fairness the students are paying money towards it in the beginning of the year anyway but the school, they'll never argue with us over, you know, if you need to get the students here, that's fine, you go ahead. So we are getting good supports that way (CS4/ET1)

The support from the school leadership in the form of financial backing for the running of the enterprise programme is essential and is described by the principal as an important factor.

The school does see the benefit of this and they [Management] do support us. For example, you might need to get a bus to go to a trade fair event up in Northern Ireland or whatever. There's never an issue with the school on that (CS4/PL)

The support from the leadership and management in the school was there from the outset in the early 1990's and was not taken for granted. It was there when they first began to have students involved in the running of the school shop. This was pioneering and innovative, with certain risks, for the time and needed the backing of the school

management. It may appear primitive now, but back then it was quite *avant garde* to have students involved and responsible for money.

That at the time was quite revolutionary because you were allowing students to handle money, you were allowing students to sell things. That never happened in our school before that you allow students to sell, to make profit, to keep the profit. This was like kind of revolutionary at the time. Now it's much more acceptable but back then it was a huge culture change in the school to allow that to happen. I remember the Head Master at the time, it was sold to him and he saw the benefit and he supported it. But you could have thought back at the time there's no way they're going to accept this, students selling, making money, this is the right way to go but thankfully it was encouraged, and it just took off from there (CS4/ET1)

This support for the programmes is also available from the other non-enterprise teachers in the school. Enterprise teacher 1 had noted a change in the attitudes of the other teachers down through the years of his involvement. When he first got involved, active and experiential teaching methods were not generally practiced or promoted in schools.

I think that now people are seeing that education is different, so we have no problem getting students out of classes now once you're respectful to colleagues that you ask. Getting students out of class, before, they would have been questioned many years back - why are you out of class, why aren't you in class? (CS4/ET1)

However, while this was the perspective of the enterprise teacher 1, the parent interviewed had a different perspective and reported that at times both his children would have been called out to by a teacher for missing classes due to their involvement with enterprise. The parent fully supported his children's efforts and believed in the benefits gained from their participation in the enterprise programmes.

But they still would have maybe sometimes been told off by a teacher, where they would have missed a class due to going to too many enterprise projects (CS4/PT)

Despite the risk of upsetting their colleagues, the enterprise teachers had persevered as they could see the benefits for the students as they were developing new skills and enhancing their capacity as self-directed learners.

For students the benefits are too many to number or name. I think the students develop their confidence that this is possible, you can do this, you can create and instead of very much students depending on teachers all the time, this is where they are coming up with the ideas and we now

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acting as facilitators rather than just telling them what you do, follow us, so it puts the responsibility on the students (CS4/ET1)

Both enterprise teachers provide the opportunity for students to engage in independent learning. They saw their role as a facilitator in the classroom. Both teachers share this vision and practice of creating a teaching environment which promotes independent and critical thinking.

There is a structure absolutely in place but it's not, it doesn't rule over everything. It actually just takes on a life of its own and we're more the facilitators and guiders in all of this (CS4/ET2)

They both believed in the importance of getting students to think for themselves and to activate this in their students. Enterprise teacher 1 was an avid proponent of discussion within his classroom. For him, he wanted his students to think for themselves and to learn from their classroom experiences. Exam preparation was secondary to the teaching and learning experiences he provided daily in his classroom.

We all teach to help the students prepare for exams but that wouldn't be my motivation at all. For me if you come into a class, I teach economics and business, you'd probably see me having a discussion with the students, getting their opinions on things, encouraging them to think for themselves. I love getting debates and discussions going in class and the students love that. I now take politics in TY as well and we're introducing this as something next year again. It just gets them discussing, gets them giving their opinions and they actually love doing this. It's encouraging them to articulate their own views, listen to other people's views, which they may not have ever heard expressed before. It just gets debate and discussion going which I suppose in a sense probably links into the fact why I love being involved in enterprise, because you're encouraging people to think for themselves, be creative, not following a hard and fast structure that we must get to page "X" by the end of this class (CS4/ET1)

This flexible approach in his teaching is important to him. He would have a scheme of work, but it does not dictate his practice or process. This flexibility is required when teaching enterprise in classrooms as the outcomes cannot be always anticipated.

We have a plan, we have a scheme and we know what we're doing but we're very flexible. A lot of the time, what you're trying to do is giving advice. The students are learning from their mistakes. You're constantly feeding back, you're constantly sitting down with them so they're learning as they go along, so it's very much hands on, they're learning, they're getting feedback so when an event is organised we sit down, and we do a debriefing session and we give them feedback (CS4/ET1)

Schools are so regulated with set time periods often only forty minutes each week and the ongoing need to cover specific material as prescribed in syllabus, which is not conducive to the approach described above. It then becomes difficult to promote enterprise and still conform to all the strictures of a school timetable.

Schools are often the most difficult place to encourage enterprise 'cos it's just so regulated with so many periods in the day. I can remember years where you'd be sneaking students here and there hoping the Head Master wouldn't ask too many questions (CS4/ET1)

This has changed overtime somewhat, there is now a much more open environment for teaching and an appreciation that not all teaching must take place within the confines of the classroom walls. This was not always the case.

The whole way we grew up with is that education had to be in a classroom with homework and it was structured and if people are wandering or sitting outside somewhere or whatever or going down town to link in with people down town to organise an event, this can't be education. Where now I think there's a real acceptance about it so it has become much more easy for us to run this programme now so that education is happening all the time and we've got out of this straight jacket of its got to be sitting in a class, one teacher talking, everyone quiet and all of that (CS4/ET1)

In a sense, it was the view of the teacher that the system had now caught up with the enterprises teachers' vision for active and experiential learning. The focus now is on developing skills in the classroom along with knowledge acquisition.

I think that's the way education is evolving now, it is the development of skills. So, for example if I go into my transition year class and I take, for example politics class, I'm not told I have to get this amount of content covered today. So, we have a discussion and at the end of the day I don't have to be looking back and saying - I've got this content done, or that page is covered. I now say we have the skills of listening, communication skills, and presentation skills, all of these. It frees you up as a teacher as well that it's about the skills. There's learning in everything even if it was badly wrong, there's learning. So, its skills and that's the way the Junior Cert is going to be so I think this is a natural follow on from that (CS4/ET1)

Enterprise teacher 1 could see the benefit of skill development and its significance for the enterprise student. There was learning from all experiences, both the successes and the failures. This approach enables student resilience, a key skill for any entrepreneur. This perspective on the importance of skills is shared by the principal.

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This school is very much about developing other skills, which are not just about someone going off to do economics or accounting or business. Need to balance the knowledge with the skills (CS4/PL)

Parent can see their own daughter benefiting from the skills promoted during the enterprise programme.

I have seen first-hand as a parent, I was at one of the trade shows and they were out talking to parents, sometimes my daughter would have been quite shy, she has come out of herself and gained confidence in talking to adults. And I have seen her also work behind a stall in the trade fair and selling the products. And again, it's just that interaction with adults which greatly improved her confidence, and these are lifelong skills (CS4/PT)

This confidence which the students develop assisted their progress in senior cycle. This was acknowledged by the non-enterprise teacher interviewed within the school. She taught English to all years in the school.

If all students in the school had a little bit more enterprise, more confidence to go for it yourself, give it a go, you are worthy, you can do it, your ideas or your way of doing it, and are just as valid as my way of doing it, have confidence with it. Enterprise definitely builds that confidence in the students and it that confidence which helps students to succeed in life (CS4/NET)

She could see the difference in the students who had being involved in the enterprise programme, and as with the parent interviewed could see the developing confidence. She was also clear that the success of the programme was due to the passion and hard work of the two enterprise teachers involved.

The core group of business studies teachers, I think work exceptionally well together and have put in a lot of hours outside their classroom hours to really encourage enterprise within the school ... the work they put into it. They definitely I mean without them there, who's going to spur it on? You know ultimately I see an awful lot of growth in the kids, when they do that enterprise and that it is their own project work there. But in particular I suppose that's a key one there. But without the teachers behind them saying you have a project to do, you got to produce a piece of work or produce a plan for a business or you got to come up with the goods or whatever it is to sell, I don't suppose they'd really do it (CS4/NET1)

The parent commented:

The two teachers, they have the ambition, the drive to push it forward, they give the students energy and responsibility for leading their own development in enterprise and it's their experience and what they can offer the students it's who they bring into the school to talk to the students, it's the efforts

they make in coordinating the programme. I think from a parent perspective it has to be driven by the two teachers in this school (CS4/PT)

Principal affirmed these views expressed.

The enterprise teachers are extremely passionate about it (CS4/PL)

Interestingly only one of the teachers involved had received any training in enterprise. Enterprise teacher 2 received her Teacher Education in the North of Ireland. She qualified as a post-primary teacher in Belfast and completed an optional module provided by the College on enterprise education.

I went to XXXX College up in Belfast and at that time they were really pushing the idea of mini companies as something that teachers could offer as extra-curricular activity... they were sort of gearing you towards offering that as sort of an extra string to your bow when you were applying to schools (CS4/ET2)

She goes on to say, that it was this module that prompted her initial involvement in the enterprise programme in the school and gave her the foresight to act as a facilitator in her classroom for the teaching of enterprise.

You're not telling them what to do. Its more guiding them and providing the advice or making sure that they've covered the basic steps but it's very much hands on the part of the student...for me it was more something that I was willing to get involved in because I saw it operating in some schools. I had gone out on teaching practice and I saw the benefits of it and certainly because it was very much, you know there was a big push on providing this as an extracurricular activity so I was certainly swept along with the positives of mini companies in the North so certainly when I came here for interview and then obviously got the job I was very happy to sort of get stuck in and get on board with mini companies here at the school (CS4/NET2)

The greater level of support given to enterprise in the North of Ireland was not only within Teacher Education, but also with regard to the funding provided to the schools. Given the schools location with its proximity to the North of Ireland, they have been involved in Trade Fairs with schools from across the border and again the amount of support given to school in the North of Ireland is commented upon by the enterprise teacher 1. Both the enterprise teachers could see the level of support given to enterprise programmes in the Northern Ireland was greater than what was offered in this jurisdiction.

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The cross border trade fair came about was basically a class discussion, the troubles were still going on in Northern Ireland and the young people said - can we do something to help this and then we thought, well you're involved in enterprise so let's organise a cross border trade fair and it very much came at the time and the wonderful thing is that event is kept going every year even in the foot and mouth crises. We actually held it even though we didn't get any groups coming from Northern Ireland we thought it was important to keep it going. Now we get great support from the local Shopping Centre on that. So, what I was going to say is that Northern Ireland is really well developed in this. They really get good funding in this, they're probably ahead of us down here. They have been at this a long time and they get great supports from their Government, which we don't get as much down here (CS4/ET1)

The lack of system level support was an issue raised consistently by the interviewees. The local support was lauded, while national system level supports and their absence was criticised.

The local support was harnessed by the teachers informally and was dependent on the teachers involved. Even the level of national publicity surrounding the SEA was questioned in comparison to other national competitions for post-primary students.

I look at the Young Scientists and I see all the publicity it gets, all the funding it gets, it's in all the National papers. In fairness, it is enterprise but the National Enterprise Finals for students announcing student enterprise awards does not get the same coverage, does not often get the Minister going, does not get the media profile and the like and yet more students are involved, and it very much comes from the students and why is that. Schools are often the more difficult place to encourage enterprise 'cos it's just so regulated with so many periods in the day (CS4/ET1)

At national level, the Government is committed to promoting and developing enterprise, but this objective is not evident at school and local level.

Government, they talk about encouraging enterprise and they do their bit but I'm quite passionate about this, third level gets a focused a lot, people in business get focused on, it's like as if, and it used to annoy me a little bit, secondary school students, a pat on the head - aren't you great coming up with your lovely idea and I thought, I didn't mean it was condescending but we're serious about this and I think that we'd be saying - they're giving us a nice little pat on the back and aren't you great and aren't your students wonderful and whatever and I'm saying - these are serious people, we're serious here, this is serious work, don't be looking to the third level sector, come down to the second level sector and see the serious work that's going on. So I think there could be a little more focus on second level. I'd love to see the enterprise events getting more publicity (CS4/ET1)

This lack of interest by the Government was also something which the principal of the school highlighted and considered that the Department of Education and Skill's focus on the STEM subjects was to the detriment of other subjects.

The priority given to STEM subjects and science subjects that has almost taken over to the detriment of everything else... And I suppose our shift in national view and focus is really towards an economy where we are driven by pharmaceuticals, we are driven by a certain high degree of high level jobs like in the science, in the computing, in all of that and the entrepreneurial side if you are asking me, yes there is an imbalance when it comes to that. I think that the government sometimes is a bit like a lighthouse where their focus sometimes changes depending on where they feel, and I think maybe more of a broader approach, towards everything is probably something that they should be practicing (CS4/PL)

This outlook for the future was something which both enterprise teachers had considered. Enterprise teacher 2 would like to see more resources for the programmes in the future.

