The Impact of Enterprise Education on Students Pursuing Professional Higher Education in Malta: A Grounded Theory study

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Abstract: This study examines the impact of enterprise education on students pursuing Professional Higher Education (PHE) at the Malta College of Arts, Science and Technology (MCAST). At EQF Levels 5,6 and 7, PHE is seen to include higher levels of work-related practice and stronger components of impact-based applied research. In particular, the study maps out the students' learning process by understanding their capabilities to generate ideas and to nurture their enterprise skills by recognising opportunities, solving problems, building relationships, and strengthening self-confidence prior to entering an enterprise venture. Relatively little is known about how students, pursuing enterprise education in a PHE context, are maximizing their potential in order to achieve a higher level of engagement in their enterprise activities within a dynamic business environment. The research method applied is that of grounded theory as advocated by Corbin and Strauss's (2008, 2015) conditional matrix and Charmaz's (2006, 2014) constructivist approach. Interpretive and qualitative in-depth interviews are undertaken with five participants, namely fresh graduates from the Master of Business Administration (for the Small Business), specialising in Enterprise Education at MCAST. The approach adopted in this study is in line with research developments in recent years, whereby grounded theory is being used as a methodology using the interpretative approach to undertake enterprise research (Urquhart 2013). It is expected that this initial study will be further extended until theoretical saturation is achieved.

An early parsimonious model explains how enterprise education influences PHE students' entrepreneurial behaviour prior to their engagement in any enterprise venture. In this research study, findings indicate that the paradigm shift from a direct learning approach to an applied research component, during which students directly interview entrepreneurs on topics related to their modules, significantly influences the mindset of PHE students pursuing Enterprise Education. This applied research study comprises several implications for the enhancement of delivering excellence in Enterprise Education by influencing the PHE students’ skills and competences. It provides policy-makers, academic researchers and other educational managers with a theoretical framework that can provide them with factors that may enhance the skills set of prospective entrepreneurs.

Keywords: Enterprise education, entrepreneurs, Grounded Theory, constructivist.

Objectives of Paper

The purpose of this paper examines, from a dynamic perspective, the impact of enterprise education on students pursuing Professional Higher Education. This paper provides a unique approach towards the implementation of enterprise education at Professional
Higher Education level. This study focuses on students pursuing Enterprise Education at Level 7, a Malta Qualifications Framework denoting Higher Education (HE), at Malta College of Arts, Science and Technology. Before delving further, it is appropriate to define the term *Enterprise* as it is often used interchangeably with *Entrepreneurship* (Henry and Lewis 2016). Bridge and O'Neill (2018) distinguish between the narrow and broad meanings of Enterprise. These authors consider the narrow meanings as encompassing business start-up, being in business and developing a business. They ponder the broad meanings as embracing positive attitudes and skills leading individuals to demonstrate innovative business behaviour. These authors also refer to Enterprise as an alternative term to small business and contend that developing an understanding of enterprise is complicated as knowledge of an exact definition is still evolving. The QAA (2018: 7) defines enterprise education as the process of preparing students with improved capabilities leading to ideas generation in response to identified needs and concept implementation, while focusing on opportunity recognition and innovation, problem identification and solution, practical action, building relationships and self-confidence. Bridge et al. (2010) also contend that by pursuing enterprise education, students nurture transferable skills, behaviours and other attributes by acting in innovative ways in a wide variety of contexts such as academic, civic, social and technological. Most importantly, Allinson et al., (2000) assert that these attributes can be taught and learned. In line with these definitions, this study maps out the students’ learning process by understanding their capabilities to generate ideas and to nurture their enterprise skills by recognising opportunities, by solving problems, by building relationships and by strengthening self-confidence, prior to entering an enterprise venture. Literature on the value of enterprise education in business contexts is widespread. However, relatively little is known on how PHE students, pursuing enterprise education, are maximizing their potential in order to achieve a higher level of engagement in their enterprise activities in a dynamic business environment.

The proposed methodology is based on grounded research in which the use of interpretive and qualitative in-depth interviews, is applied. A purposeful sample of students was selected over a 2-year period based on their theoretical understanding to the study, so as to provide rich insights relevant to the research area. Five cases of students pursuing HE are analysed in this study. A number of concepts have emerged from this initial research. These will be discussed in this paper, and initial patterns of student behaviour will indicate how these concepts seem to influence how they undertake their current and future enterprise endeavours. The research method applied is that of grounded theory as advocated by Corbin and Strauss (2008) and exemplified through their conditional matrix, and Charmaz's (2006) constructivist approach. In this approach, theory evolves from the systematic collection, comparison and analysis of data gathered, leading to concept generation and the continuous interaction between actions and concepts. Theoretical sensitivity builds throughout this research process, cumulating to a state where theoretic saturation is ultimately achieved, and a clear visuality of the final theory or model is attained by the researchers. The approach adopted in this study is in line with research developments in recent years, where grounded theory is being used as a methodology using the interpretative approach to undertake enterprise research (Urquhart, Lehmann and Myers 2010). Grounded theory is renowned for eliciting rich insights and comprehending the intricacies of enterprise behaviour and activities leading to the construction of reality that is grounded in data. The use of interpretive and qualitative in-depth interviews is undertaken with an initial 5 students pursuing PHE to evaluate how enterprise education impacts their career opportunities.
Research Question, Aim and Objectives

The research question that has directed this study, and the corresponding aims and objectives can be expressed as follows:

How does enterprise education impact on the employability opportunities of students pursuing Professional Higher Education?

