

Entrepreneurship Education In Indonesian Higher Education Institutions

A phenomenographic approach to understanding
students' and faculty members' perceptions, aspirations
and expectations

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ABSTRACT

For a variety of socio-economic and educational reasons, Entrepreneurship Education has become a critical aspect of the Indonesian higher education system. Contemporary Indonesia is characterised by high levels of youth and adult unemployment, low rates of business competitiveness, lack of entrepreneurial skills amongst graduates and negative attitudes towards entrepreneurs and entrepreneurship. Most universities in Indonesia that have adopted entrepreneurship education view it as a traditional subject, lacking innovation in its design, delivery and assessment. As a new phenomenon, entrepreneurship education remains an under-researched topic of academic endeavour.

The aim of this study is to understand students' and faculty members' perceptions, aspirations and expectations as a basis for the development of entrepreneurship education models for Higher Education Institutions (HEIs) in Indonesia.

Developing models of entrepreneurship education specific to the Indonesian context is of great importance for those who are in charge of establishing this new type of education initiative. It also will benefit the Indonesian government as they can use these informed models to make effective decisions on entrepreneurship education policy. The purpose of this study is to discover the different ways students and faculty members conceptualise entrepreneurship education and the logical relationship between these various conceptions. Focussing on this structural framework has been proven to contribute to new understandings of entrepreneurship education field.

The research study upon which this thesis is based has employed a phenomenographic approach to the collection, analysis and interpretation of primary data obtained from seven Indonesian HEIs, including seventy semi-structured interviews with students and faculty members. To complement the phenomenographic approach, face-to-face interviews were carried out with a sample of seven members of senior management, one in each institution. Due to the relatively small sample size, interpretive analysis rather than phenomenography was employed to analyse the results of these interviews.

There are a number of important results emerging from this research study. Students indicated more variation in the ways in which entrepreneurship education is being experienced. Interestingly, faculty members appear to share with students the 'dimensions of variation' upon which the 'outcome space' was constituted. Regarding respondents' aspirations of entrepreneurship education, variations emerged between students and faculty members in relation to 'themes of expanding awareness'. Both sample groups, however, seemed to accept that preparing students to become successful entrepreneurs should be considered a common aspiration of students and staff involved in entrepreneurship education. In terms of expectations, students felt that a market-driven strategy would be the best way to enhance the effectiveness of entrepreneurship education. In contrast, faculty members highlighted the importance of being part of, and contributing to, an entrepreneurial university.

Based upon the result of this research study, three models of entrepreneurship education have been identified in relation to Indonesian HEIs: (i) 'Traditional University'; (ii) 'Entrepreneurial University'; and, (iii) 'Transitional University'. Students' and faculty members' perceptions, aspirations and expectations of entrepreneurship education are the basis upon which these models have been developed. These models offer an original and innovative perspective on how entrepreneurship education should be conceptualised in a higher education context, in developing countries in general and Indonesia in particular.

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“In the name of Allah, The Most Gracious, The Most Merciful, All the praise and thanks be to Allah, the Lord of the ‘Alamin, The Most Gracious, The Most Merciful. The only owner of the day of Recompense, You (Alone) we worship and You (Alone) we ask for help, Guide us to the straight way, The way of those on whom You have bestowed Your grace, Not of those who earned Your anger, Nor of those who went astray.”

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CHAPTER 1. CONTEXT, SIGNIFICANCE AND ORGANISATION OF THE THESIS

1.1. Background

I have been a member of the Faculty of Economics at the Universitas Muhammadiyah Surakarta in Indonesia since 1997 and on sabbatical to study for a doctoral degree at Birmingham City University since 2008. I have been involved in teaching, research and community service for 11 years, with a growing interest in the area of entrepreneurship education. In 1995, I completed my bachelor degree at Universitas Diponegoro Semarang Indonesia (Marketing Management) and obtained a Master's degree in Strategic Marketing from Universitas Gadjah Mada Yogyakarta in 2003. My involvement in Entrepreneurship Education and related research began in 2005, when I was assigned to teach an undergraduate course in entrepreneurship. In due course, this led to a growing interest and fascination with entrepreneurship education and related development within my university.

My role as a faculty member of an Indonesian Higher Education Institution (HEI), involved in teaching and research in the entrepreneurship area, has made a significant contribution to my PhD research, in terms of relevant “hot knowledge” (Rein, 1973 in Kogan, 2002). First-hand experience of, and involvement in, teaching entrepreneurship in an Indonesian HEI, together with extensive knowledge of the relevant specialist literature, proved invaluable in grounding my research results and analysis in the context of entrepreneurship education development in a predominantly Muslim country.

1.2. The research context

Entrepreneurship has become a global phenomenon. Governments around the world have shown an encouraging trend in placing great importance on how to

create a culture where enterprise and new venture creation will thrive (Kirby, 2006). This economic and political perspective emphasises that entrepreneurs help to provide a better quality of life, an increase in employment opportunities and wealth creation (Matlay, 2005). At individual and organisational levels, entrepreneurship can also be considered as part of a systemic response to any change in order to prepare for living in a world which is characterised by uncertainty and complexity (Stevenson, 2004; Gibb, 2007). Therefore, the role of higher education to instil a positive entrepreneurial stance in students has become even more important.

Entrepreneurship education (which will be shortened to EE throughout this thesis), according to Matlay (2006), has been considered as an efficient way to increase the number and quality of enterprising graduates and graduate entrepreneurs entering the economy and it is also cost effective. Given this notion, Rushing argues that some entrepreneurial qualities needed to start and manage successful business can be enhanced through formal education (Rushing, 1990). In addition to this, entrepreneurial people with a high level of education and training are most likely to fulfil the demand of ultramodern customers with customised and knowledge-intensive products and services (Formica, 2002). Nevertheless, the inability of EE to produce cohorts of graduate entrepreneurs instantly will not diminish its value, since it enables students and graduates to develop unique life-long learning skills (Jones, 2010). Students themselves and society nowadays consider such skills necessary when starting and managing business (Gibb, 2006; Jones, 2010).