I would like to see a little bit more resources pumped into facilitating students to help them to be a little bit more enterprising. I obviously understand that it's coming in in the new Junior Cycle, there's more of a focus on it and that's positive but still we would find that the teachers ourselves have to go out and look for the business advisors to come in. It's not set up in any way for us and as I said earlier, we've been very fortunate that the local Chamber of Commerce have got together and met with teachers last year in the town to see how they could facilitate schools either through interview processes or also in entrepreneurship as well. It's not something that you see, oh yes, this is the Government initiative, that's not happening. It's all down to the teachers on the ground (CS4/ET2)

As well as more funding for the future, there is also the desire to create a network among enterprise teachers as he had seen the benefit of his own networking down through the years and his involvement with the programme.

Training, any form of training is always valuable... for me the greatest thing is going out and meeting other colleagues in other schools and feeding off each other. I would like to see an awful lot more interaction between schools where teachers can interact because they'd be coming to us and saying - you've been at this a long time and we'd be thinking oh right because we just don't think like that. They say - we can learn from you. So anything we can learn from each other and I'd love to see a lot more teachers coming together and exchanging ideas, like if you go to a trade fair event the teachers are sitting on the edge, bring them in, sit them down, bring them into a room and start getting a debate and discussion going (CS4/ET1)

School 4 has been involved in the SEA for many years, it has strategically extended the programme to first year students, so capacity building take place among the students before they enter transition year.

This has worked well for the school's success in the completion along with facilitating only students who are interested in enterprise to become involved.

The reputational advantage to the school is acknowledged by all interviewees in the school, and is particularly important for their status as a private fee paying school serving the local business community.

This parental demographic with strong business connections within the local town has been very useful to the school and facilitated the school's access to key business speakers for the enterprise programme.

The two enterprise teachers are passionate about the teaching of enterprise and are not constrained by the inflexibility of the school structures, though they readily admit that these could be obstacles to effective and rich enterprise learning. This typifies their vision and confidence and their ardent belief that enterprise must be taught in a manner that promotes and embeds skill development, where failure is simply just another valuable learning experience. Yet, all this happens and is sustained at local level without any Government or national supports, which ultimately means the enterprise provision within the school depends on the two teachers involved.

4.5 School 5

Case study school 5 is a co-educational school situated in a rural setting in the West of Ireland. There are 29 fulltime teachers and 373 students. This school is unique among the five schools as it is the only school where there was no transition year programme in the school. This is because a tradition has developed whereby many of the students when they completed their Leaving Certificate would complete a year-long Post Leaving Certificate (PLC) course in Business and Information Technology. This PLC course is a level 5 course on the Nationals Framework of Qualifications (NFQ). Students would typically complete their Leaving Certificate and regardless of their future career plans, be it third level or full-time employment, they would enrol for this course. This strategy is viewed positively by the teachers and the parent interviewed as it provides students with the opportunity to mature and develop important lifelong skills. The tradition of completing this PLC course had resulted in transition year not being introduced to the school.

If we had the Transition Year it would help to carry the crop of first and second or third years that participated in the enterprise competition, they could develop it in junior years and get more out of it when they came to transition year. So in one way we're ahead of the posse, and in another way by not having Transition Year we're behind, but in the other sense people that finish here can go and do their PLC in the Business/IT sector and have a Level 5 before they go onto college, that year is used that way. So, some parents in the area and the principal, has raised the issue of Transition Year and each time it more or less has been voted down. They want to continue with their system of having this PLC course. It is there since the school was founded in 1964 (CS5/ET1)

As referred to by enterprise teacher 1, the school attempted to introduce transition year, but to no avail. With no transition year, enterprise in the school was not part of the formal curriculum and had no timetabled classes. Both teachers involved in the teaching of the enterprise programme in the school have no business experience, qualification or background. They are from a metalwork and history background respectively. The entire enterprise programme is delivered outside of the structured timetable by the two teachers. It operates completely outside of the Business classes at both the junior or senior cycle. Enterprise teacher 1 was the primary promoter of the programme within the school.

We don't have TY so it's done outside of the classroom mostly. It would be Deputy principal [enterprise teacher 1] who would have gone to school here himself the vocational school, then became the metal work teacher. And as he was the metal work teacher there was a tradition in that

particular class that he'd be making stuff and he started off making candle stick holders. And I think it's largely down to him and then he got a few other teachers on board. And at the moment it's down to him and one other teacher whose pushing it. So it's not part of the curriculum it's extra (CS5/PL)

Non-enterprise teacher 2 supported this view regarding the primary promoter of the programme within the school.

I would say [enterprise teacher 1] is the main runner of it, he's fantastic in terms of he got the whole thing going in the school about enterprise himself. He knows how to encourage the students (CS5/ET2)

Enterprise teacher 1 was from the local area and had taught in the school for over 36 years, crucially he was also very active in the local community where he was the Secretary to the local enterprise centre. This gave him a deep interest in enterprise and its value to the local community, particularly in the West of Ireland. Enterprise teacher 1 pioneered the introduced of the programme in the school in the early 1990's. Over the intervening years he has received help from other teachers in the school, but this support was transitory, as he would have approached different teachers and asked for their assistance.

During the years I had different people coming to help me out: there was [enterprise teacher 2], a history and geography teacher, for a number of years helped out, there was some part time teachers that came and went over the times... over the time there was occasionally people that came for a year or two and went ... it's hard to keep it going in the school (CS5/ET1)

This allowed the researcher to gain an insight into how difficult it is to get teachers involved as time and effort is extra-curricular. This difficulty of getting teachers to contribute to the programme was raised by the principal.

It is challenging to get teachers to do it, but we would facilitate them if they needed to be freed up for the day to go to the awards, so another teacher would take their classes, so if we didn't have the willingness of other teachers to free up the likes of e[enterprise teacher 1] and [enterprise teacher 2] to go away it couldn't happen, so teachers do cooperate (CS5/PL)

The other teachers in the school are happy to co-operate as regards providing substitution for their colleagues, but not to be directly involved with the programme. This co-operation was evident from the field notes for school 5 which describe a supportive atmosphere among teachers within the school, with teachers eagerly offering to substitute for each other on the day of the researchers visit to the school.

Over time, there was no plan for how enterprise was to be promoted within the school or any formal connection with the two Business teachers in the school or with the LCVP teachers who teach the module Enterprise Education.

I wouldn't be directly involved as a subject teacher teaching say Enterprise or Business, but the school itself the teacher's would have an appreciation to encourage Enterprise, or the two ladies that do - who do the LCVP modules, they have a conscious awareness of the Enterprise programme and what it means and the number of people that participate in it. But we wouldn't have any strategic... It would be the student themselves that would come in here and have an idea and say, "I would like to take part in the competition," and there's a little booklet provided by I'd say it's a standardised booklet that each people get (CS5/ET1)

This approach to how the enterprise programme is provided in the school is described by the principal as:

It's very informal still, and very ad-hoc (CS5/PL)

For enterprise teacher 1, he believed in the core element of the SEA, this was to develop a product and sell at a profit. His vision for the programme and the teaching of enterprise is focused on the development of a product or service and making a profit. The development of skills was secondary, and though he appreciated this as important, it is the pursuit of profit which guided his thinking.

So, everything is based on making money - does it make money or what? - because that drives the people... that initiative in them to say I want to make money (CS5/ET1)

His vision and initiative stem from was the simple concept of promoting enterprise within the local community

I think it's just simple interest in it, you just keep it going, it's like in the school another teacher - he just retired last year - is in volleyball and our obsession with winning, School X is the top west of Ireland volleyball school and ours is the number two, but last year we became the number one. So I mean his obsession with volleyball and my interest in Enterprise would be, I think it's so important to the students to have an opportunity to participate. I think that it's a wonderful scheme, I think it's a necessary part of the survival of places like rural Ireland... to promote local Enterprise (CS5/ET1)

However, he is aware that such an informal approach to enterprise in the school has disadvantages, as it lacked the security of other activities that were in the school.

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Whereas with football and volleyball and basketball and debating and all the things that go on in the school, and drama, the enterprise can fall way down the list (CS5/ET1)

The push for enterprise happens on a year to year basis, and is prompted by a letter from the LEO each August.

The reality is that if I don't go out and look for my clients that are interested in it, if it doesn't get a kick-start, certainly there'd be nobody involved (CS5/ET1)

The programme in the school began with enterprise teacher 1 seeking student interest to partake in the SEA as an extra-curricular activity.

He received support from the local LEO within the county. They provided a booklet for the students who volunteer to participate. Typically, they would have 30-40 students interested at the start of the year, but this would dwindle to half that number over the course of the school year.

Some years you have more people participating than others, so you only can work with the people that volunteer, I honestly believe it could be as low as 5% within the school... I don't think that you can drill it into people that doesn't want to be taken there (CS5/ET1)

The support from the LEO is appreciated within the school is seen as a key enabling factor of the programme and particularly the continued participation in the SEA as it gives a focus and motivation for the students

The Local Enterprise Fund, that's what's allocated to us as well, and in previous years it provided us with a number of workshops where guest speakers have come along and they've helped to actually advise students as well to get their products into shape, so I suppose that would've been of great benefit (CS5/ET2)

This support from their LEO was affirmed by the enterprise teacher 1.

They have a mentor programme where they actually have a mentor that will come around and actually support them and develop their idea as part of the whole programme (CS5/ET1)

Interestingly, the perception of enterprise within the school is that it was for the less academic student.

Because some of the people interested wouldn't necessarily be the high achievers, in fact they would maybe look down on it (CS5/ET1)

This perception that enterprise is for the less academic student may emanate from the perception that enterprise is solely about starting a business and not connected with the development of lifelong skills. Also, there is a historical context which also promotes this perception

This was traditionally a vocational school when it opened up first. And it would cater for the students who intended to leave after the group cert and then the junior cert. So, it would have catered for locals that would probably have preferred to go to the trades or farming (CS5/PL)

This mindset of equating enterprise skills for use with a trade was evident from the parent:

Skills are very important because I see kids now this is my personal opinion, I see kids that I know don't want to be here at all, at all, I know they have to stay till they are a certain age, and I just think that there is a place for everybody and the skills are very important, like the enterprise is important if you want to do a trade after school (CS5/PT)

Evidence of this preference for skill development aimed at the trades among the parent population was described by the principal.

As a vocational school the woodwork and metal work and they are all the subjects that are promoted probably more than others when you have an open nights. So on the open nights we'd have the metal work displays up in the metal work room, woodwork displays and certainly the amount of science in the science lab as well but parents always drift to the metal work and woodwork room because a lot of the parents would have come here and they want to see what products they are making. So, yes by default or tradition in the school there would be that emphasis on making things on products and what people make (CS5/PL)

Students and teachers who did become involved in the enterprise programme and the SEA had to do all the work outside of the formal class time. This typically involves meeting up during lunchtime.

We've no Transition Year in this school which is a little bit of a problem, we can't allocate class periods to it so, you know, often times it's just a matter of doing bits and pieces at lunch-time, and sometimes I give up a little bit of my time in the History class or the Geography class and maybe spend half an hour here and there with students and trying to get them involved and assessing how they're getting on and things like that (CS5/ET2)

This is a situation that he would like to see changed in the future as it was having an impact on his own subject teaching.

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I suppose it would be nice at junior level if more time was allocated in the school towards it. As I said we've just been kind of working at it in this school, I've been sacrificing some of my class periods in History and Geography, but it would be nice to see some classes allocated to it, or even, you know, one class period a week would be good if we could at Junior Cert level (CS5/ET2)

This lack of provision on the timetable has an impact on the profile of student involved in the programme.

I've found First Years are very good at being enthusiastic about it and they're willing to get involved. Sometimes some of the older years; later years from the third year upwards; it's hard to get them to get involved with the actual thing because they're so busy with other studies (CS5/ET2)

None of the teachers involved presently in the programme have received any continuous profession development in enterprise education or entrepreneurship, this was coupled with the fact that neither teacher had a business qualification. They learned as they went along from their own experience of running the programme over the years.

It's all just been learning actually on the floor itself. I've just kind of over the years gained experience here and there, you know, as I said, my background isn't in Enterprise or Business whatsoever (CS5/ET2)

This approach to teaching and learning as they went along was facilitated by the relaxed atmosphere in the school. It allowed for a positive relationship between the teacher and the students and this was also observed and noted by the researcher during the school visit in the researcher field notes for school 5.

I think [school 5] is quite a relaxed school, I think there's a good relationship with the pupils and, you know, we both kind of respect each other, and I suppose that general feeling of good nature between the staff and pupils kind of helps to allow students to work comfortably and confidently at their projects (CS5/ET2)

This atmosphere allows the programme to develop and for the teachers to work with the students in a facilitator role. Given the lack of formal class time for the programme, it behoves the students to become self-directed in their learning.