The aim of this study is to examine the influence, impact and applicability of enterprise education on students pursuing professional higher education. The objectives of this paper are specified as follows:

1. To identify and critically evaluate a reference set of constructs emanating from enterprise education that influence the capabilities of students pursuing Professional Higher Education.
2. To map out the students’ learning process by understanding their capabilities that maximize the benefits that may accrue from enterprise education, prior to entering an enterprise venture.
3. To provide policy-makers, academic researchers and other educational managers with a theoretical framework that can provide them with factors that may enhance the skills set of prospective entrepreneurs.

Enterprise Education Challenges

Background

During recent decades, enterprise education has drawn continuous academic interest, evidenced by incorporating various enterprise modules in higher education that go beyond the pure business and economics disciplines (Fayolle 2013). This interest is also demonstrated by the increasing number of international conferences, research papers and books on the topic (Henry and McGowan 2016). During the past two decades, research academic journals focused on various topics such as students’ attitudes and perceptions (Shinnar et al. 2009); content and pedagogical approaches (Taatila 2010); evaluation and effectiveness (Martin et al. 2013); learning outcomes’ frameworks (QAA 2012), gender (Westhead and Solesvik 2016) and learners’ personal growth and development (Edwards and Muir 2012). It is now widely acknowledged that enterprise modules are a key component of most business and management schools, as well as other non-business and professional disciplines (Henry and Lewis 2018). Packham et al. (2010), argue that Europe requires more entrepreneurs willing to innovate and to create new ventures to facilitate economic growth. Fayolle et al. (2006), assert that higher education institutions are generating interest and driving the propagation of enterprise programmes leading to promoting graduate entrepreneurship.

Enterprise Education and Employability

It is widely acknowledged that one of the main challenges facing Higher Educational Institutions is preparing students for a lifetime of working, learning and living in an uncertain, dynamic and unpredictable world (Brown 2018). Preparing students to address these challenges, Jackson (2010) advocates developing specific skills through the
advancement of enterprise education. Most importantly, Brew (2010) contends that HE providers should tutor students in thinking critically and reflectively to solve problems that may crop up within the uncertain world of work. Rae (2007) asserts that this mode of learning will enhance the link between effective enterprise education and employability. Knight and Yorke (2003) define employability in HE as, “a set of achievements – skills, understandings and personal attributes – that make individuals more likely to gain employment and be successful in their chosen occupations, which benefits themselves, the workforce, the community and the economy.” However, Barnett (2000) claims that the employers’ unwise expectations that students are work-ready through the knowledge gained when they complete their degree programme, may create tension between employers and academics. In the same vein, Brown (2018) emphasises that enterprise education, besides promoting self-employment as an attractive career, provides students with various useful skill sets such as personal development, knowledge and attitudes, that serve them in good stead irrespective of the career they embark on after they complete the degree programme. This author reiterates that primarily, lecturers, rather than adopting the traditional way of directing the learning process, should act as facilitators by guiding students to develop interdependently their thinking and problem-solving skills.

The Higher Education Academy (HEA), which is the national body that champions teaching excellence at higher education level, works with governments, universities and individual academics in the UK and around the globe to improve student outcomes. HEA advocates that employability through enterprise education is augmented if HE providers nurture students’ competencies, attributes and behaviours. Table 1 provides Enterprise Education’s critical success factors that are associated with competencies, attributes and behaviours respectively.

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<thead>
<tr>
<th>Competencies</th>
<th>Attributes</th>
<th>Behaviours</th>
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<tr>
<td>Intuitive decision making</td>
<td>Open-minded</td>
<td>Taking initiative</td>
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<tr>
<td>Identifying opportunities</td>
<td>Proactive</td>
<td>Making things happen</td>
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<td>Problem solving</td>
<td>Curious</td>
<td>Reflecting</td>
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<tr>
<td>Influencer</td>
<td>Self-efficacy</td>
<td>Communicating</td>
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<td>Leadership</td>
<td>Flexibility</td>
<td>Taking responsibility</td>
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<td>Business and finance</td>
<td>Adaptability</td>
<td>Networking</td>
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<td>Negotiation</td>
<td>Determination</td>
<td>Personal effectiveness</td>
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<td>Business &amp; digital literacy</td>
<td>Resilience</td>
<td>Managed risk taking</td>
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**Table 1:** Critical success factors of Enterprise Education (Source: Higher Education Academy)

Content and Pedagogy

Many researchers such as Matlay (2011); Lepistö and Ronkko (2013); Ruskovaara and Pihkala (2013); Leffler and Näsström (2014) claim that lecturers and their educational institutions are critical stakeholders for nurturing students’ enterprising skills by providing the appropriate exposure to enterprise education. These researchers also contend that the ways in which enterprise education is taught is critical in shaping the students’ future practice in organisations. The lecturers’ role becomes pivotal to enterprise education because they are continuously managing the relationship between the students and the knowledge within the learning environment, and acting as facilitators between their
accumulated knowledge and students’ generated knowledge (McAuliffe and Winter 2013). Besides lecturers, there are other significant figureheads such as family members, peers, entrepreneurs and enterprise constituted bodies, who may positively influence students and motivate them to exploit their latent entrepreneurial potential (Matlay 2005).