EE has become critical in Indonesia for many reasons. The high level of unemployment, low national competitiveness in business, lack of entrepreneurship skills amongst university graduates and a poor attitude towards entrepreneurs and entrepreneurship are evident (Statistics Indonesia, 2009; Purwadi and Tantra, 2007; APEC, 2004). The Indonesian government has focused on entrepreneurship since 1994 (APEC, 2004). Nevertheless, it has been far from successful. A lack of good programmes for entrepreneurship development has become evident. Another factor, which is common knowledge amongst Indonesians, is a cultural influence, on completion of higher education, most Indonesians would prefer to work as government officers. This choice of career, with secure monthly pay

checks, is perceived to be less risky than the uncertainty accompanied by entrepreneurship.

Given this experience, in 2009 the Indonesian government allocated 37 billion rupiahs (around 2 million pounds sterling) to foster EE for students in higher education. The objective was to nurture the students' ability to assess and take risks as independent people rather than being focused only on the employment market (Kompas, 2008).

In spite of this effort, from 2,679 Indonesian private universities and 82 public ones, Kuswara found that only a few had a high commitment to EE (Kuswara, 2011). Most universities in Indonesia consider EE simply as a compulsory subject without innovation within its pedagogy and assessment. UC in this case is an exception. It was founded in 2006 by one of the Indonesian pioneers in entrepreneurship, Ir. Ciputra, with the goal of creating a study place where entrepreneurship values are fully integrated. In this university, students are taught how to become entrepreneurs whilst still following their choice of field of study. Innovation and creativity, which are, arguably, the soul of entrepreneurship, were encouraged and merged through all departmental programmes. The values of entrepreneurship were then embedded in each subject, in order to support the preparation of students for the real world of business and to become real entrepreneurs (Universitas Ciputra, 2009).

The phenomenon of EE in Indonesia, as discussed above, indicates that there is still low acceptance of and variation in the knowledge, vision and experience of this new type of education. As a departure point, Gibb (1993) suggests that it is necessary to clarify the concept of EE itself. It has been argued that the conceptual diversity of EE will lead to confused purposes and outcomes (Hannon, 2006; Gibb, 2002). A robust conceptual framework is required for the entrepreneurship programmes as a foundation to underpin its design and delivery (Gibb, 2002; Hannon, 2006). A stronger conceptual stance will give clearer direction to practitioners and policy makers that will prevent ineffectiveness of resources (Gibb, 2002). The variation in beliefs that underpins the meaning of EE will create a number of key issues concerning:

“... what should be offered, where it should be positioned institutionally, to whom it should be offered and by whom and how it should be delivered.

Such issues relate to conceptual and philosophical challenges, design options, and institutional capacity and capability factors.” (Hartshorn and Hannon, 2005, p.616)

It is important to examine the students' perspective in order to design and deliver effective EE, as has been suggested by scholars such as Gibb (2002), Hills and Morris (1998), Schwartz and Malach-Pines (2009), Mohan-Neill (2001) and Kraaijenbrink *et al.* (2010). It should be recognised that students who are studying in higher education bring different entrepreneurial needs and aspirations. Meanwhile, from the supply side perspective, educators' motivation, commitment and expectations are necessary to ensure that EE initiatives are successful (Birdthistle *et al.*, 2007; Clergeau and Schieb-Bienfait, 2007; Kent, 1990). Therefore, it is important to consider both views in EE arrangements since students and faculty members are indeed primary stakeholders in the process (Matlay, 2009).

In order for HEIs to design and deliver EE effectively, it is necessary for them to understand what students and faculty members perceive, aspire to and expect of it. Government, policy makers and business commentators, according to Matlay (2006), believe that EE is an efficient way to increase the number and quality of enterprising graduates and graduate entrepreneurs entering the economy and it is also cost effective. Unfortunately, dissatisfaction regarding the inability of higher education to fulfil this expectation has emerged, since there is little evidence that university is the right place to nurture graduate entrepreneurs. Some scholars argue that it is a matter of ambition or aspiration (Johannisson, Halvarsson, and Lovstal, 2001; Jones, 2010; Rushing, 1990). Others mention ontology or the conceptual foundation, pedagogy and context or institutional strategy as factors that must be considered as determinants in order for EE to be effective (Blenker *et al.*, 2008; Bechard and Gregoire, 2007; Gibb, 2002; Fayolle, 2008; Hindle, 2007; Pittaway and Hannon, 2008; Sewel and Pool, 2010).

1.3. Aim, objective and the research questions

The aim of this research study is to understand students' and faculty members' perceptions aspirations and expectations of EE and to develop related

entrepreneurship education models for Indonesian HEI.

The objective of the study is to investigate EE perceptions, aspirations and expectations, along with a structural framework within which the various perceptions, aspirations and expectations of a sample group of students and faculty members in seven Indonesian HEIs may be explored.

A phenomenographic approach was used to investigate this main area of enquiry (see Chapter 3) and specifically to answer the following research questions:

- What are the variations in students' and faculty members' perceptions of EE?
- What are the qualitatively different ways in which students and faculty members aspire to EE?
- What are the qualitatively different ways in what students and faculty members expect of EE?

The students' and faculty members' perceptions, aspirations and expectations of EE have not been extensively studied in the past and therefore little comparison nor contrast made. Therefore, another research question which this study aims to answer is:

- What are the similarities and differences in students' and faculty members' perceptions of, and aspirations for, and expectations of EE?

In order to provide a complete picture, it is necessary to gain senior management's views of EE. The following research question was therefore posited:

- Is there any support from senior management for students' and faculty members' perceptions of, aspirations for, and expectations of EE?

All findings in relation to these research questions will be the basis for developing models of EE for Indonesian HEIs.

1.4. The significance of the research

The need and therefore the significance of this study is not only conceptual but also pragmatic. As reviewed above, there is little acceptance of EE amongst

Indonesian HEIs, along with little agreement on how it should be designed and delivered. There is a clear need for an improved understanding by students and faculty members of their perceptions of, aspirations to and expectations of EE. The findings which are presented in the models specific to the Indonesian context are of great importance for those who are in charge of developing EE initiatives, not only in established universities, but also new ones. The Indonesian government can use these informed models to make effective decisions on EE policy. Eventually, this study will contribute to enhancing the growth of EE and its efficacy. As a principle, this study is seeking insight from both perspectives: the demand-side (students) and the supply-side (faculty members) to prevent the one-sidedness found in the current literature. Furthermore, the fact that this EE research was carried out in Indonesia, with the use of a phenomenographic approach, bring other advantages which will contribute to the development of the body of knowledge in the area of EE and EE research.