I kind of take a different approach than your standard kind of teacher-pupil relationship, you know, you can be much more relaxed with them and, you know, it's all about building their confidence as well and some students come to you with ideas which aren't that well developed and it's a way of trying to advise them more than anything and encourage them, you know. Some students maybe

lack confidence at times as well and you have to kind of, more-or-less kind of convince them that their ideas is a good one if they could put a bit more effort into actually shaping it (CS5/ET2)

Where a more austere approach was taken by the teachers, then it could be expected that less students would participate. As their participation is at all times voluntary.

The lack of enterprise education among the teachers was symptomatic in their lack of understanding for the difference in the definitions of enterprise education and entrepreneurship, this was also evident when the non-enterprise teacher 1 was interviewed. She was a science teacher and she did not see any relationship between the skills developed through participation in the SEA and the skills required in her class.

I would say [Enterprise teacher 1] is the main runner of it, he's fantastic in terms of how he got the whole thing going in the school about enterprise himself. He knows how to encourage the students, but it does not have any impact on me or my classes, I teach science here (CS5/NET1)

However, as the interview progressed and when the researcher pointed out to her the possible connection, she appeared to have a eureka moment.

Oh, of course yea, new first year junior cycle, the key skills we have to learn it ourselves to be fair as well, but definitely and I suppose that's where it will help junior cycle key skills to get it into their head and that the enterprise even communication everything working with others there is so many key skills that will be involved in enterprise yea (CS5/NET1)

The realisation was that the skills which students developed in the enterprise programme did have an impact on her classes and their success in the Sci-fest competition, but this relationship had to be explicitly explained.

Yea, well I have never thought about it, but yea of course they would cross over definitely (CS5/NET1)

This highlights how the enterprise programme is left to operate in isolation within the school and viewed as the sole preserve of the two teachers involved. This separate entity is also reported on when commenting on national policy and supports.

Well I'd be aware of them, but I wouldn't go into them, they don't have any impact on me or the school here...mine is very simple, it's, "would you like to make money? I'll give you an opportunity - there's a Young Enterprise Competition, if you'd like to go ahead and develop your idea, it gives you a hand on how to develop the product (CS5/ET1)

A view shared by enterprise teacher 2

Not that familiar with it I must say, no, I wouldn't be that well up on it (CS5/ET2)

Despite the lack of national support for their programme, enterprise teacher 1 continued to be passionate about the promotion of enterprise within the school for the betterment of the local community.

The principal of the school offers an alternative more business-like benefit as to why it was supported in the school.

It raises the profile of the school here, when they win prizes and get photographs up on our website (CS5/PL)

This is also raised by the non-enterprise teacher.

Yea, it will raise the profile of the school and they'll go to various events and win prizes (CS5/NET1)

In return for the benefit to the school in reputational status, the teachers receive support from the principal and their teaching colleagues. Support was available regarding staffing, but no financial support is explicitly provided to the programme from the school.

Staffing support...but there wouldn't be any financial support or...if they wished there would be no problem going CPD if they wished to, it hasn't been requested (CS5/PL)

A possible reason why it had not been requested by the teachers is because it is not available to the teachers. Other supports not provided include the support of local business.

So far, no, nobody has really come from the local business sector to actually helps us at this point, no (CS5/ET2)

While the LEO would have provided some speakers to the school in the past, these speakers were always from outside the area.

Another reason why local business speakers were not used is because the programme does not have scheduled classes. This makes it difficult to bring a speaker into the school for logistical reasons. However, enterprise teacher 2 does bemoan the lack of local business support for the programme and appreciated the potential it represented for the school.

It's something maybe we should look at because we've got a Local Enterprise Unit here in[town 5], so probably it's something worth thinking about, maybe getting some of those people involved to actually give some advice to the students and perhaps we could bring them out on a trip to see some of these businesses in operation (CS5/ET2)

The parent interviewed agreed with the potential benefit of bringing in external support from the local business community.

I would like to see people from outside coming in and giving talks and stuff, this is what you can be when you leave school, this is what you can do, you don't have to get your 570 points and go to college it's not all about that. I would like to see someone coming in and doing that yea... I think it hits home a lot more (CS5/PT)

Another support which the teachers would like to see included is more time for the programme within the timetable and taught curriculum.

I suppose, it would be nice at junior level if more time was allocated in the school towards it. As I said we've just been kind of working at it in this school, I've been sacrificing some of my class periods in History and Geography, but it would be nice to see some classes allocated to it, or even, you know, one class period a week would be good if we could at Junior Cert level... I think perhaps in this school perhaps if we could kind of coordinate more with the actual Business Studies class I think it would be of great benefit (CS5/ET2)

School 5 was the only school with an enterprise programme which operates entirely independent of and outside the formal curriculum. A real advantage is that it allows the school work with students who had opted in to participate. Therefore, the motivation of the students is assured, and this motivation is reflected in their success in the SEA. However, the students still have to rely on the support of link teachers within the school, and without this support the programme would flounder.

There is no evidence of a systemic effort from within the school to promote and sustain the programme outside facilitating the endeavours of the two enterprise teachers.

4.6 Summary of case stories and emerging factors

The emergent concepts and extended analytic codes identified from the data analysis and displayed in table 3.10 of the Methodology chapter were used as a lens to frame enterprise education stories in the five case study schools. Table 4.20 provides an overview of the six emergent themes with analytic codes and their presence in each of the five case study schools.

Table 4.20: Emergent themes with analytic codes for each case study school

Six emergent concepts and related analytic codes	School 1	School 2	School 3	School 4	School 5
1. School Context					
Location and size of the school	•	•	•	•	•
Parental support	•	•	•	•	
Support of external businesses	•	•	•	•	
2. Curriculum Provision					
Rigidity of the system	•		•	•	
The points system	•		•	•	
Government policy paucity	•	•	•	•	•
Financial support	•	•	•	•	•
3. Teacher Efficacy					
Passion for the subject	•	•	•	•	•
Facilitator role in the classroom	•	•	•	•	•
Value of skill development	•	•	•	•	
Training				•	
No support nationally	•	•	•	•	•
Support from colleagues	•	•	•	•	•
4. Confidence					
Teachers confidence necessary	•	•	•	•	•
Student confidence necessary	•	•	•	•	•
Principal confidence	•	•	•	•	•
5. Leadership and Management					
Management support	•	•	•	•	•
Restricted access to enterprise		•	•	•	•
Co-operation of other teachers	•	•	•	•	•
6. Strategic planning					
Public image of school	•	•	•	•	•
Competition in the area	•	•	•	•	
Success is celebrated	•	•	•	•	•

The five case study schools while all describing different paths towards their success in the enterprise competition, yet all shared common experiences and issues.

The centrality of the teacher for success was evident in all five schools, their passion for skill development and their ability to model the skills they wanted to develop in their students permeated throughout all the schools.

Key supports were in place, primarily from school management, parents and colleagues. The location and context of the school emerges as significant. Also all schools had a vested interest in the success of enterprise education and this interest went beyond simply the educational value. External support was a common factor, in particular the support of parents and local businesses. Other enabling factors emerged such as the support of the LEO and the enterprise competition itself through its rules and regulations which provided clear guidance to the schools. Significantly the lack of national policy and support was common to all five schools, leaving the survival and success of enterprise education within the gift of teachers. The factors are listed in table 4.19 and will form the basis for discussion in the next chapter.

Table 4.21: Summary of emerging factors from case study schools

- Individual champions - interest and drive
- Teacher competency and efficacy

- School location and situation
- Local socio economic capital
- Role modelling by key personnel.
- School leadership and management
- School organisational culture
- Curricular access and participation
- Parental support and involvement
- Local Enterprise Office/Business support

- National competition rules and regulations- criteria and standards
- National policy and support

5 Discussion and Conclusion

This research study was initiated from a reflection on my own practice as a teacher of Business and enterprise for twenty years in a post-primary school. This experience of teaching enterprise prompted me to consider how it was taught in schools and why certain schools appeared to be more successful than others in its curricular provision and execution. In my own context much autonomy was afforded to the teacher and how they interrogated enterprise education as an element of the curriculum and subsequently, how they taught enterprise in the classroom. After reflecting on my own practice and the extant reading around the theme of enterprise education in schools, clarity on the issue and associated problem of how best can enterprise education be provided within the curriculum of schools began to emerge. This issue or challenge became the genesis for this research study whose purpose is to identify how best can we develop, support and enable the successful implementation of enterprise education within Irish post-primary schools? The 'we' in this overarching research question refers to us as teachers and the wider educational community and stakeholders. This problem is the *raison d'être* for this research study.

The identification and clarification of the problem was marked by a process of additional reflection and reading from national and international research on enterprise education as it applied to post-primary curricula, with a particular focus on the research which resonated with the Irish system context and schools. Considering the current levels and models of engagement with enterprise education in the system, this process of investigation on the problem gave rise to the two research questions which guided the research study:

1. What are the antecedent and or contextual factors facilitating selected schools in the successful provision of enterprise education?
2. How can these factors inform a national framework of strategic policy and development of enterprise education in the Irish post-primary educational system?

Reviewing and categorising all the factors identified in the previous chapter from a systems perspective, it became obvious that they can be categorised within three levels of support for enterprise education within a school; individual, whole school and national.

Discussion and Conclusion

Within each level of support, antecedent and contextual category related factors are identified and these when present result in successful outcomes and are the enablers or drivers of enterprise education (Figure 14). The composite of these will help inform a framework for future strategy and policy on enterprise education within the post-primary system. This supported providing answers to the second research question and developing a possible solution to the research problem.

Figure 14: Levels of Support for Enterprise Education in Post-Primary Schools

LEVEL OF SUPPORT	ANTECEDENT AND CONTEXTUAL CATEGORIES	ANTECEDENT AND CONTEXTUAL FACTORS
Individual	<ul style="list-style-type: none"> Individual champions 	<ul style="list-style-type: none"> Individual champions - interest and drive Teacher competency and efficacy
Whole School	<ul style="list-style-type: none"> School context and culture School organisational structures Local support of enterprise organisations and businesses 	<ul style="list-style-type: none"> School location and situation Local Socio economic capital Role modelling of key personnel School leadership and management School organisational culture Curricular access and participation Parental support and involvement Local Enterprise Office/Business support
National/System level	<ul style="list-style-type: none"> Recognised national competitions 	<ul style="list-style-type: none"> National competitions rules and regulations- criteria and standards National policy and support

5.1 Individual Level

5.1.1 Individual champions – interest and drive

Although it was the students who were directly engaged with the enterprise education projects, the promotion of enterprise education in all five post-primary schools was dependent on the motivation of individuals involved primarily teachers and principals who led and championed the programme.

The level of engagement and support of every individual may be identified as an important antecedent factor in the findings and each differed in their motivation for their own reasons.

In one school, the teacher's motivation for supporting and enabling enterprise education emanated from their own personal circumstances, in particular their own job security within the school. This teacher promoted enterprise with a view to increasing student numbers and thereby secure her teaching position. In recent years, her interest in the programme had declined and interestingly for this school, its success in the SEA competitions had also declined. She reported her reduced interest as a result from her improved professional status (full-time position) and changed personal circumstances (she had a young family and could not now give the programme the time it required). Giving time outside the timetabled hours and after school hours was more difficult and with her permanency there was no reason to maintain a high level of engagement and involvement.

Despite the fact that another teacher took over most of the teaching of enterprise, the success of the school in the SEAs decreased dramatically. This demonstrates the impact of the individual factor with its underlying motivation and level of interest as an enabler. This issue of time and by inference the prioritisation of involvement was raised in all the case study schools, by both teachers and principals.

It was generally accepted in all schools that to design and deliver the enterprise programme to a competition success standard additional time was necessary, including time outside school hours.

It was considered impossible to implement an effective enterprise programme in just two to three classes a week. Consequently, time during lunch hours and after school had to be used to supplement the scheduled timetabled hours. This level of individual commitment to enterprise education from all of the teachers involved in the study was essential to the successful implementation and positive outcomes for the schools. The existence of enterprise education within all case study schools outside the core junior and senior curriculum is also a factor here, as teachers' involvement is predicated on their individual level of motivation and interest.

This brings the issue of sustainability to the fore, as a school's programme and its success appeared to be dependent on a single teacher's level of commitment. The significance of the teacher in the promotion of enterprise is supported within the extant EU literature and beyond. Ng states that 'teachers play a critical role in promoting the spirit of innovation and enterprise among students' (2004, p.186), while the EU Commission contend that enterprise education 'practice tends to be ad hoc...relied heavily on the enthusiasm and commitment of individual teachers' (2010, p.ii). Thus, a factor for the success of enterprise education is the interest and drive from individual champions within schools.

However, the motivation of the individual champions for enterprise education needs to be examined, as teachers in this study had provided the enthusiasm and commitment based on particular motivators being present for them as individuals. If these are not present or motivating factors change over time, the support and enabling of enterprise education in schools is adversely affected. As other enablers are discussed, the issue of sustainability within a school will be further explored later in this chapter.

Exploring individual motivations further, it may be noted that some other teachers in the study were driven by utilitarian motivations and in particular the belief in enterprise as a way to create and retain employment in the local town as in the case of the enterprise teacher 1 in case study school 5.