While the debate surrounding whether or not enterprise skills can be coached has basically been resolved (Leffler and Näsström 2014), there are various teaching methods by which enterprise education can be taught. The academic aspects of enterprise education are delivered to students via traditional lectures and other teaching methods such as case studies and group discussion (Tiernan 2016). However, Henry and Lewis (2018) argue that delivery of enterprise education is no longer based solely on traditional classroom methods. Indeed, during the past two decades, various pedagogical approaches are implemented in enterprise education to prepare students for the uncertain world of work. These include: action learning (Leitch and Harrison 1999); experiential learning (Daly 2001); video role-plays (Robertson and Collins 2003); and a taught content embracing business planning and implementation (Hartshorn and Hannon 2005). Other scholars such as Johannisson (2016), Neck et al. (2014), Rae and Woodier-Harris (2013) and Rigg and O’Dwyer (2012) advocate the importance of empowering students to think for themselves and reflect on their own learning as potential entrepreneurs. Students also enhance their learning process by adopting qualitative research methods such as in-depth interviews or case studies or focus groups on enterprise activities (Penaluna et al. 2015). Other forms of learning emanate from students adopting quantitative research based on surveys focusing on enterprise activities by entrepreneurs (Packham et al. 2010). Tiernan (2016) advocates that educators should promote enterprise learning environments that empower students to think and design innovatively. Other pedagogical approaches should focus on the development of skills and behaviours by engaging in a creative stance to teaching through the development of students’ analytical, reflective and lateral thinking (Hindle 2007). Other scholars call for more action and experiential-oriented activities such as problem solving and project work (Ruskovaara and Pihkala, 2013). Various other scholars such as Solomon et al. (2002), Hytti and O’Gorman (2004) and Kuratko (2005) claim that enterprise education should cover a wide range of skills in creative thinking, new product development, patents, leadership, financing new ventures and entrepreneurial traits and characteristics.

**Research and Enterprise Education**

In order to better equip students pursuing higher education with capabilities to craft ideas and develop skills to implement them, Brown (2018) advocates the meshing of research and enterprise education throughout the program of Higher Education studies. Similarly, Jackson (2008) reiterates that the adoption of enterprise education is effective if students are capable of generating bright innovative ideas, to communicate and work well with others and solve problems. HEA (2010) contends that research-engaged teaching and learning is based on a curriculum design encompassing a student-centred pedagogy that affords students opportunities in which they can engage in practical research projects.

**Benefits of Enterprise Education**

Various authors such as Kuratko (2005); Matlay (2005, 2008); the European Commission (2011); Solesvik et. al. 2013); and the QAA (2018) have acknowledged the benefits that may accrue from effectively implementing enterprise education by addressing today’s challenges at the workplace. Most importantly, enterprise education strengthens the
students’ educational development, and generates employment leading to economic prosperity. It also provides students with competencies, whether in employment or as self-employed, with which to improve their coping skills within changing environments; identify and grasp new opportunities; harness teamwork skills; seek initiatives; assess and manage risks; be resilient; and raise career aspirations. These latter attributes are high on the agenda of employers. Other scholars such as Gibb (2011) and Rae (2008) claim that students can reap the benefits of enterprise education by developing a creative mind-set.

**Grounded Theory Methodology**

The methodological stance that has been adopted by the researchers for this study is that of grounded theory. In this approach, theory evolves from the systematic collection, comparison and analysis of data gathered, leading to concept generation and the continuous interaction between actions and concepts (Glaser and Strauss 1967). Grounded theory, through the activation of in-depth interviews, is regarded as an appropriate qualitative methodology that furnishes rich insights and considerations of organisational tasks and processes, forming integrated patterns that result from the close proximity to the qualitative data gathered (Corbin and Strauss 2008). There is evidence that decision-makers are more likely to endorse findings that derive from qualitative research rather than the traditional quantitative survey measurements as the primary source of data collection (Shankar and Goulding 2000). This research study has adopted Charmaz’s (2006) constructivist approach. It assumes multiple realities and multiple viewpoints of these realities. The researcher’s values, positions and actions impinge on the interpretations and construction of categories, subcategories, and properties that stem from the interaction between the researcher and participants. Also, as posited by Bryant (2017), the grounded theory method must relate to the development of research skills such as motivational enquiry, critical insight, interpretation, expertise and experience, which contribute towards theoretical sensitivity of the researchers.

Gurd (2008) advocates that grounded theory is not only appropriate to analyse questions relating to process, but it is also suitable to evaluate behaviour in organisations. Glaser and Strauss (1967) also claim that grounded theory fits the interpretative approach, since data analysis leads to inductive rather than deductive discoveries. Whereas they discard the rigour of testing a hypothesis from existing theories, they contend that the creation of analytical codes and categories evolves through the continuous comparison of data sets throughout each stage of the analysis. This constant comparison method paves the way for theory building.

Strauss’s early discord with Glaser had led to the former collaborating with Corbin to formulate a coherent and structured codified data system. Whereas Glaser applies grounded theory as a research design, Corbin and Strauss regard grounded theory as a research technique which follows a set of procedures systematically (Gurd 2008). Similarly, Charmaz (2006) transforms the heuristic rules applied by Glaser and Strauss into a flexible approach by advocating researchers to use these guidelines as an assortment of generic principles. Indeed, she raises the level of grounded theory to a technique that researchers adopt in their research activity. In this respect, the researchers’ justification for adopting grounded theory methodology emanates from its definite elements, embodying a series of systematic steps for data collection, coding and analysis, theoretical sampling, memo writing and constant comparison leading to the generation of conceptual categories, subcategories, properties, dimensions and theory building (Charmaz 2006). Indeed, through these procedures, researchers can identify and analyse patterns of data leading to the derivation of theory that will be consistent empirically.
The approach adopted in this study is in line with research developments in recent years, where grounded theory is being used as a methodology applying the interpretative approach to undertake enterprise research (Goulding 2002; Urquhart, Lehmann and Myers 2010). In order to encompass the contextual conditions that are required to assess enterprise education, this research study adopts a constructivist approach using a combination of inductive and abductive thought (Reichertz 2007). Cardinal to this particular constructivist philosophy is the authors’ significant experience in enterprise teaching and research. Such an approach is suitable to generate a framework of students’ learning behaviour on enterprise education from the data that emanates from the area of enquiry. Whereas induction is utilised initially to examine the grounded data that derives from the initial cases, abduction considers the various possible explanations for the grounded data through the constant comparison analysis, and by discovering a new rule which has not as yet emerged by logical rules.