1.5. Organisation of the thesis

As outlined previously, the focus of this study is entrepreneurship as a teaching subject and the main question of this study is concerned with the variations in students' and faculty members' perceptions, aspirations and expectations of EE. However, it is necessary to review issues related to entrepreneurship as a phenomenon and a research field as well as a teaching field. This approach will thus ensure that there is a balanced discussion, not only from an educational point of view, but also from an economic view. Therefore, Chapter Two will draw on previous studies of entrepreneurs and their activity based on historical beginnings, with debates regarding entrepreneurship as a discipline also included. A wide discussion about EE during its growth period, together with the issues that have evolved, will be provided. The chapter will also discuss EE within the Indonesian context. Finally, a conceptual framework which indicates the relationship between the perceptions, aspirations and expectations of EE will be presented.

While still focussing on the aims of this research study, it is however necessary to present a brief discussion related to general issues in research methodology in

order to provide justification for the research method chosen to answer the research questions. Chapter Three begins with a discussion of definitions of research, including the importance of the philosophy which will underpin the choice of research techniques and procedure. Current developments in research into entrepreneurship and EE will also be discussed. This will be followed by assumptions held in this research study and a description of the research method based on a phenomenographic approach. Finally, the chapter will provide a concise description of the data collection in seven Indonesian HEIs.

Chapter Four is the first of three analytic chapters and presents and discusses the findings from the analysis of the phenomenographic interviews. As this chapter is the first to discuss the interviews, it is necessary to explain in detail the analytic process which was carried out in order to establish the categories of description, focusing specifically on the variations in students' and faculty members' perceptions of EE as the object of analysis. The findings from this analysis are then presented as categories, followed by a discussion of the structure of these categories; the chapter concludes with a discussion of the findings with respect to relevant literature in the area.

Chapter Five is the second of the three chapters which present and discuss the findings from the analysis of the phenomenographic interviews. Within the discussion of perceptions in Chapter Four, it has been agreed that EE as a matter of learning, either enterprising or entrepreneurial, is the highest understanding of EE. There remain questions in relation to how learning has been understood in order to help students to attain their career aspirations. The views of students and faculty members were collected in order to provide a complete understanding of EE aspirations. Using phenomenographic assumptions, the research findings will be presented, analysed and discussed along with senior managements' views and the recent debates in EE. Throughout the interviews, faculty members and students were asked to discuss the relationship between career ambitions after graduation and entrepreneurship learning/teaching, and how they consider that EE has helped them to reach the career aspirations.

In the discussion about aspirations in Chapter Five, it is agreed that entrepreneurial learning should prepare students to accomplish their career ambitions as entrepreneurial employees or great entrepreneurs. There still not

clear in relation what and how all aspects including students, faculty members and institution should be considered in order to achieve those aspirations effectively. In Chapter Six, students' and faculty members' views were collected in order to provide a complete understanding of expectations of EE. Throughout the interviews, faculty members and students were asked to discuss the interrelationship between the determinant factors which affect the success of EE. Using phenomenographic assumptions, the research findings will be presented, analysed and discussed, along with senior management's views and the recent debates in EE.

As stated previously, the final result of this study will be proposed models of EE (EE) for HEIs (HEIs) in Indonesia. This mission is considered as necessary since EE is still emerging in Indonesia. As a result, it is rare to find the Indonesian context discussed within the EE research field literature. The empirical models may contribute to improving acceptance of EE in Indonesian HEIs.

As indicated in Chapter Four, there is resistance amongst senior management when discussion about entrepreneurship and EE is confined narrowly to business and its economic value. Effectiveness is another critical issue. Within the same chapter, the lack of empirical studies in relation to the key success factors of EE initiatives that lead to prejudice from senior management that entrepreneurs are born not made is also discussed.

It is therefore necessary in this study to develop empirical models which will act as guidance for Indonesian HEIs where EE initiatives have not yet started, or who are still looking for ways to enhance their effectiveness. It will be demonstrated in Chapter Seven that the models might be useful for those who are about to found a new university and consider EE as an alternative strategy for its market positioning.

CHAPTER 2. LITERATURE REVIEW

2.1. Introduction

As outlined in Chapter 1, the focus of this study is entrepreneurship as a teaching subject, with the main question is the variations of students' and faculty members' perceptions and expectations of, and aspirations towards, EE (EE). However, it is necessary to review issues related to entrepreneurship as a phenomenon and a research field as well as a teaching field. Thus, this approach will ensure that there is a balanced discussion, not only from the educational point of view, but also from the economic one (Block and Stumpf, 1992; Erkkila, 2000; Rushing 1990). Therefore, this chapter will draw on previous studies in relation to entrepreneurs and their activity. Debates regarding entrepreneurship as a discipline will also be included. In addition, a wide discussion of EE during its growth period, together with the issues that have evolved, will be provided. EE in the Indonesian context will also be discussed. Finally, a conceptual framework which indicates the relationship between EE perceptions, aspirations and expectations will be presented.

2.2. Entrepreneurship

2.2.1. Perspectives and definitions

2.2.1.1. The important role of entrepreneurship

Entrepreneurship has become a global phenomenon. Governments around the world have demonstrated effectively how to create a culture where enterprises and new ventures creations can thrive (Kirby, 2006). This economic and political perspective emphasises that entrepreneurs, and in turn entrepreneurship, contribute to economic improvement and employment generation (Matlay, 2005). At individual and organisational levels, entrepreneurship can also be considered

as part of a systemic response to any change in order to prepare for a world which is characterised by much greater uncertainty and complexity (Stevenson, 2004; Gibb, 2007). In entrepreneurship literature, the relationship between its activity and economic development can be understood more easily through Schumpeter's concept of creative destruction (Hebert and Link, 2009; Richardson, 2004). In the concept, development will occur unless there is a disturbance to disrupt the equilibrium of the circular, economic flow. New technology or other innovative advantages which mainly emanated from arising, new firms will challenge and possibly replace existing firms and industries. As a result, greater productivity will spread through the economy (Richardson, 2004, p.470).