The school was located in a rural setting in the West of Ireland and the main enterprise teacher was very involved in the local community enterprise unit. The said teacher was very familiar with the employment opportunity deficit that currently existed in the community and hence the importance of developing entrepreneurship in a local rural area. He used the school's participation in the SEAs as a conduit to igniting students' interest in enterprise and the possibility of starting a business in the local area after they left the school. This narrow perspective of enterprise is how enterprise is viewed in the USA, where enterprise is concerned with starting up a new business as opposed to skill development (Downs, 2010). However, this simply supports Hytti and O'Gorman's contention that there is 'still considerable conceptual confusion as to what constitutes enterprise education' (2004, p.12).

This perspective impacted on how enterprise education was perceived within the school. It was solely viewed as a conduit for setting up a business and job creation. The wider perspective of developing competencies and life-long skill development was not recognised or prioritised by the teachers or others in the school. This narrowing of perspective could also have been due to prior education and training in enterprise education by other staff and principal in the school and this fact brings into focus the importance of dialogue on the wider benefits, associated skills and approach in enterprise education. The perspective adopted by a school was based on the teacher's interpretation. The role of the principal in the five schools was more visible when looking at whole school supports as opposed to individual supports.

Whatever the individuals' motivations and articulated reasoning for the need for enterprise education, all the enterprise teachers who participated in the study acknowledged the importance of skill development as a means of igniting enterprise potential within their students. This exemplified the necessity for having a champion teacher in a school as referred to in the literature on the development of enterprise in educational settings.

Eyal and Yosef-Hassidim (2012) believed that educational *champions* are teachers who introduce innovations in schools. They are 'someone committed to innovation and are dedicated to fostering and promoting innovation in an organisation by going beyond job requirements' (2012, p.216).

With the exception of school 5, which focused solely on business start-up, the motivation for being a 'champion' teacher within a school focused on the value of enterprise as a life skill and competency along with the enterprise knowledge and know how.

A significant factor in all the five case study schools was the situation where the enterprise programmes were driven by individual teachers. Individual teachers who had promoted and championed enterprise education. There was always one enterprise teacher and in some schools two teachers who passionately believed in the promotion and development of enterprise within the school and pushed towards innovation (Ng, 2004).

The centrality of the teacher in the promotion of enterprise is supported in the literature, 'the teacher is an important key figure in all forms of development work, and this applies also to the introduction and implementation of enterprise in schools' (Leffler and Svedberg, 2005, p.224).

The passion and priority given by all the enterprise teachers to the SEA was referenced by all the respondents. This interest and drive of individuals is a factor and was translated into giving additional time to the programmes outside the timetabled provision. Respondents reported that the need for additional time was driven primarily by enterprise skill development, such as allowing students to develop their skills learning first-hand. Haase and Lautenschlager argue that 'entrepreneurial hard facts...can be easily taught', but the teaching of skills is different, as 'experience-based soft skills related to entrepreneurship are rather difficult to impart or develop, but they are much more important and render enterprise education unique' (2010, p.147).

It is this practical experience which provides student with the richest enterprise learning. Skill development is not possible by reading a textbook, 'writing an essay about riding a bike might help the writer to understand and talk about the process, but is unlikely to develop all the skills needed for the actual task of riding a bike, which can only be evaluated through actual participation' (UK Government, 2014, p.11). This is the same for all skills, they can only be developed with practice and actual participation in real life activities, hence the prominence of experiential learning in enterprise education. The teachers in this study reported that for valid skill development, experiential learning was necessary.

Teachers are critical role models also for students in the enterprise classroom. 'Teachers play a critical role in promoting the spirit of innovation and enterprise among students... to excite students... go against the general culture of wanting "orderliness" within the classroom' (Ng, 2004, p.186). An enterprise teacher's attitude to the topic will influence student's perceptions and motivation within the classroom. They need to excite and encourage students to become entrepreneurs and interested in business. Ng believes that 'if students are encouraged to be risk-takers, teachers must be risk-takers too' (2004, p.187). The majority of enterprise teachers in this study did take this risk, they tried new things in their classrooms without the guarantee of success.

They modelled risk taking for their students and moved away from the tried and tested methodologies, which are didactic in nature. This placed additional time and work demands on the structure and timetables of all concerned as the learning process is longer. In addition to being aware of the additional time demands of teaching enterprise skills, the enterprise teachers in this study were also acutely aware pedagogical practice and approach was a key enabler in enterprise skill development within the classroom.

5.1.2 *Teacher competency and efficacy*

A facilitator style or approach to teaching was required. If students were to be encouraged and supported in their enterprise education, the teacher had to take a step back and let the students take the lead in the classroom. This is a big change for many teachers, it requires a complete shift of mind or *metanoia* (Senge, 1990, p.13). *Metanoia* is not easy to promote or command in teaching, yet for skill development to flourish in classrooms then students must be allowed to become active participants in their own projects and their own learning. This demands what Seikkula-Leino (2011) called a 'shift in pedagogy' where the teacher has to change their entire pedagogical approach (Leffler, 2009, p.110). This *metanoia*, enabled enterprise education within the selected schools. The findings in this study indicate that it is imperative that teachers adopt a facilitator approach to teaching and this must be complemented with experiential learning for students. Teacher competency and efficacy are required to support teacher *metanoia* and becomes another factor facilitating certain schools to succeed

This shift in pedagogical practice was clearly identifiable in the approach taken by all the enterprise teachers and some of the non-enterprise teachers interviewed. They observed that more was required from the teacher than simply teaching subject content and they were all happy to adopt this approach with the enterprise classes, especially in transition year.

It is interesting to note however that all teachers reported that they shifted back to a more traditional didactic mode for examination classes. In addition, they viewed this approach as different to the norm and as reported by one enterprise teacher that they felt they were pushing against the system in trying to promote skill development in her classroom, a feeling which had receded in the past number of years, but had not completely vanished.

Discussion and Conclusion

This opinion was also expressed by another enterprise teacher where they reported valuing the importance of discussion within his classroom. They opined that by students vocalising their opinions and having a say in the classroom, students' communication skills and their independent thinking skills developed as did student confidence.

Throughout the recent introduction of the Junior Cycle into post-primary curriculum in Ireland, many teachers and commentators questioned the value of prioritising key skill development and they viewed the changes as a 'dumbing down' of standards within the national system (ASTI, 2019, p.2).

Traditionally teaching is examination centred in the post-primary school system in Ireland, and any methodologies which are not anchored around examination preparation are viewed as time wasting. Trant (2007, p.6) described this situation, suggesting that in Ireland curriculum as a process is neglected and the emphasis of a curriculum as a product is overdone to the 'point of distortion'. He claims that the use of summative assessment in Ireland combined with its overarching managerial aspect has resulted in an 'examination-led curriculum... [and] what tends to be taught is what is examinable and what is most examinable is often of least importance. Other forms of teaching and learning, such as debating, questioning and investigating come to be regarded as wasteful of time' (2007, p.190). Yet, it is these teaching methodologies that were practiced by all the enterprise teachers and which resulted in successful implementation of enterprise practice and outcomes within the selected schools.

To act entrepreneurially, active learning is necessary. Contemporary pedagogies (e.g. project-based, active learning or independent learning) should be applied... non-traditional learning environments (real-life situations, out of classroom) should be available for all students.

(EU Commission, 2013, p.6)

The importance of teachers exhibiting effective practice in the enterprise classroom is another enabler. Taking a new approach does involve risk taking from teachers, as they shift their pedagogy away from knowledge- content-led teaching.

'Teachers cannot teach how to be entrepreneurial without themselves being entrepreneurial' (EU Commission, 2013, p.5). Therefore, 'entrepreneurship education requires a shift in pedagogy... the pedagogy of entrepreneurship education is focused on students activity in learning, the learning situations are flexible, interactive, and based on multidimensional knowledge...mistakes are regarded as a part of the learning process' (Seikkula and Leino, 2011, p.72). It is an approach that demands teachers engage in experiential learning and practice the key skills themselves whilst being open to a changing and fluid teaching environment.

Experiential learning was central to the beliefs of the enterprise teachers and some of the non-enterprise teachers interviewed and is supported by Pihie and Bagheri, 'entrepreneurship learning is an experiential process which requires students to practice real roles and tasks of an entrepreneur...teachers play a critical role' (2011, p.3310). The enterprise teachers appreciated the value and necessity for experiential learning as promoted by Kolb (1984) and others (McKnight 2011, Colakoglu and Sledge 2013, Seikkula and Leino, 2011). Teachers created environments where students could experience the success and sometimes the failure associated with starting a business and selling products to the public.

The significance of experiential learning was acknowledged by Hytti and O'Gorman (2004, p.18) as one of the key factors, when a teacher adopts a facilitator approach in the learning process of a classroom. One of the main challenges they report for teachers is having to relax their control within the classroom as now the students are central to the process. Teachers find it hard to strike this balance between facilitator and teacher or instructor in the classroom and moving away from traditional practices requires an inner confidence in their own ability and efficacy as teachers.

Birdthistle *et al.* acknowledged that the success of enterprise programmes depended on the commitment of the teacher and also on their knowledge and skills as entrepreneurs (2007, p.267). They placed teacher efficacy at the core of enterprise education.

Discussion and Conclusion

All the teachers in the study reported changing or adapting their pedagogical practice for the enterprise class so this affirms the teachers' efficacy and belief in their own practice. With the exception of one teacher who had their teacher education in Northern Ireland, all of the teachers had come to this belief of their own volition based on their own experience, and significantly without any formal education on enterprise education. Although some did admit that the initial challenge was significant and varying degrees in the level confidence existed among the teachers.

They exhibited self-belief in their own judgements as teachers and practitioner understanding of the learning process within their classrooms. Bandura defined self-efficacy as the 'belief's in one's capabilities to organise and execute the courses of action required to produce given attainments' (1997, p.3).

Confidence in their own ability to evaluate what works best in their own classroom and in selecting the optimum strategy for engaging students in the SEA and consequently enterprise education was a feature of the enterprise teachers' responses. This was despite the fact such an approach was not widespread in the wider educational system or within their own school context.

Another interesting feature was that other teachers in the schools exhibited a commitment for the development of enterprise and possessed a positive attitude towards entrepreneurship. They exhibited a strong sense of appreciation and value towards the entrepreneurial enterprise within their school. This signifies a cultural awareness and openness towards the role of enterprise within the school's provision and experience for the students.

The majority of teachers participating in this study did not have formal education in enterprise education. However, their enthusiasm and demonstrated interest compensated for this deficit in the teachers own education. The literature argues for both education and interest.

Pihie and Bagheri state that 'to improve student entrepreneurial learning and competencies...they should be taught by qualified teachers who have a positive attitude towards entrepreneurship' (2011, p.3308).

This is also supported by Jones and Iredale, teachers are important influencers for students and where teachers have a positive and enthusiastic attitude to enterprise education, this positivity will be inculcated into their students. Hence the critical importance to the teacher of both experience and education in the promotion of enterprise in schools (2010).

Only one of the eight enterprise teachers interviewed for this study had received formal enterprise education, all the others had to rely on their own capabilities and belief system, what worked best for them and their students in their local context. They did so because they were passionate and committed to developing enterprise in their school.

A critical and important factor here has to be the training and education of teachers (Leffler, 2009, p.105). Garavan *et al.* (2010) identified a lack of training in the Irish system a decade ago, where teachers do not always understand the challenges of business and how best to develop entrepreneurial thinking. This lack of training and knowledge is not restricted to the Irish educational system, and is evident across the Europe, such as Sweden where 'teachers' knowledge of entrepreneurship is very limited' (Leffler and Svedberg, 2005, p. 225).

The recommendations from Birdthistle *et al.* made over a decade ago, still has relevance in the five case study schools and more specifically for all future enterprise education teachers- their practice needs to be founded within a formal educational experience. These same researchers also sought an investigation into the best practices taking place a school level, and for this practice to inform the national policy and guidelines on enterprise education in the interest of reducing the fragmentation and *ad hoc* approach which exists at post-primary today and reported in the five case study schools.

5.2 *Whole School Level*

All the schools identified antecedent and contextual factors which contributed to their success. At the whole school level three categories summarise the antecedent and contextual factors which are pertinent:

- School context and culture
- School organisational structures
- Local support of enterprise organisations and businesses

In this section, the researcher will explore each of the factors and the associated enablers which supported the enterprise education within the five schools.

5.2.1 *School context and culture*

The schools were primarily motivated to participate in the SEA awards for reasons directly related to their situation and context. As well as educational, these reasons varied from expediency, uniqueness, convenience and more broadly the potential to provide a competitive edge compared to other local schools. Although initially in the schools, leadership and management recognised the educational value of enterprise education, in time they also acknowledged the value of the success in the competitions in the promotion of the school and in raising the school's reputation. Therefore, it can be concluded that the involvement in the SEA and enterprise education made educational sense whilst also having a strategic purpose.