Grounded theory's approach to sampling discards the procedure for calculating sample size, purposely searching for valuable cases that are rich in information content (Aquilina 2017). Grounded theory researchers initially undertake convenience sampling by selecting early participants. The initial data collection and analysis subsequently direct the researchers to discover diversity in properties and new avenues of enquiry leading to purposeful sampling. Theoretical sampling is not attempted in this initial study, although it shall be included in later research stages.

Context and Process in Grounded Theory Research

Grounded theorists Glaser and Strauss (1967), Charmaz (2006), and Corbin and Strauss (2008) accredit the importance of process in grounded theory, if researchers are to understand the intricacies of how, rather than why enterprise education emerges. They contend that structural or contextual conditions cannot be discarded, as these impact on the processes that are derived from strategic actions, interactions and emotions. To assist researchers in identifying and analysing processes, they devise strategies to detect concepts within categories, tied to a central category. This linkage process develops iteratively until the emergent categories saturate through theoretical sampling. Likewise, Charmaz (2006) maintains that since processes are moulded by past events, even the most standardised processes will effectively uncover new perspectives and insights.

Analysis of Initial Research Findings

This study focuses on students pursuing enterprise studies at Professional Higher Education level at the Malta College of Arts, Science and Technology. These PHE students form the population of this study. In this respect, a sample of students was selected due to their theoretical relevance to the study, so as to provide rich insights relevant to the research area. Expert interviews are conducted with these students as these participants provide deep insights relating to the impact of enterprise education on their current and future entrepreneurial capabilities. The software package MAXQDA is used to enhance the coding and mapping capabilities that emanate from the coding and analysis of data collected. Research through in-depth interviews is undertaken to analyse patterns of students’ learning behaviour associated with Enterprise Education. The researchers, already trained and experienced in interviewing techniques, are the only persons gathering data and transcribing the digital recordings. Participants are furnished with a purpose statement, that articulates the objectives of this study and are notified on issues relating to confidentiality and anonymity. Standard procedures for setting and
undertaking interviews, as well as for transcribing and coding of data, are established in advance. These expert interviews which are all carried out in English, with a duration of around 50 to 70 minutes each, are largely unstructured and open-ended, adding further structured questions as the interview progresses. These interviews provide the participants with the opportunity to communicate their views freely. Transcription from the recordings proved to be time-consuming as it took approximately 12 hours of typing for each interview, however this process did give valuable initial insights into each interview.

The researchers followed Charmaz's (2006) guidelines whereby data collection, comparison and analysis are undertaken simultaneously after each interview is held. After each interview is concluded, the researchers create memos by utilising field notes that result from some brief comments and key important issues that emerge during the interview. This memo-writing process enables the researchers to analyse the data promptly and allows them to generate ideas which may be checked at a later stage of the research process.

Description of Framework

The researchers utilize MAXQDA as a qualitative data analysis software application in order to exploit the mapping capabilities that result from coding and comparison activities of the large volume of data gathered. This process entails evaluating data to formulate a set of categories, subcategories and properties. Each transcript is uploaded onto MAXQDA. During this stage, the researchers use in-vivo coding whereby each interview is analysed by selecting all important incidents from each interviewee's discourse. Although the process of uploading the 5 detailed transcripts and generating in-vivo codes for each interview proved to be very time-consuming, the researchers believe that this was not time wasted. This process generated some 400 in-vivo codes. Charmaz (2006: 56) emphasizes that, “in vivo codes reflect assumptions, actions and imperatives that frame action”. Through in-vivo coding, the author contends that researchers develop a profound understanding of what is unfolding within the participants' working environment.

After this exercise is completed, the researchers create concepts from the code segments which emerge from each phrase, sentence, or paragraph that are linked to each in-vivo code from each transcript. Concepts are formed by collecting the codes, transforming them into common themes and subsequently placing them into categories and subcategories, each with their properties and dimensions. At this stage, the researchers also undertake the process of axial coding as advocated by Corbin and Strauss (2008), by classifying the category framework into contextual conditions, actions/reactions and consequences/outcomes. Consequently, the researchers endeavour to identify the interrelationships between categories and to relate structure with process. After compiling the conceptual category structure, coded segments are analysed from each transcript and subsequently linked to the corresponding properties and subcategories within each category. This process, which entails a continuous comparison of data sets, forces the researchers to validate the data sets gathered. Consequently, this proves to be an adequate method to reduce the risk of the researchers influencing the study with their preconceived ideas, which would naturally have accumulated throughout their professional experiences. MAXQDA assists researchers to evaluate and interpret systematically textual data. In particular, its main screen embodies 4 windows representing a quadrant structure of document group, coding/category system, text browser and the retrieved segment window. Figure 1 depicts an example of MAXQDA used in this research study, showing the four windows. MAXQDA fits within the analysis framework that is essential when a grounded theory study is carried out.
Evaluation of Emerging Constructs

This initial grounded theory research study based on five students pursuing Professional Higher Education at the Malta College of Arts, Science and Technology, provides a framework for compiling the constructs relating to the impact of enterprise education on these students’ capabilities. The emergent constructs are placed within a hierarchical structure comprising a top-down approach linking categories, subcategories, and properties to each other. As stated by Birks and Mills (2015), the language used by various grounded theorists has been somewhat confusing as there tends to be some overlapping between these terms. In order to eliminate any misconceptions about these terms and how they relate to each other, it is pertinent to come up with definitions and how they have been applied in this research study. Corbin and Strauss (2008: 159) define categories as, “higher level concepts under which analysts group lower level concepts according to shared properties”. In this research study, a subcategory is labelled as a medium-to-high concept, however it is always linked to a category. Charmaz (2006) defines properties as characteristics or components of an object or action. Properties are linked to a corresponding subcategory. Dimensions, which represent variations within properties, provide specificity and range to concepts in this research study.