However, Baumol and Storm (2010) argue that entrepreneurial activities must also be productive. Productive entrepreneurs who contribute to economic growth can be contrasted with unproductive entrepreneurs, since the latter contribute little or nothing to growth and sometimes can detract from it. Innovative but unproductive entrepreneurship is perceived as being dysfunctional for the economy. Baumol and Storm describe these entrepreneurs as:

“... enterprising individuals who employ new approaches to rent-seeking, criminal, and other unproductive or even socially damaging activities. In addition, these are the entrepreneurs who seek to obtain a larger slice of the pie for themselves, rather than increasing the size of the pie for everyone.” (Baumol and Storm, 2010, p.530)

Entrepreneurial activities, according Gibb (2002) must be aligned with the conventions of society, morally and ethically. This standpoint is necessary in order to ensure that individuals' and organisation's objectives are conducive for general well-being (Gibb, 2002).

Some scholars have different perspectives regarding the critical and strategic role of entrepreneurship, such as those presented in the work of Gibb (2002), Kirby (2006) and Stevenson (2004). As a result of global pressures, changes could influence how individuals, organisations and society react in order to cope with uncertainty and complexity (Gibb, 2002). Indeed, Kirby (2006) states that:

“... in a global economy, every citizen is interdependent, but increasingly will be required to take ownership of their own destinies –for the benefit of themselves, their families, their colleagues, their fellow countrymen and world citizenry.” (Kirby, 2006, p.42)

Kirby's view demonstrates there is a need for individuals, communities, organisations and societies to develop a greater awareness of enterprise and mutual support. Stevenson (2004) concludes that it is important to view entrepreneurship in a broader sense. It should be deemed as part of a systemic response to change and as an initiator of change (Stevenson, 2004). Therefore, it is assumed that entrepreneurship as a management skill can be practised and perfected to drive any venture forward in any kind of domain, such as business, society, culture or politics (Wickham, 2006).

2.2.1.2. *Entrepreneurship and educational reforms*

In developing countries, including Indonesia, educated unemployment has become a massive reality (Singh, 1990). The situation will get worse around the globe; Matlay (2011) argues that:

“By the time “generation Y” enrolled in higher education institutions (HEIs), large employers were in decline and a rapidly growing cohort of new graduates was forced to choose between three main options: unemployment, employment in smaller businesses or an entrepreneurial career.” (Matlay, 2011, p.167)

There is also evidence in the UK that the impact of the experience in the university on student's goals to become entrepreneurs is not positive (Gibb and Hannon, 2006). This means that there is a much higher percentage of students in the beginning year aspiring to entrepreneurship than in the final year (NCGE/Barclays Bank, 2006 cited in Gibb and Hannon, 2006). This is not surprising, as encouragement to young people to consider self-employment or setting up a business or co-operative as a career option (Watts, 1981) is rare.

There is some evidence which indicates that education in the Third World inhibits, rather than promotes, the growth of entrepreneurship (Singh, 1990). This issue is still relevant for Indonesia, where deficiency in learning across educational systems has been taking place, including a heavy emphasis on cognitive attainment and separating knowledge from its application in the real world (Raihani, 2007). In addition, it is common in many developing countries, where industrial leaders are considered worthy of little respect and autocratic classroom control inhibits risk-taking (Whyte and Braun, 1965). As a result, many university

graduates are unable to play their part in the community and face the competition and the change (Raihani, 2007).

It could be argued that educational institutions at primary, secondary and higher education levels need to implement advance learning methods and tools. This will encourage creativity, innovation and the ability to “think out of the box” to solve problems (Volkmann, 2009, p.15). At the higher education level, two changes are needed: the education system has to have a “doing” rather “thinking” orientation, while knowledge has to be converted to solution that benefits customers in the marketplace (Formica, 2002, p.171). It is also imperative to celebrate entrepreneurs and their success in all educational environments (Aronsson, 2004).

EE, according to From (2006), can be thought of as a manifestation of something that traditional education in a sense has already left behind. Its focus is on experiential learning, in which knowledge and understanding are created through the transformation of experience in a realistic environment. Eventually, it will produce graduates who are more able to deal with the world (Crosby, 1995). It is a reminder that studying should be aimed at grasping the object of learning and for life, rather than simply taking tests and exams (Bowden and Marton, 1998). These EE characteristics, arguably, enrich education as a whole (Hindle, 2007). This means that although EE does not result directly in the creation of entrepreneurs, it may still foster enterprising behaviour (Singh, 1990).

2.2.1.3. The problems of the definition of entrepreneurship

Entrepreneurship is undoubtedly an important field; nevertheless, agreement as to what entrepreneurship involves remains unclear. In recent literature about entrepreneurship, according to Sexton (1994), there is a wide variety of definitions and conflicting schools of thought. However, this fact will affect both its legitimacy as an academic discipline (Vesper, 2004) and hinder policy and practice (Gibb, 2007). Since there is no generally acceptable and comprehensive definition of entrepreneurship, researchers used to define entrepreneurship near to their conceptual representation (Matlay, 2005). Consequently to generalise the research findings can be quite a task.

A solution for this would be to resolve the debates concerning the definitions of

both "entrepreneur" and "entrepreneurship"; otherwise, it can lead to confusion when assessing the current state of EE (Gibb, 2007; Henry *et al.*, 2005). For instance, the key question of whether entrepreneurship should simply to be considered as a business phenomenon or whether it has wider application must first be clear (Gibb, 2002). Defining entrepreneurship is also a vital part of universities' campus-wide initiatives. According to the work of Bechman and Cherwitz (2009), it would be difficult for educators if entrepreneurship were defined exclusively as the creation of material wealth. Therefore it is important, according to them, to define the term in a manner that is unique to universities' intended goals and institutional culture, whereby its implementation for campus-wide initiatives and sustainability will be successful.

Gartner (1990), however, argues that it is not necessary for one definition of entrepreneurship to emerge. The reason is that the variation in the meanings of entrepreneurship will enable people to share what they think about entrepreneurship. Arguably, developing a lexicon for the entrepreneurship field which includes different types of entrepreneurship and entrepreneurs with different appellations might be necessary, as pointed out by Vesper (2004).

2.2.1.4. *The entrepreneur and entrepreneurship: The economic perspective*

From an economic standpoint, four main themes can be used to approach entrepreneurship and the entrepreneur, as summarised in Table 2.01 (Casson, 1990; Bjerke, 2007).