The value of existing in and learning within a competitive environment cannot be underestimated and is widely acknowledged as a valuable learning experience and context for students. A competitive environment becomes part of the culture of a school. Teachers and all within the community have an expectation of success and are continuously encouraging students to strive for success. As entrepreneurial culture is easier to inculcate when there is an accepted competitive environment.

Students going to school in this type of environment, one in which their own school is in constant competition with other schools, are quite simply more likely to become entrepreneurs.

Sobel and King, 2007, p.436

This, they contend is because schools in such competitive environments will always be promoting innovative practice and looking for ways to excel, ways to outperform their competitor schools.

An additional benefit for the school is that resulting innovations and successes provide real potential opportunities for positive media exposure to promote their school. This creates a level of coherence between the school context and culture and impacts on how the students are taught, thereby building a consistency of purpose into the educational experiences of students.

For this study, four out of the five schools are located in a competitive urban location, raising the issue of an urban versus rural divide in enterprise education. Probing deeper into this, significant considerations emerge. The four urban schools, three being voluntary post-primary schools and one being a private school were situated in urban settings reported a demographic profile that is predominately middle-class students from mainly business and farming backgrounds.

Garavan *et al.* (2010) describe the social and cultural dimension of enterprise and the importance of context for the development of enterprise. They viewed wealth as another significant aspect to the social and cultural dimension of enterprise. 'Individuals from lower socio-economic categories may consider that it is only the elite who will engage in entrepreneurial activities' (2010, p.229). This factor emerged in this study, as all the schools selected in the top ten for the SEA's would be perceived as having a typically middle-class socio-economic demographic.

The advantage here is that this provides a school with key local business links. So is an enabler which is valuable for connecting and tapping into the local business community, their knowledge and 'know how'. This raises issues for the promotion and successful implementation of enterprise education in schools, as schools from a certain socio-economic group will have connections to business and will provide students with resources, expertise and role models for enterprise. 'Wealthy individuals have greater access to resources and experience (Garavan *et al.* 2010, p.229). This is a significant factor for enabling enterprise and it supports the contention from Davies and Hughes that evidence exists that school selection matter (2013, p.17).

In many cases these same students from business and farming backgrounds have enterprise behaviour modelled in their homes also. So they are exposed to enterprise behaviour from the main primary formative influencers in their lives. This is an enabling factor that is recognised in the literature.

Entrepreneurs are more likely to come from families in which their parents owned a business...the potential entrepreneur views their parents as role models, and being 'one's own boss' is perceived as a feasible career.

O'Gorman and Cunningham, 2007, p.10

Therefore, students whose parents mainly come from business backgrounds will also have a student population which is predisposed to enterprise from an early age in their homes. This role modelling for students by parents and others within the community is critical as it gives the schools and students access to key contacts within local businesses and so helps create viable business links and connections between businesses and the school. This presents a real challenge for schools with a more mixed socioeconomic demographic.

5.2.2 School organisational structures

For the four schools with a Transition Year, they delivered the programme with the specific aim of participating in the SEAs along with the inclusion of some enterprise theory. At junior cycle, the teaching of enterprise was an appendage to the mainstream Business Studies curriculum.

Consequently, if a student did not study Business Studies at junior cycle, then they had not the opportunity to participate and become part of the SEA competition and experience enterprise in action until in Transition Year.

For the final two years of senior cycle, enterprise programmes were not actively promoted as teachers and students focused on the subject content for the Business Leaving Certificate and examination preparation. This prioritising of examination preparation was acknowledged by Trant when he asserted that in this learning environment, 'what tends to be taught is what is examinable and what is most examinable is often of least importance. Other forms of teaching and learning, such as debating, questioning and investigating come to be regarded as wasteful of time' (2007, p.190).

This structure and approach to the enterprise programmes within the schools highlighted again the importance of the individual interest rather than it being the result of a strategic decision by leadership and management. This 'general lack of strategy' towards enterprise education was evident a decade ago in the Birdthistle *et al.* study (2007), they described a situation where the enterprise teachers and 'schools have to feel their way forward' and work within the structures already present (Leffler, 2009, p.113).

This reliance on a one or two teachers for the teaching of enterprise and involvement in the SEA within a school did point to the challenge of sustainability. The majority of teachers in these case study schools teaching the programmes outside their regular timetabled commitments on a voluntary basis. This is not sustainable in the long term nor should it be expected to be. None of the case study schools had planned for any eventualities outside this scenario of voluntary involvement of a passionate and interested teacher who also relied on the 'goodwill' of colleagues to facilitate the students involvement during school time, such as their attendance at trade fairs and information sessions or at the regional and national competitions.

The presence of an ethos of collegial support can be considered as a somewhat isolated and impromptu at school level – again the question of sustainability arises. Once again, the *ad hoc* provision for the enterprise programmes through mostly informal arrangements within the school is highlighted and this is mostly driven by a principal, as the leader of learning, who sees its potential both for the students' education and for the school itself as an organisation.

The role of the School Leader (principal in this study) both as decision-maker and as supporter of the initiative is widely reported in the literature. From the perspective of curricular change and innovation, the school principals' support facilitates teachers to become change agents within their own classrooms. This agency is advocated by Fullan (1993) and also has resonance with the work of Stenhouse (1975) who state that teachers behave as extended professionals when they are involved in the design of the curriculum they deliver, so the curriculum is relevant to the learner's unique context. The EU Commission also state that 'entrepreneurship education requires teachers to be key agents for change' (2010, p. 46).

The school leadership, principals and by implication supported by their Boards of Management in all case schools, trusted their teachers and their capacity to design and deliver effective enterprise programmes. These programmes are relevant to their local context and provide rich learning for the students.

As well as being facilitators of enterprise education, the principals also have to be models of innovation and enterprise for both teachers and students themselves and create an organisational culture of experimentation and risk-taking (Ng, 2004, p.187). Principals have to support teacher champions and this support includes some structural and resource support, encouraging multidisciplinary collaborations; promoting extended teamwork; giving subordinates spare time; exercising tolerance regarding possible failure; providing resources; offering fair compensation; and giving workers leeway to plan, develop, and carry out their innovation (Eyal and Yosef-Hassidim, 2012, p. 217). The teachers in all the case study schools viewed their principal's support as critical to the success of the programmes. At times this support was at the level of practicality where principals provided the funding for class cover and bus hire as the facility for more wide ranging supports such as time reduction, resources and planning time for the teachers was limited.

Another area where the principal supported the enterprise teachers was through an agreed access participation policy for students thus allowing only particular students the opportunity to experience enterprise education. This restriction on the number of students who can access an enterprise education class appears to run contrary to the literature (Garavan *et al.*, 2010) and policy advocated by the EU Commission reports (2008 and 2010) where enterprise education should be embedded across the entire curriculum and be part of all subject areas. Ng states that there is a 'danger that some school leaders and staff may view innovation and enterprise as an add-on initiative... instead of getting everyone in the school involved' (2004, p.190). For Ng it is essential that enterprise 'cannot be seen as yet another project for only a certain group of people' (Ng, 2004, p.190). In this regard, it is interesting also to note that despite their success within the competitions, no specific plan or policy for pedagogy or provision was present in any of the schools which would have formalised any longer-term support or inclusion within the curriculum.

5.2.3 Local support of enterprise organisations and businesses

All the five case study schools had a relationship with their local enterprise development organisation. Four out of the five school schools were eager to highlight the value of this connection for the school.

Each county where the five schools operated was supported by a LEO. The support offered by the LEO ranged from assistance in the completion of forms for entry to the national competition, to arranging local speakers to visit the schools. All schools believed that this support was vital to their success in the enterprise competition. The speakers provided real life business advice and stories which the teachers could not. It was reported that the students reacted positively to the interactions and that this supported teachers in the delivery of experiential enterprise learning in the classroom.

The speakers also modelled many of the skills which the teachers sought to inculcate into the students. Having access to this resource through the link person with the LEO allowed students and teachers to avail of a resource which merged skill development and modelling with experiential learning opportunities. It allowed students to experience learning which could not be delivered any teacher in any context.

The literature and policy documents from the EU all assert the necessity for the involvement of local business with enterprise programmes. Various reports all explicitly promote the involvement of business, 'teachers and schools will not be able to realise their ambitions without cooperation and partnerships with colleagues, businesses and other stakeholders' (EU Commission, 2013, p.5). Another EU report supported this partnership when they noted that learning systems need to be entrepreneurial in their very design. Engaging with partners should be a prerequisite of a modern learning environment (EU Commission, 2014, p.7).

This involvement of business with schools does not have universal appeal. McCafferty (2010) raised the concern of bringing business into the classroom, and she feared the 'glorifying and embedding the values' of neoliberalism in the classroom. She has tracked the relationship between business and education and could now see that the direct participation of business in everyday classroom experience and the open promotion of business interests and free market values growing within the system (2010, p.544).

She warned of ultimately bringing to life the possibility of a 'neoliberal pedagogy' and this needs to be at the forefront of critical discourse on education (2010, p.559). It is interesting to note, that none of the participants within the five schools raised this issue or expressed any misgivings towards the perceived popularisation of a neoliberal agenda within the curriculum. It perhaps reflects the lack of discussion that takes place around curriculum and its content that was much lamented by Gleeson (2009, p.138).

Mc Cafferty's concerns were also echoed earlier by Smyth (1999) and how enterprise education was promoted in the Australian educational system. He contended that 'the push to include within schooling an explicit part of the curriculum which is directly connected to promoting business values, ought to be a source of considerable alarm' (1999, p. 442). He believed it seeks to promote business values ahead of other social concerns. He also expressed his concern that enterprise is framed in considerations that are competitive rather than collaborative. All five schools in this study entered the SEA with the overall ambition of winning the competition. The competition promotes a message of 'the survival of the fittest' and the pursuit of success is very evident in the five case study schools who all strategically involved local businesses and support. The necessity to have a national policy for enterprise education is raised here. If there existed a national policy together with a devolved infrastructure of support accessible to all schools, a parity of experience with an accepted educational rationale for enterprise education may be present at system level.

5.3 National/System Level

No formal national or systemic supports exists in Ireland presently, outside the support of the network of LEOs in Ireland. These offices promote the competitions and help mediate and disseminate the entry criteria for the competition. The situation exists now within the schools that the criteria for entry into the SEA competition is the *de facto* syllabus for enterprise within the five schools outside that prescribed in the Junior and Leaving Certificate Business subjects. Therefore, the competition existence itself is a key factor in the development of enterprise education within schools and thus can be considered to be an enabling factor for successful implementation of enterprise education within schools.

Allowing enterprise in schools to be designed and negotiated around the entry into a national competition and outside of any formal curriculum planning structure, namely the National Council for Curriculum and Assessment (NCCA), allows enterprise education implementation in post-primary schools to exist in a fragmented and sporadic way. An individual school's participation in the SEA is voluntary and dependent on individual teacher interest and motivation, which as demonstrated in the case stories can waver and wane over time.

As regards national policy, a common view repeatedly expressed and shared by all the case study schools was they felt overlooked by the DES, other government agencies and policymakers. All the schools operated in complete isolation from any formal national supports or guidance. Successful implementation of enterprise education in the schools depended on individual and whole school antecedent and contextual supports and necessary support for sustainable curricular provision at national system level was missing. This situation runs contrary to the advice promulgated by the EU Commission. An EU Commission report in 2010, asserted that there is a significant need for member states to support the embedment and deepen implementation of entrepreneurship education.

This need to have enterprise education embedded more widely in the school curriculum is also recommended by IBEC in 2015. Their report had seventeen recommendations for action with regard to entrepreneurial education for Ireland. Of particular interest to this dissertation is number 9:

The Department of Education and Skills Inspectorate should ensure entrepreneurial learning outcomes are embedded and measured through school self-evaluation inspection reports.

IBEC, 2015, p.15

School self-evaluation is a process of internal school review introduced by the DES in 2012. It requires schools to identify a focus or area for review within the school which needs improvement and to implement an action strategy to support development in the selected area (DES, 2016b).

As previously noted in the literature review, the Action Plan for Education 2017 sought to have a common policy for enterprise developed through a new Entrepreneurship Education policy and guidelines for schools' (DES, 2017, p.56). However, to date no action has been taken.

This research study has identified the antecedent and contextual factors which facilitated certain schools be successful, at individual and local level. The dearth of supporting factors at system level has also been discussed. Upon discussion and distillation of each case story in this chapter, the key underlying enabling factors which supported the implementation of enterprise education within the five schools were identified. Taking due consideration of the second research question, these are now applied to the development of a proposed framework to support enterprise education at system level and so help alleviate the *ad hoc* and fragmented implementation of enterprise education that currently exists.