The hierarchical structure, as illustrated in Figure 2, comprises a core category, three categories and twenty-three subcategories denoting the various constructs relating to enterprise education that emerge from the evaluation of the five in-depth interviews with students. The core category focuses on the Impact of Enterprise Education on PHE Students. The three categories which comprise the contextual conditions, actions and reactions, consequences and outcomes, are rooted in Strauss and Corbin’s (1998) coding paradigm of the Conditional and Consequential Matrix. Context portrays the set of conditions in which situations relating to the implementation of Enterprise Education and to which situations and conditions students respond to through their actions and interactions. As a result, these previous actions bring about consequences which represent the outcomes of these actions or of responses to events. Therefore, whereas the outcomes are the result of actions in response to the implementation of Enterprise Education, the consequences answer the questions about what happened as a result of those actions. Consequences may in turn trigger changes in the contextual conditions. Furthermore, there is the issue of reverse causality where the consequences will also influence further actions,
reactions, outcomes and context. This is not a problem in grounded theory, since authors such as Charmaz (2006) and Corbin & Strauss (2008) argue that all categories will react and interact to explain the phenomenon under study. The researchers followed Corbin and Strauss’s (2008) recommendations by analysing data for process and examining the interrelationships between concepts within the categorical framework based on context and conditions, actions and reactions, and consequences and outcomes.

Figure 2: Evaluation of the emerging constructs of Enterprise Education on students

The twenty-three subcategories are further expanded with their corresponding properties in Figure 3, reflecting the construction of reality through the interpretation of grounded data. An evaluation of the interrelationships between these emerging constructs, within the hierarchical structure denoting contextual conditions, actions/reactions and consequences/outcomes, was carried out. A typology strategy is followed in this research study whereby data is grouped into categories, subcategories, properties and dimensions according to established common criteria. The identification of the relationships and interrelationships between these emerging constructs would not have been possible without integrating structure with process, as advocated by Strauss and Corbin (2008). Structure encompasses the contextual conditions and the consequences, whereas process denotes the actions and reactions undertaken by the students and education providers. The different cycle stages that each student passes through shows that the contextual conditions trigger the students and education providers’ actions and reactions, which then influence the outcomes and consequences.
Two subcategories corresponding to the contextual conditions and actions/reactions categories respectively, which are shaded in Figure 2, form the basis towards understanding the dynamic process that impacts on the students' capabilities as a result of undergoing enterprise education during a definite period. The shaded subcategories comprise the Enterprise Education course content and the students' emergent entrepreneurial mindset resulting from the continuous adaptations that are undertaken by the education providers on the implementation of enterprise education. These two subcategories that emerge from the implementation of enterprise education influence how students are undertaking their current and future enterprising endeavours. Through these two subcategories, students are also achieving a higher level of engagement in their enterprising activities leading to better employability opportunities within a dynamic business environment. These employability opportunities stem from the students' exposure to thinking critically, solving problems effectively, developing a set of new skills to deal with the uncertain world of work, personal development, meshing applied research with enterprise education, communicating effectively with knowledgeable...
audiences by delivering presentations, and working smart by utilising various methods that are learned throughout the Enterprise Education course.

**Contextual Conditions**

MCAST's Research and Innovation Centre caters for higher education programmes and professional degrees while also working in close collaboration with industry in order to provide students that are both academically prepared and practically trained to satisfy the needs of the dynamic business world.

**Overview of Participants**

The five participants have a number of years' experience within industry and are all currently working as entrepreneurs or intrapreneurs. They are all pursuing their professional higher education by following a three-year Master in Business Administration for the Small Business programme specialising in Business Enterprise at MCAST. All students have obtained initial qualifications and hold a first degree in various disciplines, ranging from business administration, public policy, child care, information technology and education. All five participants have undertaken this enterprise education programme because they aspire to make a career move by progressing to senior positions in industries such as accountancy, banking, finance, management, marketing, human resource management, child care, public policy, educational institutions and more, or by setting up their own business.

**Course Content**

This Enterprise Education programme focuses on the Small and Medium Enterprises' (SMEs) theoretical knowledge, application-oriented experiences as well as the identification of innovation possibilities and growth potentials. MCAST works very closely with SMEs to design and continuously develop this Enterprise Education programme. This ongoing interaction with SME owners and their key managers ensures that the courses of study are relevant to their particular needs. The Enterprise Education programme is taught by industry experts and leading academics who have had successful careers in their respective business settings. The programme is structured to reflect the needs of modern business dynamics. In particular, students are able to fit their studies in without interrupting their current job and any other major commitments.

The Master of Business Administration (MBA) specialising in Enterprise programme consists of 8 compulsory modules, a selection of 2 elective modules and a Master's Dissertation. Each module carries with it 6 ECTS, with the Dissertation carrying 30 ECTS. The programme outlined below has 3 exit points, relating to 30, 60 and 90 ECTS accumulated totals.
Year 1  Post-Graduate Certificate in Business Administration (Level 7 – PgCert)

Compulsory Modules

1. Applied Research and Development
1. Business Analytics
1. Strategy and Small Business Growth
1. Development Economics
1. New Ventures – Start-up Challenges

[Accumulated Total of 30 ECTS]

Year 2  Post-Graduate Diploma in Business Administration (Level 7 – PGDip)

Compulsory Modules

1. Accounting for Managers
1. Entrepreneurship Management
1. Small Business Marketing

Elective Advanced Professional Studies  Select any two modules

1. Basics of Project Management
1. Financial Analysis
1. Managing Organisational Behaviour

[Accumulated Total of 60 ECTS]