Table 2.01. The entrepreneur from an economic perspective

	The influential scholar	Definition of an entrepreneur
Risk and Uncertainty	Cantillon, Knight	An entrepreneur is someone who lives on uncertain income (a risk taker).
Market Process	Kirzner	An entrepreneur is someone who perceives the opportunity for gain in a situation of disequilibrium and acts accordingly (an opportunist).
Innovation	Schumpeter	An entrepreneur is someone whose 'creative destruction' regulates growth and fluctuation in economy (an innovator).
The Entrepreneur and the Firm	Say	An entrepreneur is someone who brings the factors of production together and organises business firms (a business builder).

Source: Adapted from Casson (1990) and Bjerke (2007)

Although there are different definitions of the entrepreneur, the economic perspective can at least offer some answers to the principal questions of “who is the entrepreneur and what does he do that makes him unique?” (Herbert and Link, 1988, p.11). Kalantaridis (2004) has posited the view that the cognition and economic action are performed by entrepreneurial agents. This proposal led Davidsson (2004) to the idea of confining the definition of entrepreneurship to a market context. Based on the Austrian economists, especially Kirzner, Davidsson proposed a fruitful way to define entrepreneurship: it is “the competitive behaviours that drive the market process” (Davidsson, 2004, p.16). The following arguments have also been provided by Davidsson to support his proposed view of the entrepreneurship phenomenon: (1) It is based jointly on behaviour and outcomes and entrepreneurship can be portrayed as micro level behaviour that can have hugely important macro-level implications; (2) It puts entrepreneurship squarely in a market context and makes clear that it is the supplier who exercises entrepreneurship, not customers, legislators or natural forces that also affect outcomes in the market (Davidsson, 2004, p.6).

This definition appears to be aligned with a broad consensus among politicians and governments that entrepreneurship and entrepreneurs are vital for economy (Atherton, 2004).

2.2.1.5. *The entrepreneur and entrepreneurship: The non-economic perspective*

Moving away from the economic perspective, psychology and sociology are two disciplines that also offer alternative ways to understand entrepreneurs. While psychology focuses on the motivation and cognition of the agent, sociologists and anthropologists are interested in the relationship between entrepreneurs and their context (Kalantaridis, 2004). In the psychological literature, it is widely acknowledged that entrepreneurs possess certain characteristics, such as risk-taking ability, the high need for achievement, a high internal locus of control, a higher need for autonomy, deviancy, creativity, opportunism and intuition (Kirby, 2006, pp.37-39). Sociology, on the other hand, provides insights into the process of entrepreneurship, including the importance of values, beliefs and attitudes in fostering entrepreneurship development (Wickham, 2006).

Gartner (1988), a sociologist, argues that it is fruitless to ask who the entrepreneur is because the previous research has not found any difference between entrepreneurs and managers in relation to the personality characteristics. Gartner (1988) even defines entrepreneurship as the creation and establishment of new organisations. There are three advantages that can be gained from entrepreneurship being conceptualised as a process that takes place in an organisational setting. First, considerable attention can be emphasised to analysing the steps or stages involved. Second, it enables the identification of factors that both constrain and promote the process (Sexton, 1994). Finally, skills relate to organisation creation that an entrepreneur need to know will be critical.

Gibb (1990) contradicts most of the economic and sociological literature by proposing a definition of the entrepreneur in terms of a set of personal attributes, rather than as a person undertaking a particular societal role or set of tasks. An entrepreneur is someone who exhibits in his or her behaviour the use of a combination of enterprising attributes. As personal attributes, according to Gibb, these can be used anywhere, not only in the business context. Due to globalisation, entrepreneurial behaviour is needed by individuals, organisations and societies. Atherton shares a similar view to Gibb and offered the term of “being entrepreneurial”, which is defined as:

“... taking the initiative and responsibility to re-shape existing boundaries and norms and to create new boundaries and norms in order to manage and deal with conditions of ambiguity, complexity and uncertainty.”
 (Atherton, 2004, p.126)

Table 2.02 summarises the differences between the economic and non-economic perspectives to help understand entrepreneurship and is based on Kalantaridis (2004). An institutional analysis has been suggested in order to overcome inherent shortcomings in each perspective, as laid out in Table 2.03, which summarises the institutional approach to understand entrepreneurs and entrepreneurial actions. In addition, Kalantaridis also argues that understanding of the entrepreneur will require the clarity of key concepts and propositions and sensitivity to the specificity of the context.

Table 2.02. Understanding entrepreneurship: economic versus non-economic approaches

	Economic approaches	Non-economic approaches
Influential Scholars	Pioneered by Cantilon and Say in the mid-eighteenth century. Revived by Schumpeter and Knight in the early 1900s	Pioneered by Weber in the early twentieth century.
Contribution	Explores the function performed by entrepreneurial economic agents.	Provides suggestive insights into the characteristics and attributes of individuals who perform entrepreneurial functions.
Focus	Explores aspects of cognition and economic action.	Psychologists focus on the motivation and cognition of the agent. Sociologists and anthropologists focus on the relationship between the entrepreneur and the context.
Critique	Mainstream economics that pursues universal laws has been proved unable to advance understanding of the entrepreneur. For example, the deployment of a mathematical method in the pursuit of laws of motion and causation in static equilibrium situations.	Mono-causal explanations of either the sociology or the psychology of the entrepreneur have proved unsuccessful. For example, not all Protestants engage in entrepreneurial pursuits and not all members of socially marginal groupings create entrepreneurial ventures.

Source: Adapted from Kalantaridis (2004)

Table 2.03. The Institutional Approach

Perceptions of the entrepreneur	The influence of context upon entrepreneurial actions
<ol style="list-style-type: none"> 1. Entrepreneurs as unified human beings, who are contextual but engage in purposive action. 2. The entrepreneur is a rational economic agent but not in the manner of the neoclassical tradition. The entrepreneur's rationality is influenced by his or her past as a member of a collective. 	<ol style="list-style-type: none"> 1. The characteristics of the institutional setting and the level of technological advancement outline the boundaries (which could also be viewed as a finite set of opportunities and constraints) of entrepreneurial decision-making. 2. Interaction with other economic agents influences the outcomes of entrepreneurial actions, creating new information and experiences that may instigate new entrepreneurial action.