5.4 A framework to support future development at system level

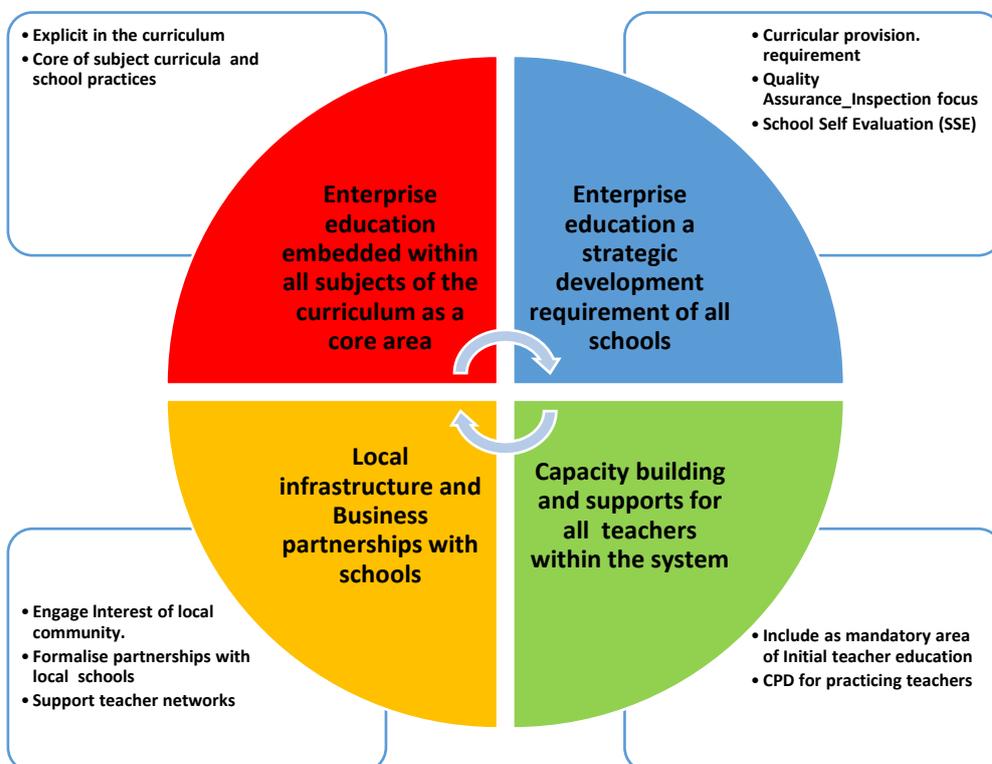
It is an assumption of this dissertation that any policy developed for enterprise education or entrepreneurial learning within schools must embed the enabling factors identified in the case study schools across the educational system and be present in all post-primary schools. Emerging from the data collected from the case stories is a framework for 'bold' action towards the embedding of these factors in all post-primary schools.

Four dimensions or pillar areas for action at system level are proposed and the factors identified in the previous discussion are elements of these as displayed in Figure 15. Please note that the operating definition of Enterprise Education is that it is a part of all subject curricula and entrepreneurship is an element of the Business curriculum.

1. Enterprise education embedded within all subjects of the post-primary curriculum as a core area
2. Enterprise education a strategic development requirement of all schools
3. Capacity building and supports for all teachers within the system
4. Local infrastructure and business partnerships with schools

These are summarised on the following table with some suggested areas of focus.

Figure 15: A Framework to Support Future Development at System Level



1. Enterprise education embedded within all subjects as a core area

Curriculum is core to the practice of every teacher and every school involved in post-primary education. Thus, it must be a central part of any framework developed to support and embed enterprise education.

Explicit in the curriculum

Traditionally the fragmentation of approaches across the EU member states is in how countries have sought to embed enterprise in their national curricula, some countries opting for an explicit approach as opposed to Ireland’s implicit approach through generic key skills. It would suggest that the implicit approach is only working to a certain extent.

The EU Commission report (2014) supports the view that enterprise education is for all teachers across the curriculum and must be embedded across the entire curriculum.

Discussion and Conclusion

Entrepreneurship education is not just a module or a teaching method. The entrepreneurial approach needs to be core to the way education operates. It is a stance; a culture of leadership, learning and teaching. It can already be noticed across Europe, but is not systemic and is not supported by policy.

EU Commission, 2014, p.14

Enterprise education needs now to be part of all curricula and subject specifications. This requires action by the NCCA to ensure that this is a whole-school curricular response.

Core of the all subject curricula and school practices

For improvement to happen, we need a 'clear articulation of the goals of innovation and enterprise' for school wide implementation to be achievable (Ng, 2004, p.196). This clear articulation of goals needs to occur at micro, meso and macro level. With all levels offering coherence across the entire education sector. Presently, even in the post-primary schools where enterprise excels, there is no strategic planning and within the schools, enterprise is viewed as an appendage to business subjects and programmes.

Enterprise education needs to be more interwoven into the fabric of a school. What is needed is a school wide policy and implementation which links to and is embedded in the key skills promoted across all subjects at junior and senior cycle. All subject planning should include an enterprise focus as an entity and interwoven into the fabric of each subject, similar to the current emphasis for literacy and numeracy within all subject planning.

2. Enterprise education as a strategic development requirement of all schools

The experience reported within the five case study schools all supported this contention of fragmentation and unsustainability, as the enterprise programme was delivered by one or two 'champion' teachers. The success of the programmes depended on their commitment and voluntary efforts. Schools relied on a teacher's own motivation or self-interest in enterprise education. To support and enable the implementation of enterprise education in schools and ensure that it no longer remains dependent on the presence of 'champion' teachers in the school, enterprise education must become part of the expected pedagogical practice and thus a focus of quality assurance practices within Irish classrooms and schools.

Curricular provision requirement

Enterprise education should now be explicitly part of the curricular quality framework within post-primary schools. The quality framework entitled '*Link to Looking at Our School (2016) – A Quality Framework for Post-Primary Schools*' (LAOS) is the lens through which teaching and learning is evaluated in Irish schools. It sets out domains for evaluating teaching and learning practices and approach within schools with descriptors or statements of effective and highly effective practice (DES, 2016, p. 13).

Within this framework enterprise education needs to be named along with statements of practice directly related to the area. This will allow teachers to greater understand the standards of effective practice and highly effective practice in enterprise education in the classroom. This inclusion will also serve to highlight its significance for all teachers and support its implementation across the entire curriculum, particularly if it were to be part of the learner outcomes and learner experiences domains within LAOS (DES, 2016, p. 13/15).

Quality Assurance DES Inspection focus

With enterprise education now part of the LAOS 2016 or a future version, enterprise education would become a focus for all subject inspections and school evaluations going forward, and part of all subject evaluation criteria. By including enterprise education in the LAOS quality framework, teachers will now be more attuned with its significance for all learning in all lessons, as it will be part of the assessment or evaluation criteria for the Inspectorate. Redolent of what is assessed is prioritised, so too if enterprise education were part of LAOS 2016, then it would be prioritised within the educational system (Gleeson, 2009).

Whole School Self Evaluation (SSE)

Schools are required to engage in a process of internal evaluation called School Self-Evaluation (SSE), which will support the external evaluation provided by the DES Inspectorate. Every four years the DES provides guidance on what area of focus schools use for their SSE process. The first for area of focus for all schools with the SSE process was on literacy and numeracy in 2012 and all post-primary schools prioritised this area.

The DES could now instruct all post-primary schools to adopt enterprise education as the area of focus for the next cycle of SSE which is to begin in 2020 and will run for four years. This would ensure enterprise education became a focus for all schools over the next four years and would expedite the embedment of enterprise education.

3. Capacity building and supports for all teachers within the system

In the five schools, all considered enterprise to be primarily about entrepreneurship and competing in the SEA competition. It was not explicitly part of any other subject in the curriculum, yet enterprise education was visible in some other subjects, such as science in school 1 and 5 and engineering in school 2. However, teachers were unaware that they were employing and developing the enterprise approach and skills linked to Man's foundation 1 and the experiential approach (Man, 2006).

This lack of awareness of the meaning, and understanding of, enterprise education was also evident in a certain lack of understanding of the terms enterprise education and entrepreneurship and the difference between them. Schools have no clear understanding of what is required for enterprise education nor how it operates in practice. Nine of the ten teachers interviewed for this study were not fully aware of the difference between enterprise education and entrepreneurship.

This lack of clarity around the terms is endemic of the lack of education around enterprise education in the post-primary system. This needs to be addressed if teachers are to have the confidence and efficacy to teach enterprise education and become effective role models for their students. This will not happen unless teachers are educated on the rationale for enterprise education and what it means to teach it effectively (Lepisto and Ronkko, 2013).

This education for teachers has to be provided to all teachers in the post-primary system. Teachers should receive education and capacity building around the primary attributes needed for the teaching of enterprise education and to become facilitators of learning. Teachers need to be educated on the qualities needed such as lateral-thinking, action-focusing, being flexible and willing to take a risk (EU Commission, 2011, p.8). All teachers must receive this knowledge, skill and education.

Serving teachers also require this so all teacher be they entering the post-primary system or working in it will exhibit the values of the entrepreneurial school (EU Commission, 2011, p.8). One of these qualities is a school which values its community and it is this value which forms the foundation for pillar of action number four.

4. Local infrastructure and business partnerships with schools

For all the five case study schools, a central factor to their success was the development of external links with the LEO and or with local businesses. Their input into the enterprise programme was always valued and desired and is supported by Man's theoretical foundation number 3: networking approach (Man, 2006)

Engage interest of local community

All the case study schools had developed links with the local community and spoke very positively about their impact on the students. These links were typically developed through the parents of students in the school. A strong correlation existed between the level of parental input and the strength of the local business linkage with the school. Some schools were linking with the local Chamber of Commerce and inviting parents to assist with particular aspects of the enterprise provision within the school. All the schools valued the importance of providing students with real-world experiences and spoke effusively about how this facilitated authentic learning and skill development. It provided a learning experience for students which was not possible to provide in the classroom. It also supplements and at time substitutes gaps in the teacher learning and experience.

However, these experiences were developed within the school through parental involvement and in some cases through personal contacts from the teachers. The importance of such engagement is supported in the literature and yet its provision in schools relies on an informal system of serendipity (EU Commission, 2016; Gilbert, 2012; Lucas and Spencer, 2017).

For enterprise education to succeed and become embedded in post-primary schools, they need to engage with the local community and to develop programmes incorporating valid real life experience for all students. It supports students in making connections between the learning taking place in the classroom and its application to real life scenarios.

Lucas and Spencer in their work with schools throughout the UK speak about the need to create new co-curricular opportunities for students and partnering with a range of youth and community groups outside of the school environment (2017, p.13). Such experiences offer students the opportunity to develop the range of skills which will be required of future workers (WEF, 2018).

Formalise partnerships with local schools

Within the five case study schools, engagement with the local community depended upon the teacher and or parents having local knowledge and appropriate contacts. No formal partnership existed within any of the schools and their sustainability in some schools was linked with a particular teacher. This random *ad hoc* approach to local engagement needs to be addressed. Schools should be supported and linked with appropriate local businesses or community organisations through formal networking supports which are centralised and monitored from a national level.

A centralised support system needs to be developed, where schools can be provided with suitable local community agencies who are willing to partner with the school on their enterprise education provision. Many businesses now have a social partnership and civic engagement supports and aspirations. A national centralised organisation which could provide appropriate guidance to the community organisations and linkage with post-primary schools is necessary to formally embeds the linking and promote growth within schools.

Teachers should also be facilitated in the development of a network of teachers involved in the promotion of enterprise education within their school. Teacher networks could be structured around particular regional areas, if not nationally. Such networks would allow teachers to connect and share practice.

This is acknowledged by the EU Commission:

Teacher networks are the least developed type of support. However, they could be a very important and efficient tool to exchange good practices, facilitate access to the topic and offer networking opportunities between more experienced teachers and those new to the area.

EU Commission, 2016, p.103

The development of teacher network for the integration of enterprise education needs to be part of any national strategy. It would ensure that such networks had a formal function and no longer relied on informal personal connections. The development of such teacher networks will facilitate and enrich local business engagement

The framework to support future the development of enterprise education at system level with its four pillar areas for action is constructed from the antecedent and contextual factors which emerged from the five case study schools. Some of the constituent framework pillars and supporting buttresses are part of the framework due to their absence at system level, but were raised by the participants in the five cases as key enablers which were required by the schools, if enterprise education was to become supported and embedded in all post-primary schools.

The framework provides an appropriate structure to guide any future policy development for enterprise education.

5.5 Conclusion

This research study sought to investigate how enterprise education could be supported and embedded in the Irish post-primary educational system. To achieve this aim, two research question emerged for the study:

1. What are the antecedent and or contextual factors facilitating selected schools in the successful provision of enterprise education?
2. How can these factors inform a national framework of strategic policy and development of enterprise education in the Irish post-primary educational system?

The discussion pertaining to the two research questions predicate an overdue national discourse on enterprise education. The antecedent and contextual factors identified through the case stories and discussion were used to assess the potential support areas for schools in the provision of enterprise education. In addition, the discussion of the enabling factors clarifies why the selected schools were successful in the SEA. The discussion and investigation of the five case study stories of enterprise education also facilitated a process whereby the enabling factors relating to embedding enterprise education in the post-primary curriculum were identified and the proposed framework of action generated.