Year 3  Masters (Level 7 – Master of Business Administration)

Research Project/Dissertation  at 30 ECTS

[Accumulated Total of 90 ECTS]

The MBA, specialising in Business Enterprise, is awarded to participants who successfully complete the three year part-time post-graduate university study. The academic year spans from September to June. Students study ten modules during the first and second academic years – five modules per academic year – followed by a Master's thesis during the third academic year. The programme uses a modular delivery cycle of 7 weeks of directed and independent learning. Directed learning encompasses a blend of lectures, case studies, debates and guest speakers, tutorials, seminars and other appropriate teaching methods. The directed learning for each module takes place on a Friday to Saturday basis for the first three weeks of the delivery cycle. Lectures are delivered on Fridays between 17:30hrs and 20:30hrs (3 hours); and on Saturdays between 08:30hrs and 13:30hrs (5 hours). The subsequent three weeks are utilised by the students to develop and complete the assignment by applying the theories and directly interviewing entrepreneurs on topics relating to their corresponding taught module. During the seventh week, students present their findings in class to two examiners and their colleagues, prior to submitting the assignment for final assessment by the tutor. One graduate of this enterprise education programme commends the importance of the assignment and oral presentation relating to the assignment for each module:
But, really and truly, in my experience, the most rewarding part was the assignment, because the assignment is based on applied research and it makes you go through all the coursework that you did. Of greater importance, are the findings of the applied research which are presented in class to the examiners and student colleagues which assist us in enhancing our presentation skills. In Enterprise Education, it is a top priority to have excellent presentation skills.

All five participants are mature students, hold a first degree, and have a number of years of work experience, some even at executive level. The assessment mode for this enterprise education programme caters for the particular characteristics of these students who are faced with the continuous dynamic pressures that their employment, whether self-employed or inter-employed, demands. While assuring the highest academic standards, the assessment mode for this programme focuses on assignments, class presentations and the final year dissertation. Each assignment task reflects the learning outcomes that are specified for each module. In particular, while reviewing the relevant theories, students also demonstrate their rich insights that emanate from the business and management practices that are exercised at their workplace or at other firms. Feedback for each assignment is delivered by their examiners within reasonable time so as to ensure sufficient time for improvements to take place when subsequent assignments are undertaken.

**Actions and Reactions**

Most students reacted positively to the opportunity provided to them to present their applied research findings for every module in class in the form of presentations to the two examiners and their colleagues. Students consider presentations in class as a critical success factor for their personal development, even because they are grilled on the topic presented to their examiners and colleagues at the end of the presentations. This mode of applying research, as well as class presentations, contributes towards a change in the students’ entrepreneurial mind-set.

In modules such as ‘Development Economics’, students are encouraged to work in teams to create and develop a crowdfunding research project. Once students had the idea, they started its development by carrying out brainstorming sessions. The experience for these students proved to be positive as it contributed to teambuilding and teamwork. These research projects assisted students to be creative and innovative. Of significance is the team presentation on these research projects which also contributed towards enhanced teamwork. All students assert that they learn a great deal from such applied research projects primarily because the effort demanded is enormous. One student graduate who teamed up with another graduate on a crowdfunded project commented on the benefits that may be reaped when participating with another student on any research project:

> The crowdfunding research project was positive. The fact that my student colleague was a team player, it was not a problem. Given that I had past experiences in committees, I am used to be a team player. The crowdfunding project within the Development Economics module helped us to be creative and innovative in the way we think.

The lecturers’ delivery of each taught module was broadly excellent. During the delivery of lectures, lecturers endeavoured to interact as much as possible with the students and to provide practical examples, especially from their vast work experiences. Students
also participate in class by asking questions to the lecturer to ensure that they are understanding the contents of the topic delivered. Discussions between students are ongoing, even extending outside the lecture room. Students commended the use of effective PowerPoint slides by all lecturers as part of their preparation to render the Enterprise Education programme a successful venture. One student graduate acclaimed the importance of lecturers acting as facilitators:

Lecturers encourage us to participate in class by asking us questions on the topic being delivered. Most students interact with the lecturers by asking questions to ensure that they are understanding the lecturers' viewpoints and by discussing points which may be of interest to the whole class.

Some students emphasised the importance of the lessons learned for those who are in employment and, therefore, they can consider themselves as intrapreneurs. These students recognise that in most circumstances when problems crop up at their workplace, they have to exercise the same skills set learned from the Enterprise Education programme as entrepreneurs.

Consequences and Outcomes

Through this programme, students develop their critical thinking abilities and foster their analytical skills to address today's toughest business challenges. Students claim that through critical thinking they are challenging and evaluating their ideas in ways they never attempted before. In particular, students acknowledge that lecturers are acting as facilitators and are assisting them in nurturing their thinking skills. This programme is also helping students foster their academic experience and professional skills, and providing them with a highly employability skill set in a competitive jobs market. Most students claim that this enterprise education programme strives to prepare and develop them into leaders who are committed to making a difference both personally and professionally. All the students demonstrate commitment, enthusiasm and focus in their studies because they genuinely believe that this programme assists them to attain their professional goals.