Source: Adapted from Kalantaridis (2004)

2.2.1.6. History of entrepreneurship as a phenomenon

In contrast with economic theory and models that provide a great deal of insight, history provides a different perspective in terms of understanding entrepreneurship (Landes, Mokyr and Baumol, 2010). The entrepreneurship patterns and the evolution of innovation and entrepreneurship can be tracked back through the years. The other benefits of adopting a historical perspective include its ability to provide specific examples at a deeper level, and to accordingly investigate the varied nature of the activity (Landes, Mokyr and Baumol, 2010). In short, history reveals commonalities in the development of a culture of entrepreneurship, the institutions that foster this activity, and the link between entrepreneurial activity and economic growth. Therefore, a study of history is intended to illuminate useful knowledge in regard to entrepreneurship and entrepreneurship policy.

Wingham (2004) argues that Phoenicia (approximately 1100BC-500BC), with their entrepreneurial philosophy and practices, may be considered a starting point to understanding entrepreneurial diversity in the 21st Century. As a nation of independent city states, with most of their population merchants and traders, the Phoenician trading and their entrepreneurial culture contributes to and inspires beyond their empire (Wingham, 2004). During this period, the risk-bearing function of entrepreneurship was dominant (Herbert and Link, 1988). The traders adventured on to the other side of the globe and established trade through an

uncertain environment, which presented personal and financial risk (Wingham, 2004). The role of merchants or traders as entrepreneur was common until the 15th Century (Herbert and Link, 1988).

In the 17th Century, the role of the entrepreneur in the market economy (the Cantilon's entrepreneur) was to provide desired goods or services at the right time and place in order to meet predetermined consumers wants (Herbert and Link, 1988). This embraced a number of occupations, and cut across production, distribution, and exchange.

If Cantilon's entrepreneur is not required to be innovative in the strictest sense of the term (Herbert and Link, 1988), Schumpeter, in contrast, associates entrepreneurs with innovation. It has been argued by Schumpeter that, by the offering of new products and services within the market, the size of the basket of obtainable goods and services can be increased (Wingham, 2004).

Generally, it has been accepted that the rise of unemployment has become a common phenomenon around the globe during the 21st Century. Birch's discovery regarding the role of small businesses in creating new jobs leads to revisiting the Schumpeterian Theory of Creative Destruction (Wingham, 2004). Therefore, substantial support has been given to the new understanding of economic growth (Wingham, 2004). An economic system in which experimentation and risk-taking are common should be developed, as the most successful regions are those with the highest rate of innovation and failure (Birch, 1981, p.7). Indeed, Global Entrepreneurship Monitor (GEM, 2006) indicates other evidence regarding the relationship between early-stage entrepreneurial activities –which are the prevalence rate of nascent entrepreneurs (people in the process of starting a new business)– coupled with new business owner and economic development.

2.2.2. Development of entrepreneurship: Entrepreneurial activity, policy, research, and teaching

2.2.2.1. The level of entrepreneurial activity

The importance of entrepreneurship is commonly related to the contribution of small businesses (Birch, 1981). The ability of a small firm in creating new jobs, as

indicated in many studies in the US and Europe, has encouraged policy makers around the world to foster entrepreneurship. After its re-emergence as economic policy agenda in the 1980s, scholars appeal for studies regarding factors at which the level of entrepreneurship can be increased (Hofstede *et al.*, 2004). The level of entrepreneurship can be measured on the basis of the number of self-employed per labour force (Hofstede *et al.*, 2004) or the prevalence of young enterprises (Grilo and Turik, 2005). Whilst the variation of entrepreneurial activity is believed to take place at a country, organisational, and individual level (Audretsch *et al.*, 2002). At a country level, there are two main factors regarding the determinants of entrepreneurship:

- 1) economic factors; cultural traits and attitudinal phenomena (Hofstede *et al.*, 2004), and
- 2) a nation's level of human capital intended on entrepreneurship and the level of governing protection (Bowen, 2008).

At an organisational level, the macro-structural and micro-behavioural can be taken into account as the factors influencing entrepreneurs' intention to make their enterprise grow (Liao, 2004). The macro-structural predictors of company growth encompass "external environment, managerial practice, planning and control, network resources and alliances, interaction, and the accessibility of capital" (Liao, 2004, p.119). On the other hand, demographics, firm age, and personal attributes can be deemed as the micro-behavioural predictors of venture growth (Liao, 2004).

At an individual level, the determinants of the level of entrepreneurship refer to an individual's decision and commitment (Katz and Gartner, 1988) to engage in business creation. Linan (2007) argues that the entrepreneurial intention model is a basic element in the entrepreneurial process. As opposed to attitude, belief, or other psychological or sociological factors, intention is deemed a better predictor of behaviour, such as venture creation (Krueger and Casrud, 1993).

Other scholars highlight the pull and push factors as determinants of business start-up and entrepreneurship in general (Matlay, 2005). Pull factors encompass the expectation of being better-off as an entrepreneur, such as through consideration to material and/or non-material benefits (Hofstede *et al.*, 2004); this

fulfils a personal need for change, growth, and development (Matlay, 2005). On the other hand, negative factors, including the level of dissatisfaction due to frustration with previous wage employment, job loss, and personal crises are taken into account as push factors for someone to choose entrepreneurship as a career path (Liao, 2004).

Veciana, Aponte and Urbano (2005) suggest that determinants of entrepreneurship may be analysed better through Institutional Economic Theory, which is a framework providing the most consistent and appropriate conceptual frameworks in order to understand entrepreneurship phenomenon in a region or country due to the environmental factors (Veciana, Aponte and Urbano 2005). Such environmental factors can be either formal or informal. As opposed to political and economic rules and contracts, which constitute formal factors, cultural and social environment, as a part of informal institutional environment, affects perceptions of desirability and feasibility of new venture creation (Veciana, Aponte and Urbano 2005).

Given the discussion above, if business creation (in particular, the number of start-ups) is a primary measure of entrepreneurial activity, it seems that, the higher the number of individuals starting up businesses, the better economy (Atherton, 2004).