It is hoped that the framework will be used for strategic planning at national level to initiate and guide a national policy discourse towards action to ensure all schools and students have parity of experience of enterprise education at post-primary. Engagement with the framework will hopefully allow a rebalancing to occur between the rhetoric expounded at national level and the reality experienced at a school level, so a future vista of reality and rhetoric coalescing for enterprise education can be realised and sustained.

Intertwined in the research questions is the concept of enterprise and its various interpretations. This research study has identified enterprise education as the development of enterprise skills for all students and not just limited to the setting up of a business, and the need for this wider lens to be clearly understood and applied by all post-primary teachers. The adoption of this wider perspective is supported by the EU and its policy, so enterprise education is for all students and not restricted in its provision and implementation to a limited member of students.

5.6 Contribution to knowledge

Inspired and affirmed that 'case study has a unique and distinctive contribution to make to education research', this research study identified a gap in the academic literature pertaining to the provision of enterprise education at post-primary level within the Irish context (Cohen *et al.*, 2018, p.390). This study addressed this gap and facilitated an in-depth analysis of successful enterprise education provision thereby shining a light on an area of curriculum provision which has been under researched in the past.

The literature pertaining to enterprise education has heretofore focused primarily on its provision at third level, an issue acknowledged by Draycott *et al.* positing that 'enterprise education in schools has been largely unexplored by the academic community' (2011, p.674). This study has focused specifically on enterprise education in Irish post-primary schools and has added to the academic literature. By exploring the factors which facilitate success in enterprise education, this study represents a much needed contribution to the enterprise education field of knowledge which was sought over a decade ago (Birdthistle *et al.*, 2007). The purpose and skills needed for enterprise education have been widely explored in the existing literature (Man, 2006; Leffler, 2009; Gibb, 2008 and Draycott *et al.* 2011), but what is not explored is the factors needed within post-primary schools for successful integration of enterprise education.

A review of the literature highlighted the need for schools to involve local business and community organisations (Draycott et al. 2011; Man, 2006; Lucas and Spencer, 2017). This requirement is one of the four pillars of action in the framework and promotes the development of productive relationship between post-primary schools and the local community. It will also support the acquisition of enterprise skills and allow students to possibly experience failure and develop their ambiguity tolerance, skills which require for life and cannot be easily experienced in classrooms (Fee, 2012; Hytti and O’Gorman, 2004).

The study highlighted the disparity that exists between the rhetoric attached to enterprise education at national level and the reality which is experienced by the students and schools charged with implementation. For the first time in Irish academic literature, the antecedent and contextual factors which support the integration of enterprise education in post-primary schools have been identified.

Investigating the factors further has allowed the development of a framework to support enterprise education at system level. A framework which has the potential to support and ensure the integration of enterprise education across the entire curriculum.

The four constituent pillars of the framework provide a tangible structure to the rhetoric and are built upon the foundations of five schools’ lived realities. The framework is designed to support all schools within the system and initiate and inform strategic action plans. Further research on the process and ‘how’ of action identified within the areas is required.

5.7 Contribution to policy and practice

Moving beyond the framework presented in the chapter, the research study has highlighted to imperative of skill development as integral to all teaching and learning occurring in post-primary schools. Enterprise education offers an ideal conduit for the development of life skills in all subjects and to become part of every students received curriculum. This need was never greater and is supported in an ESRI report written by Smyth at al. (2019) which collated the views of students, teachers and parents about the existing Leaving Certificate examination. They concluded that the present examination ‘was seen to facilitate rote learning, with a focus on memorising material at the expense of authentic understanding and a neglect of the development and assessment of broader

skills' (2019, p.90). Third level institutions have also expressed their misgivings about the present system of education at post-primary and its ability to adequately prepare students. The Hyland report stated, 'concerns that the second level education system does not prepare students adequately for third level have been expressed with monotonous regularity during the past 50 years' (2011, p.6).

This neglect and inadequacy is apparent to a wide range of educational stakeholders and it is now time for policy and practice to mirror what is required from students when they leave post-primary schools, namely Enterprise Education.

5.8 Limitations of the research study

Perceived limitations to this study surround the use of a case study methodological approach for the research project and the limited number of schools involved in the study. Five schools were selected for practical reasons, however five units of analysis is regarded as appropriate, and certainly well above the single unit of analysis selection where most of the concerns relating to case study primarily arise within the literature (Yin, 2014).

The limitations of case study as a methodological approach was commented upon in chapter three. Chief among these limitations was the 'thorny' issue regarding generalisation (Robson, 1993, p.51). This does not present a *thorn* for this study, as the schools selected are not samples, but were selected 'to expand and generalise theories, not extrapolate probabilities' (Yin, 2014, p.21). Generalisations are not part of this research study, rather the identification of common antecedent and contextual factors which are present in the five participant schools.

Concerns about the reporting and the inference of researcher bias may arise (Cohen *et al.*, 2018, p.379). Such concerns have been explored in the Methodology chapter and all findings have been reported as transcribed in the interview transcripts.

The use of ample direct quotation from the participants in chapter 4 was deliberately included to allay these concerns and provide 'greater rigour' to the case study (Yin, 2014, p.21).

The selection of the five schools was based on the best and only gauge of successful enterprise provision currently available in the Irish post-primary educational system. This is reflective of the paucity of research and policy in the area of enterprise education which presently besets its provision in post-primary schools.

The selection criteria are clearly explained, and the process followed a specific procedure using a schools success in the SEA over a set period of time. It ensured that the researcher could pursue an investigation of the existing provision of enterprise within post-primary schools.

5.9 Further research

This research study tracked the performance of schools over a six-year period in the SEA. It is recommended that another study would track the performance of schools over a longer period of time and formulate a longitudinal study on how schools are performing.

The framework proposed to support future development of enterprise education at system level needs to be monitored and evaluated. As with all frameworks designed on paper, refinements are necessary when implemented in the real world and as stated above each pillar area of action should be accompanied by an action research or inquiry process which monitors and tracks process issues and concerns.

Within each of the four pillars attaching to the framework, are specific areas for action. Each of these needs further research for best practice.

Such as considering the capacity building pillar, what type of CPD is needed for enterprise education? What model of community/business engagement works best for enterprise education? Finally, still focusing on the capacity building pillar, further exploration of the enterprise teachers who champion enterprise education in post-primary schools and what drives them to become such impassioned advocates of enterprise needs further research.

In pillar four, the need to develop of local infrastructure and business partnerships with post-primary schools is presented. This engagement with external groups is essential as the need for skills continues to grow in prominence as stated in the 'World Economic Forum' report 2018.

Teachers cannot provide the valuable real world learning experiences required for effective enterprise education within the classroom walls and these connections and links will have to become part of the post-primary curriculum.

A mindset of agile learning will also be needed on the part of workers as they shift from routines and limits of today's jobs to new, previously unimagined futures

World Economic Forum, 2018, p.ix

The development of these links will need to be the subject of greater research and how such links can support the curriculum at post-primary level and is underexplored in the Irish context.

5.10 Final concluding comments

This research and learning journey began with a Business teacher seeking to investigate how enterprise was and could be taught more effectively in post-primary schools. This took the researcher on a long and winding road which up until now was not well travelled or explored.

After extant reading around the area of enterprise, the significance of enterprise as a term became apparent and the dichotomous perspectives attaching to it; entrepreneurship and enterprise education. This led the researcher to reflect more deeply on the significance of the word for all teachers and not simply for us Business teachers. Enterprise education is for all teachers and is not simply a business term within the business curricula only considered by the business teacher. This deeper understanding and appreciation for enterprise and specifically enterprise education opened up the possibility of bringing enterprise education to all teachers and students and *apropos* a research study on how it could be supported and embedded across the post-primary curriculum.

The study has facilitated a richer understanding and appreciation for the work presently taking place within schools and how enterprise education is championed in schools across Ireland. However, this practice needs to become common to all schools and be provided to all students in post-primary schools. It is this ambition which fuelled the researcher's drive in the earnest hope that this study will make a difference to the lives of students in the future.

Discussion and Conclusion

The framework and four pillars of action which have emerged from the study provide a guiding structure for the strategic development of enterprise education within the Irish educational system. The four pillars of action should now be used to support a process of ensuring the rhetoric attaching to enterprise at national level can be bridged with the reality of practice happening every day in post-primary schools.

While cognisant of the limitations and the need for further research, this study has sought to illuminate and enhance scholarship for enterprise education within post-primary schools with particular prescience for the Irish context. It has been an enjoyable journey and has opened up the researcher to knowledge and skill which truly typifies the essence of highly effective enterprise education in action in a post-modern world.

Enterprise education is unique as a curriculum endeavour, in that it requires the support and partnership of the local community. Enterprise education to be truly realised is reliant on this contextual factor, but here too lies a unique opportunity for all involved to harness this community and business involvement to provide valuable learning experiences for all. The need was never greater:

By one popular estimate 65% of children entering primary schools today will ultimately work in new job types and functions that currently don't yet exist...most existing education systems at all levels provide siloed training and continue a number of 20th century practices that are hindering progress on today's talent...businesses should work closely with governments, education providers and others to imagine what a true 21st century curriculum might look like.

World Economic Forum, 2016, p.32

The need to imagine what this true curriculum will look like is no more. Enterprise education has come of age and it is time for a marriage of rhetoric and reality. Enterprise education is for now and for all. It is the true curriculum 21st century.

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7 Appendices

7.1 Appendix 1: Participant Invite Letter



The teaching of enterprise in Irish post-primary schools: an analysis of the antecedent and contextual factors

Dear Principal,

My name is Gareth McConway and I am a doctoral student with the School of Education at the National University of Ireland Galway (NUIG). I am conducting a research project into how enterprise education is interpreted and delivered with second level schools. The focus of this research project is the antecedent and contextual factors which are present within schools that promote exemplary and engagement with enterprise education

My interest within this subject emerges from having taught Business for over twenty years at second level. To date, few studies have examined enterprise education in second levels schools in Ireland. This paucity of research is set within a context whereby at national level the importance of enterprise education is much lauded and persistently identified as a key action towards creating a technology based economy.

As a participant in the study you will be asked to partake in a semi structured interview. This interview will seek to ascertain your opinion and insights into enterprise education within your school. The interviews will take place at a mutually agreed time and place. It is not envisaged that any interview will exceed 30 minutes. The interview will, with your permission only, be audio recorded so I can accurately reflect on what is discussed. The audio tapes will only be reviewed by me who will transcribe and analyse them. They will then be destroyed.

Confidentiality is completely assured and your participation and identity will remain confidential. The information will be kept in a secure location. The results of the study will become part of a Doctoral thesis and be available in the Library at the National University of Ireland Galway. Taking part in the study is your decision. You do not have to and can withdraw your co-operation at any time. If requested, a copy of the interview transcript will be made available to you for your inspection and final approval. There are no known risks and/or discomforts associated with the study.

By participating in this study, you will have the opportunity to reflect upon your own academic training, current practice and professional experience. This research also represents an opportunity to have your opinions included in research that has the potential to benefits students, teachers and school leaders here in Ireland at national level.

If you have any questions or concerns about participating in this study, please do not hesitate to contact me directly at g.mcconway2@nuigalway.ie. Alternatively you may contact my supervisor, Dr Mary Fleming, School of Education at mary.fleming@nuigalway.ie.

I thank you in advance for your willingness to help in generating new knowledge in this field with a view to advancing our understanding of how best improvements can be made for students who attend second level schools in the future.

Yours faithfully,

Gareth McConway.

7.2 Appendix 2: Participant Information Sheet



The teaching of enterprise in Irish post-primary schools: an analysis of the antecedent and contextual factors

Participant Information Sheet

Dear Research Participant,

You are being invited to take part in a research study. Before you decide, it is important for you to understand why the research is being done and what it will involve. This Participant Information Sheet will tell you about the purpose, risks and benefits of this research study. If you agree to take part, I will ask you to sign a Participant Consent Form. If there is anything that you are not clear about, I will be happy to explain it to you. Please take as much time as you need to read it. You should only consent to participate in this research study when you feel that you understand what is being asked of you, and you have had sufficient time to think about your decision. Should you wish to participate in this study you will be given a copy of this Information Sheet and a signed consent form.

Title of this study

The teaching of enterprise in Irish post-primary schools: an analysis of the antecedent and contextual factors

Principal Researcher

Gareth McConway, PhD student at the National University of Ireland Galway (NUIG) who may be contacted at g.mcconway2@nuigalway.ie

Aims of this research project

This research study aims to explore what factors are evident in schools which exhibit exemplary practice in the area of enterprise education. Through the examination of the antecedent and contextual factors within four exemplary schools it is hoped to identify the primary prescripts for success to occur in the delivery of enterprise education in second level schools in Ireland. Having identified such prescripts, then they may be usefully employed to inform the national discourse pertaining to enterprise education at second level in Irish schools.