Most students following the PHE programme believe that their self-efficacy is becoming more effective because they are now executing decisions with the knowledge gained from all the enterprise modules taught throughout the programme. Luszczynska and Schwerzer (2005) define self-efficacy as an individual's belief in his/her natural ability to exercise personal judgement and innate power to affect prospective situations leading to successful outcomes. One student who is currently an entrepreneur emphasised the importance for entrepreneurs to be self-confident and initially claimed that part of being self-confident means that 'one thinks that one knows everything'. Later, this student claimed that their previous attitude towards self-efficacy may lead to undesirable and long-winded results, as they now acknowledge that better decisions can be made with the vast amount of knowledge they managed to garner since completing the MBA programme:

I think one of the important traits of an entrepreneur is that you are self-confident. Part of being self-confident is that you feel that you know everything. Obviously with hindsight, if I would have done the MBA before, I would have done things very differently and probably, done it much better than I did. Not probably, definitely done it much better than I did. That is the things that I have learned through the
course that I have completed so far, have already opened my mind to a skills set which I did not have before. I used to think that I knew it all. I realised how little I know when I started reading for the MBA, but how much I know. That is I know, but not nothing. But what I knew was spread out, not stored in my mind in a structured way.

Most students believe that the Enterprise Education programme enables them to plan effectively any tasks or projects, thereby reducing the risk of failure. They also express that learning valuable project management techniques is assisting them to be more in control in their day-to-day tasks. Of significance is the peer influence that most students are experiencing in their enterprising mind-set from those students who are practising entrepreneurs. In particular, students acknowledged the way these student-entrepreneurs think and the way they ask smart questions during lectures. Knowledge garnered from the various modules that form part of this enterprise programme, assists these students towards solving work-related problems holistically and towards adapting themselves to the uncertain world of work. Students are reaping maximum benefits from this knowledge by utilising the taught models in the applied research that they undertake for each module.

Students feel that the timing of lectures, since they are currently being held on the weekends, helps them to maximize their time and cope with their work responsibilities as well. Time is very important for most students because they have work commitments. Students also commend the way the modules are planned sequentially because the content of each module builds onto the following one, and therefore all the modules are having a significant impact on their mind-set. Students claim that each Enterprise Education module is adaptable to any business context. In addition, students tend to subconsciously link the theories that they learn during the Enterprise Education programme, with the task in hand at their workplace. Most students are also considering starting new ventures, following their successful applied research project on crowdfunding, as part of their coursework from the Development Economics Module. Students who are practising entrepreneurs, claim that since completing the Enterprise Education programme, they have developed a positive and knowledgeable mind-set to run their business, and the programme has provided them with insights they did not identify before. In particular, they claim that by gaining more knowledge through the Enterprise Education programme, they feel that they are more authoritative when they take business decisions. Most students claim that this Enterprise Education Programme is improving the way in which they plan and implement projects. Indeed, students claim that doing coursework on the company that you manage or own, is beneficial as it will lead one to do tasks differently and work smarter at their place of work.

Most students commonly nurture their personal development by, for example, subscribing to world renowned magazines such as *The Economist* and *The Harvard Business Review*. This Enterprise Education programme has raised the students’ level of personal development to higher standards, by enhancing their knowledge through effective project management, communicating their research findings by delivering effective presentations, being more creative and innovative, working smarter, meshing applied research with Enterprise Education, acquiring a set of new skills, thinking critically and enhancing their self-efficacy. One student graduate acknowledged the importance of personal development strengthened through the Enterprise Education programme which contributed towards this student becoming more knowledgeable:
Through the Enterprise Education programme, I have enhanced my personal development and consequently, I have raised the MBA to a level that I was not achieving before. Personal development is something which is ongoing. Personal development is not only academic but also relates to all our exposure of all the knowledge that we gather throughout our lives.

In particular, most of the students’ applied research learning occurred when they undertook in-depth interviews with entrepreneurs, digitally recorded the interviews, transcribed them and uploaded the transcripts onto qualitative software to create concepts by analysing the transcripts. Students claim that the way lecturers taught them to carry out research, has raised their research and reporting components to higher levels of excellence.

**Interpretation of Emerging Grounded Theory Model**

The authors put forward the following conceptual model that aims to capture the early Grounded Theory synthesis of this research endeavour. The forthcoming model aims to build a parsimonious model within the substantive area of enquiry; an important requisite for any grounded theory study. It also shows the crucial interaction between context and actions as, in the words of Strauss and Corbin: “process and structure are inextricably linked, and unless one understands the nature of their relationship (both to each other and to the phenomenon in question), it is difficult to truly grasp what is going on” (1998: 127). The in-depth interviews repeatedly provided input into particular categories that have been embedded in the following Figure 4. On the X-axis of Figure 4 (Assisted Enterprise Learning), related categories were that of Lecturers Preparation, Lecturers as Facilitators and Motivation to Study, showing a strong appreciation towards the entrepreneurial teaching behaviour of lecturers. On the Z-axis of Figure 4 (Critical Self Reflection), related categories were that of Thinking Critically, Reflexivity and Reactions, highlighting the constant self-challenges that the students were prompted to go through. On the Y-axis of Figure 4 (Self Efficacy), related categories were that of Changing Entrepreneurial Mindset, Self-Efficacy and Adaptation Uncertain World, demonstrating how students, built confidence as well as the competences to succeed.

Also embedded within the model, shown through the nodal points that are labelled as Learning Life Events is the concept of Edelson's (1988) psychodynamic approach. Edelson promotes the psychological concept of life issues; issues that have been ingrained into the individual’s mindset over many years and that tend to remain relatively constant over that person's lifetime. The students participating in this research study, repeatedly demonstrated how particular learning ‘incidents’ framed and supported their enterprise learning trajectory. Various categories such as Problem Solving, Working Smart and Peer Influences fuelled this component of the model. In summary, students would go through unique learning incidents or ‘life events’ assisted by competent tutors, experience corresponding periods of critical reflection, and gradually build heightened levels of self-efficacy. In essence, the proposed model abides by what Grounded Theory research is particularly suited for; looking for adapting and changing patterns within a continuous interaction of actions, context and consequences (Rizzo and Fulford 2012).
Following the in-depth evaluation of the data collected 5 propositions emerged from this research study. These are stated in Table 2 as follows:

<table>
<thead>
<tr>
<th>Enterprise Education</th>
<th>No.</th>
<th>Proposition Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pedagogical Learning</td>
<td>1</td>
<td>Adopting a model of pedagogical blended learning with direct teaching and applied research based on the learning outcomes framework induces critical self-reflection and influences the subsequent skills and competencies of Professional Higher Education students pursuing enterprise education.</td>
</tr>
<tr>
<td>Enterprise Behaviour</td>
<td>2</td>
<td>Students that pursue enterprise education programmes should exhibit innovative business behaviour, generate ideas, recognise opportunities and identify problems and solutions in an uncertain, dynamic and predictable world.</td>
</tr>
<tr>
<td>Applied Research</td>
<td>3</td>
<td>Enterprise Education programmes enable students to think critically and reflectively by the meshing of applied research and enterprise education taught modules.</td>
</tr>
<tr>
<td>Self-Efficacy</td>
<td>4</td>
<td>The higher the assisted Enterprise Learning provided to students pursuing enterprise education, the higher is the self-efficacy exhibited by these students.</td>
</tr>
<tr>
<td>Employability</td>
<td>5</td>
<td>Adopting a model of pedagogical blended learning with direct teaching and applied research, enhances the link between effective enterprise education programmes and employability, providing self-employment as well as general employment.</td>
</tr>
</tbody>
</table>

Table 2: Emergent Propositions from the impact of Enterprise Education on Students.
The following discussion focuses on the implications for stakeholders in this research study. Of particular interest to academics and researchers alike, are the two progressive phases that are used in this study to create an initial conceptual framework on how enterprise education impacts on the employability opportunities of students pursuing Professional Higher Education. These three phases comprise: (1) the identification and extension of constructs emanating from enterprise education as illustrated in Figure 2 and Figure 3; (2) the critical evaluation of interrelationships between these constructs; and (3) the mapping of the students’ learning process as exemplified in the conceptual model in Figure 2, by understanding their capabilities to maximize the benefits that may accrue from enterprise education prior to entering an enterprise venture. In particular, the key constructs as demonstrated in Figure 2, that emerge from the detailed constructs set established in Figure 3, prove to be the basis for contributing towards how students may reap maximum benefits from the enterprise education model adopted in this study. The initial conceptual model generated in Figure 2 rests on three pillars, namely, the Enterprise Education Course content, influencing the students’ entrepreneurial mind-set leading to improved employability opportunities. The final Figure 4, that is the emerging Grounded Theory model, goes beyond Figure 2 in its visualisation of the interaction between the main themes of Assisted Enterprise Learning, Critical Self Reflection and Self-Efficacy, and the processes in which these themes take place.

Policy makers would do well to evaluate this conceptual model, as the knowledge that is generated by students from the implementation of the Enterprise Education model programme, as specified in this study, not only encourages students to embark on a self-employment venture by becoming entrepreneurs, it also enhances their capabilities in entrepreneurship. Policy makers acknowledge the importance of enterprise education as it not only strengthens the students’ educational development, it generates employment leading to a country’s economic prosperity. For example, most students are considering starting new ventures following their successful applied research project on crowdfunding as part of their coursework from the Development Economics module. Employers continuously seek employees who are better capable of coping with changing environments; grasping out new opportunities; fostering teamwork skills, assess and manage risks; and be resilient. The Enterprise Education model, as encapsulated in this programme, encompasses most of these attributes. Also, enterprise education prepares and helps develops leaders who are committed to make a difference in their communities, both personally and professionally. Academic researchers may benefit by extending the conceptual model to incorporate the views of educational institutions including lecturers, entrepreneurs, employers and policymakers. Their views could enhance the enterprise education model by adopting changes in the current enterprise education model. For example, such views may necessitate changes in the curricula by strengthening the mode of student-centred learning leading to preparing students for a lifetime of working, learning and living in an uncertain, dynamic and unpredictable world. These changes can occur if students are exposed to developing new skills through the advancement of Enterprise Education.

Education managers may follow the path that is illustrated in the conceptual model with the objective to nurture students' enterprising skills by providing the appropriate exposure to a student-centred enterprise education. The pedagogical enterprise education model adopted in this study may assist education managers to shape the students’ future practices in organisations. Most importantly, educational institutions have to select lecturers, who besides holding sound academic qualifications, have
work-related industry experience. The choice of lecturers becomes pivotal to enterprise education, because they are continuously acting as facilitators between their vast accumulated knowledge and the students’ generated knowledge. It is evident from this study that educational institutions should promote enterprise learning environments that empower students to think critically and design innovatively. Most importantly, education managers should promote research-engaged teaching and learning based on a curriculum design encompassing a student-centred pedagogy that allows students to be engaged in practical research projects.

Recommendations for Future Research Directions

The objectives of this section stem from the fact that just as new research is inspired by critical assessments of previous research, so the results of this research study will become the take-off ground for generating further research questions and tentative interpretations at wider formal levels. As contended by Curran and Blackburn (2001: 7), in order to pass the test of quality, the research findings will have to be transferable to a wider audience, and particularly to researchers. The emergent Grounded Theory model, as visualised in Figure 4, can be strengthened through further evaluations in various locations such as in other small island states, for example: Cyprus, Mauritius and Seychelles. The model should be considered for its relevance in these small island states to determine whether they experience similar characteristics related to students pursuing Enterprise Education in professional Higher Educational Institutions.

It is also expected that further research would take this model to be tested in a variety of contexts by incorporating the views of education managers, lecturers, entrepreneurs, policymakers and other stakeholders. This further research will generate an extended set of constructs which may be evaluated for their interrelationships. It is hoped that by doing so, the generalisability of the impact of enterprise education on students pursuing Professional Higher Education in Malta, is enhanced.

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