2.2.2.2. *Entrepreneurship policy*

Research findings confirmed that entrepreneurship is essential to economies. Accordingly these have encouraged policy makers around the world to foster entrepreneurship. In developed countries, more recent attentions have been paid to entrepreneurship policies because the governments believe that entrepreneurship can renew their economic performances and be a solution for unemployment problems (Lundstrom and Stevenson, 2005). In developing countries, however, there are quite different reasons. Governments in Asia, through supporting micro and small enterprise development activity, believe that entrepreneurial activities will impact not only on the innovation and resource allocation but also sustainable development in the rural poor (Richardson, 2004). According to Kantis (2002), it is government who has the main responsibility:

“... to plan the strategy, build the vision, mobilise key players and commit to promote the emergence and development of new entrepreneurs and dynamic of enterprise.” (Lundstrom and Stevenson, 2005, p.12)

More specifically, Hart (2003) highlights two areas where the role of public policy and governance will be essential. All the contextual determinants of the demand for entrepreneurship and the supply of entrepreneurship can be shaped by either education, macro or entrepreneurship policy. Education policy can influence “background condition” over a decade or more whilst macro policy can shape “short-term condition” on a monthly basis. Entrepreneurship policy, however, can have impact within a period of years on “intermediate condition” for entrepreneurship (Hart, 2003, p.9).

It has been acknowledged that the appearance of Birch's (1979) recommendations on the role of new small businesses in the job creation in the US is a cornerstone of entrepreneurship policy. Nevertheless entrepreneurship policy must not be considered as modernised policy promoting small and medium enterprises or SMEs (Audretsch *et al.*, 2007). Some countries such as Australia, Canada, Sweden, Taiwan and the US, according to Lundstrom and Stevenson (2007), adopted E-extension approach which its primary focus is:

“... geared towards addressing market failures and levelling the playing field for existing SMEs.” (Lundstrom and Stevenson, 2007, p.108)

The strongest commitment to entrepreneurship policy, according to Lundstrom and Stevenson (2007), should be demonstrated by government through more comprehensive and integrative approach in order to produce higher levels of “dynamism, innovation, productivity and growth” through robust entrepreneurial activity. This “holistic policy approach” has been adopted by the UK, the Netherlands, Finland and Denmark which address the following failures including systemic, social, education, information asymmetries and market failures (Lundstrom and Stevenson, 2007, p.14).

The choice of entrepreneurship policy instruments, however, is determined by context (Audretsch and Beckmann, 2007). This argument is also supported by Lundstrom and Stevenson (2007). Having identification towards the range of policy instruments and measures in the collective policy palette of 13 economies, Lundstrom and Stevenson (2007) concluded that the formulation of

entrepreneurship policy was influenced greatly by country context. Therefore mapping the current status of entrepreneurship in the country coupled with identifying country-specific entrepreneurship opportunities and challenges are necessary as suggested by United Nations Conference on Trade and Development (UNCTAD, 2012).

2.2.2.3. *The developments in entrepreneurship research*

The focus of entrepreneurship research, according to Acs and Audretsch (2003), has changed significantly over past twenty years. Firstly, it has been centred on the behaviour and cognitive issue which is focused on the discovery and exploitation of opportunity instead of research on traits and personality. Secondly, the relationship between nascent entrepreneurs, organisation/firm births, and economic growth emerges as a critical theme of research. Thirdly, there is a need to examine not only economic but also social impact of new firm formation and firm dynamics (Acs and Audretsch, 2003, p.5)

An entrepreneurship definition should guide what the scholarly domain of entrepreneurship will be (Davidsson, 2004). The work of Shane and Venkataraman (2000) and Gartner (1988, 1993, 2001) inspired Davidsson (2004) to suggest the coverage of entrepreneurship research as:

“... the study of process of (real or induced, and completed as well as terminated) emergence of new business ventures, across organisational contexts. This entails the study of the origin and characteristics of venture ideas as well as their contextual fit; of behaviours in the interrelated processes of discovery and exploitation of such ideas and behaviours link to different types of direct and indirect antecedents and outcomes on different levels of analysis.” (Davidsson, 2004, p.30)

This strong definition, with its focus on ‘the process of emergence’ (Gartner, 1988; 1993; 2001), is expected to advantage the entrepreneurship research as a field of social science (Davidsson, 2004). Moreover, it will also prevent the low quality of entrepreneurship research (Watson, 2001) since there is clarity regarding purpose, data collection, sampling, and findings. Kyro (2006), however, argues that it will less possible to attract education researchers as it tends to put entrepreneurship as an individual and business-oriented phenomenon rather than an educational and social-oriented one (Scott *et al.*, 1998).

2.2.2.4. Education and entrepreneurship development

There are two areas where the role of education for the development of entrepreneurship will be significant (Mitra and Manimala, 2008, p.50): creating the right attitude in individuals and developing knowledge and skills relevant to entrepreneurship. Education and particularly higher education should nurture entrepreneurial spirit where an individual might one day decide to create business (Ducheneaut, 2001). These views seem to align with the notion of the theory of planned behaviour which career selection in entrepreneurship is a function of belief. Shapero and Sokol (1982) have studied the development of perceptions about desirability and feasibility of entrepreneurial behaviour as a result of the influence of education and teaching factors.

In other cases Ducheneaut (2001) argued that entrepreneurial motivation and behaviour may have been acquired in the period preceding higher education. In this case, the role of university education is to identify and nurture those who can act as agent of change for the next decades, and make a profound difference in the future supply of entrepreneur (Kent, 1990). Therefore there will be two primary tasks of EE:

“... (i) detect students with a high degree of entrepreneurial awareness and potential and (ii) give training which reveals these characteristics, consolidates them and completes them through the acquisition of technical skills which reinforce the chances of successful creation and subsequently the successful development of business.” (Ducheneaut, 2001, p.137)

There is scepticism, however, that higher education can be the source of high quality entrepreneurs (Scott *et al.*, 1998). More specifically, Mitra and Manimala (2008) stated that there is mistrust and mismatch between higher education and entrepreneurship. Mistrust occurs when an entrepreneurship programme in a university is perceived as ineffective. It may be caused by a fundamental mismatch regarding what is offered by HEIs and what is actually needed by SME entrepreneurs (Mitra and Manimala, 2008, p.53). Gibb (1993) identified that the learning focus is significantly different between university/Business School and entrepreneurs. Therefore it will be necessary for HEIs to use enterprising method to the curriculum for all subjects and disciplines (Gibb, 1993). The idea of

entrepreneurial or enterprising university has also been raised in order to respond to this requirement (Gibb, 2006; Blenker *et al.*, 2008; Formica, 2002; William, 2003).