You have been selected to participate in this study as the school to which you are attached has been identified as exemplary within the area of enterprise education. This selection has been based on a prescribed criteria primarily relating to the schools performance in enterprise related competitions. Within the four selected exemplary schools I shall be inviting key stakeholders to participate in semi-structured interviews

The study seeks to address the following two main questions:

3. What are the antecedent and or contextual factors facilitating selected schools in the successful provision of enterprise education?

4. How can these factors inform a national framework of strategic policy and development of enterprise education in the Irish post-primary educational system?

How data will be gathered

Research with participants will take place through semi-structured interviews over 12 months. The semi-structured interview will take approximately 30 minutes and can be held on a date/time and in a location of your preference. Please note that the interview will be audio recorded to ensure that your insights and opinions are properly understood and conveyed in the research.

The following outlines the general topics that may be discussed during the interview:

- History of their involvement in enterprise education
- Their understanding of the meaning of the term enterprise education
- Experience of enterprise in their own background
- Training in the area of enterprise education
- Benefits of enterprise education
- Classroom strategies employed in their provision of enterprise education
- Supports available for the delivery of enterprise education programmes

Foreseeable risks and consequences of participation in this study

There are minimal foreseeable negative risks associated with participation in this study. However, it should be noted that the interview questions will ask you to reflect upon your own knowledge, your opinions about how best students learn and experiences of enterprise education within your school setting. Should reflection and thought about these areas lead to personal discomfort or distress, please contact the researcher immediately.

Possible benefits from this research

There are a number of possible benefits that could derive from this research project for you and others involved in this field of education:

1. You have the assurance of knowing you have contributed to an area that lacks serious study in the Irish context and are helping to advance our understanding of educational provision for colleagues in enterprise education.
2. The insights derived from your participation could help lead to greater understanding of the particular needs and challenges faced by policy makers and leaders in exploring new ways to lead and manage the provision of enterprise education in second level schools.
3. Through participation in this study, you have the opportunity to critically reflect upon your professional practice, the school where you work, and the students you teach.

4. You will have be part of a group of exemplary schools that will potentially contribute towards improving the standards of teaching and learning in the area of enterprise education nationally with the view of generating new knowledge in this area. Knowledge specific to the Irish context.

Your rights within this study

As a participant in this study, your association is completely voluntary and you have the right *not* to participate or to withdraw from this study at any time with no penalty or prejudice. You may also re-join at a later date if you so choose. At any time if you wish to withdraw from this study, simply make it known the researcher that you no longer wish to participate.

Confidentiality

Your confidentiality is completely assured. Results from the study will be reported as group data and will not identify you in any way. All information that is collected about you during the course of the research will be kept strictly confidential and will not be shared with anyone else. The information collected in this research will be stored in a way that protects your identity. The audio recording will be transcribed for analysis. Data collected from this study will be kept in password protected files on the researcher's personal laptop. Following a five year period after the completion of this project, all data collected from the interview transcriptions will be destroyed.

How the results of this study will be communicated

The results of this study will be communicated in a thesis dissertation as a requirement of the doctoral programme at NUIG. Additionally, the results of this study may be disseminated in scholarly and professional journals, at educational conferences, and to organizations and other interested persons who have interest in the area of Enterprise Education at second level in Ireland.

To summarise

As a participant in this study, your association is completely voluntary and you have the right *not* to participate or to withdraw from this study at any time with no penalty or prejudice. You may also re-join at a later date if you so choose. At any time if you wish to withdraw from this study, simply make it known the researcher that you no longer wish to participate.

If you have any questions or concerns about any aspect of this study, please feel free to contact the researcher, Gareth McConway by telephone at 087 2252622 or email at g.mcconway2@nuigalway.ie. Alternatively you may contact my supervisor, Dr Mary Fleming by email at mary.fleming@nuigalway.ie.

Thank you for reading through this information.

7.3 Appendix 3: Participant Consent Form



The teaching of enterprise in Irish post-primary schools: an analysis of the antecedent and contextual factors

Participant Consent Form

Name of Researcher: Gareth McConway

Please tick as appropriate. By ticking “YES” to the following four questions, you are affirming your desire to participate in this study.

1. I confirm that I understand the information contained in these documents and I have had enough time to consider my participation in this study [YES] [NO]

2. I confirm that I was provided with contact details for the primary researcher of this study and was encouraged to ask any questions I may have. [YES] [NO]

3. I certify that my participation in this study is completely voluntary and I understand that I may withdraw from this study at any time without penalty or prejudice. I also understand that I may re-join the study at a later date if I so choose. [YES]
[NO]

Appendices

4. I agree to take part in this study and to partake in a semi structured interview.

[YES] [NO]

5. I agree for the semi structured interview to be audio recorded interview. [YES]

[NO]

Signature of Participant

Date

Name of School

Participant category

7.4 Appendix 4: Semi-Structured Interview Schedule for Principals

Semi-Structured Interview Schedule for Principals



Q.	Enterprise education within the school, how was it introduced into the school
	✓ Any particular event or factor which triggered its introduction
	✓ Local interest in enterprise education from outside the school
	✓ Was the initial motivation for introducing enterprise education emerge internal or external to the school
	✓ Student desire or teacher desire in enterprise which prompted its introduction in the school
Q.	When you think back on the evolvement of Enterprise education, is there any significant or particular events which stand out?
	<ul style="list-style-type: none"> ✓ Major wins ✓ Particular students ✓ Particular products ✓ Notable product failures ✓ Notable past pupils who have excelled since leaving school
Q.	Reflecting back on enterprise education in the school, what are some of the contributing factors facilitating your success?
	<ul style="list-style-type: none"> ✓ Student ✓ Teachers ✓ Parents ✓ Local community
Q.	How is enterprise education promoted within the school?
Probes	<ul style="list-style-type: none"> ✓ Formal ✓ Informal ✓ Any ceremonies
Q.	Has the way in which enterprise education is promoted changed since it was introduced initially in the school?
	✓ If so why
Q.	What factors with the school structure facilitate the successful evolvement of enterprise education?

Appendices

Probes	✓
Q.	What supports are provided by the school management for the teachers of enterprise education
Probes	<ul style="list-style-type: none"> ✓ Structural supports ✓ Staffing supports ✓ Financial supports ✓ Training ✓ Time ✓ Any specific examples
Q.	How are the participant teachers selected who are involved in the delivery of the programme(s) in this school
Probes	
Q.	Is the local Business community involved in your schools enterprise education programme
Probes	<ul style="list-style-type: none"> ✓ If yes, how? ✓ If yes, how did this develop? ✓ If no, why?
Q.	What are the primary benefits of enterprise education for the school?
Probes	<ul style="list-style-type: none"> ✓ Students ✓ Teachers ✓ Local community

7.5 Appendix 5: Semi-Structured Interview Schedule for the Enterprise Teacher

Semi-Structured Interview Schedule for the Enterprise Teacher



Q.	Brief personal and professional biography
Probes	<ul style="list-style-type: none"> ✓ Business background ✓ College attended ✓ Degree awarded ✓ Number of years teaching
Q.	How would you define entrepreneurship
Probes	
Q.	How would you define enterprise education
Probes	✓
Q.	Enterprise education within the school, how was it introduced into the school
	✓ Any particular event or factor which triggered its introduction
	✓ Local interest in enterprise education from outside the school
	✓ Was the initial motivation for introducing enterprise education emerge internal or external to the school
	✓ Student desire or teacher desire in enterprise which prompted its introduction in the school
Q.	When you think back on the evolvement of Enterprise education, is there any significant or particular events which stand out?
	<ul style="list-style-type: none"> ✓ Major wins ✓ Particular students ✓ Particular products ✓ Notable product failures ✓ Notable past pupils who have excelled since leaving school
Q.	Reflecting back on enterprise education in the school, what are some of the contributing factors facilitating your success?
	✓
Q.	Enterprise education within the school, how was it introduced into the school

Appendices

Q.	In your daily classroom, what are the dominant teaching methodologies employed
Probes	<ul style="list-style-type: none"> ✓ Active methodologies ✓ Give specific examples
Q.	Have you a scheme of work developed for the teaching of enterprise education
Probes	<ul style="list-style-type: none"> ✓ What year groups ✓ Are learning outcomes included
Q.	Considering your approach to teaching enterprise education, is your priority skill development or knowledge acquisition
Probes	<ul style="list-style-type: none"> ✓ How has this developed?
Q.	How would you describe your role in the enterprise education classroom
Probes	<ul style="list-style-type: none"> ✓ Facilitator ✓ Supportive ✓ Leader ✓ Mentor ✓ Different to their other classes
Q.	What primary supports are utilised by you in the teaching of enterprise education
Probes	<ul style="list-style-type: none"> ✓ Structural ✓ Time ✓ Financial ✓ External support from local business ✓ Please give examples
Q.	Have you received any specific training in the area of enterprise?
	<ul style="list-style-type: none"> ✓ Formal training ✓ Informal training ✓ Initial teacher education ✓ Professional development
Q.	What assessment is carried out by you in the enterprise education classes?
	<ul style="list-style-type: none"> ✓ Formal ✓ Continuous ✓ competitions
Q.	How important for you is participation in Enterprise competitions like the Student Enterprise Awards?
Probes	<ul style="list-style-type: none"> ✓ Do the competitions dominate the teaching in the classroom ✓ Are they a help or hindrance to their work? ✓ Why so?
Q	Are you aware of Government policy or EU policy regarding enterprise education?
Probe	<ul style="list-style-type: none"> ✓ How are you updated regarding developments in the area of enterprise education?
Q.	Final Comments you would like to make before we conclude our interview
Probes	<ul style="list-style-type: none"> ✓ What supports would you like to be introduced to aid the teacher of enterprise education ✓ What can the Department of Education and Skills do for the enterprise teacher

7.6 Appendix 6: Semi-Structured Interview Schedule for Non - Enterprise Teacher

Semi-Structured Interview Schedule for Non-Enterprise Teacher



Q.1	Please give a brief description of your role in the school
Probes	<ul style="list-style-type: none"> ✓ Number of years teaching in the school ✓ Subjects taught
Q.2	What is your understanding of enterprise education
Probes	✓
Q.3	What is your understanding of the term entrepreneurship
Q.3b	Enterprise education within the school, how was it introduced into the school
Probes	<ul style="list-style-type: none"> ✓ Any particular event or factor which triggered its introduction ✓ Local interest in enterprise education from outside the school ✓ Was the initial motivation for introducing enterprise education emerge internal or external to the school ✓ Student desire or teacher desire in enterprise which prompted its introduction in the school
Q.4	What are the benefits of enterprise education to this school
Probes	<ul style="list-style-type: none"> ✓ Students ✓ Teachers ✓ School population ✓ School reputation
Q.5	How is the role of enterprise education viewed from within the school
Probes	✓ From an outsider perspective
Q.6	What particular factors do you think contribute to the school having a high enterprise education profile?
Probes	✓ Students

Appendices

	<ul style="list-style-type: none"> ✓ Teachers ✓ School management ✓ External networking or links with local business people
Q.7	What supports are available for enterprise education within this school?
Probes	✓
Q.8	Is skill development a key focus for them in their teaching?
Probes	<ul style="list-style-type: none"> ✓ NCCA junior cycle Key skills ✓ NCCA senior cycle Key skills
Q.9	Would you view enterprise education as the sole preserve of the Business teachers?
Probes	✓ Elaborate further
Q.10	Would you welcome the opportunity to become involved in the delivery of enterprise education?
	✓ Seek elaboration

7.7 Appendix 7: Semi-Structured Interview Schedule for Parent

Semi-Structured Interview Schedule for Parent



Q.1	Can you please give a brief summary of your involvement with the school
Probes	<ul style="list-style-type: none"> ✓ Number of years ✓ Number of students ✓ Past or present ✓ Transition year or not
Q.2	What is your understanding of the term ‘enterprise education’?
Probes	✓
Q.3	How aware are you as a parent of the programmes within the school involved in the delivery of enterprise education?
Probes	✓
Q.4	Would you perceive enterprise education to be as important as other senior cycle subjects
Probes	<ul style="list-style-type: none"> ✓ See as a transition year project only? ✓
Q.5	What particular skills are taught in the delivery of enterprise education
Q.6	What do you consider as the primary factors for this schools success in the area of enterprise education?
Probes	<ul style="list-style-type: none"> ✓ Students ✓ Teachers ✓ Parents ✓ Local community ✓ Senior management
Q.7	Would you like to see enterprise education becoming more embedded in the student experience for all in the school
Probes	<ul style="list-style-type: none"> ✓ Junior ✓ Transition ✓ senior
Q.8	Has your son/daughter benefited from the skills developed in enterprise education

Appendices

Probes	<ul style="list-style-type: none"> ✓ What exact skills ✓ At what stage, junior, transition or senior cycle
Q.9	What skills/knowledge can be brought into the school from external sources to support the delivery of enterprise education in the school?
Probes	
Q.10	Any final comments/opinions you may have in relation to enterprise education in this school