2.3. Entrepreneurship education

2.3.1. Definitions of entrepreneurship education

2.3.1.1. *The important role of entrepreneurship education*

EE has been a worldwide phenomenon throughout the 21st Century (Katz, 2003). There are a number of reasons behind this proliferation of EE initiatives around the world. Policy makers in both developed and developing countries have considered EE a solution to the problem of stagnating or declining economic activity (Matlay, 2006). More specifically, it has been argued that EE would produce more and better entrepreneurs than there have been in the past (Ronstadt, 1985), or that education would increase the overall potential to obtain entrepreneurial success (Kirby, 2003). The World Economic Forum – as a non-partisan, international organisation aimed at building the state of the world, and which involves leaders in partnerships to build global, regional and industry programmes – states that:

“Entrepreneurship education is critical for developing entrepreneurial skills, attitudes and behaviours that are the basis for economic growth.” (Volkman, *et al.*, 2009, p.9)

According to Gibb (2006), however, the policy rationale for engaging in EE initiatives has changed since the re-emergence of entrepreneurship as an economy policy agenda in the 1980s. The important role of job creation through self-employment and small firm growth were the main reasons for promoting EE in the 1980s. The next decade, as a direct result of globalisation – through which social and economic uncertainty and complexity have become a norm – the education system was assigned responsibility for providing a workforce that is more enterprising (Gibb, 2007). This means that the development of personal capacities must be emphasised as opposed to business knowledge *per se* (Gibb, 2002; 2007).

Although the importance of enterprise and entrepreneurship is established amongst governments and policy makers, academic thinkers, such as Gibb and Curran, insist that, ‘myths, assumptions and confusions’ remain regarding small business, and enterprise research and policy (Atherton, 2004). Therefore, it would be so much more useful if everyone in the EE community consider a reflection on some philosophical and contextual fundamentals of the education process itself (Hindle, 2007). It has also been suggested by Hannon (2005) that a fundamental belief in the role of EE is strongly needed, particularly when the external pressure on the education system to promote entrepreneurship culture at a higher education level is very strong. If it is just considered a need to be in alignment with new and changing central and regional government policy agendas, promoting EE in higher education will be more likely encouraged by faith rather than a strategic reasoning (Hannon, 2005). As a consequence, the provision of entrepreneurship will be unsustainable, and there will be an apparent misdirection of resources, thus preventing its effectiveness (Gibb, 2002; Hannon, 2005).

Indeed, for all entrepreneurship programmes, a clear conceptual framework is required as a foundation for underpinning its design and delivery (Gibb, 2002; Hannon, 2006). A stronger conceptual stance will give clearer direction to practitioners and policy makers, which will prevent the ineffectiveness of resources (Gibb, 2002). The variation of beliefs that underpin the meaning of EE will lead to a number of key questions concerning:

“... what should be offered, where it should be positioned institutionally, to whom it should be offered and by whom, and how it should be delivered. Such issues relate to conceptual and philosophical challenges, design options, and institutional capacity and capability factors.” (Hartshorn and Hannon, 2005, p.616)

2.3.1.2. *Narrow and broader definitions of entrepreneurship education*

The first formal programme in entrepreneurship was initiated by Harvard University, and aimed to energise the economy, offering returning war veterans opportunities for self-employment. During the same year of 1945, many industrial enterprises created to serve war needs collapsed (Mitra and Manimala, 2008). A concept of teaching entrepreneurship focused mainly on specific situation: new

venture creation (Fayolle and Klandt, 2006); this gained great momentum when Birch published his research recommendations on the impact of new small ventures on job creation in the United States in 1979 (Kirby, 2006). Since this time, governments around the globe have become interested in the creation of enterprise culture. In the UK, projects aiming to promote enterprise culture were underpinned by the assumption that people are born with entrepreneurial characteristics which can either be unleashed through appropriate market mechanism (Lord Young, 1992) or fostered into entrepreneurial action through exposure to enterprise in education (Davies, 2002).

The idea of teaching entrepreneurship focused on new venture creation and comprised of the following objective:

“... to generate more quickly a greater variety of different ideas for how to exploit a business opportunity and project a more extensive sequence of actions for entering business.” (Vesper and McMullen, 1988, p.9)

This is referred to as the traditional entrepreneurship paradigm (Kirby, 2006, p.2). Other proponents of this narrow business model of EE are Bechard and Toulouse (1998) and Jones and English (2004). Bechard and Toulouse define an entrepreneurship development program as:

“... a collection of formalised teachings that informs, trains, and educates anyone interested in business creation, or small business development.” (Bechard and Toulouse, 1998, p.320)

Jones and English (2004) define EE as:

“... a process through which such education is provided to people with the ability to recognise commercial opportunities and have the insight, self-esteem, knowledge and skills to act on them.” (Jones and English, 2004, p.416)

The view that entrepreneurship is only about making money and creating economic value is not established amongst entrepreneurship academics. West *et al.*, (2009), for example, argue that the creation of social, intellectual and cultural value should be considered in addition to economic value. It would be necessary not to confine to EE simply building skills so that students understand how to go about creating value. In order to attract non-business faculty, there should be the acknowledgement that something deeper incorporated within EE can provide a much more substantive link to the educational goals of departments across the

campus; this is considered far more important (West *et al.*, 2009).

Entrepreneurship, according to Green (2009), is the process through which innovations become produced value. It should entail three essential components, namely a new idea, its implementation into an enterprise, and the market's acceptance of the enterprise. Another critique has also been addressed in terms of treating entrepreneurship as a discrete business practice and an element of business education. Green (2009, p.15), therefore, suggests that a comprehensive education in entrepreneurship should emphasise the 'what' and 'so what' aspects. This means that it is not only important to answer the question regarding how to start a company, but also why a company should be started, and what it means to start a company.

Gibb (2006) suggests a broader concept of education for entrepreneurial attitudes and skills. It should be aimed to nurture certain personal qualities but not directed immediately on the creation of new businesses. This broad focus will enable students to have transferable skills which are required to meet the needs of the current employment market. This universal goal of entrepreneurship education, however, will ultimately prevent the opportunity to empower students to a more innovative role in the context of local, national, and global economies (Black *et al.*, 2003). The EU (European Commission, 2004) adopts both a broader and narrower concept of entrepreneurship teaching.

2.3.2. Entrepreneurship education in the US, Europe and Asia

2.3.2.1. *Entrepreneurship education in the United States*

In the United States, the remarkable growth in EE started in the 1960s, during which time universities and colleges offered entrepreneurship-related courses as an important part of their curricula, including Entrepreneurship and Venture Creation, Small Business Management, and Enterprise Development (Lee *et al.*, 2005). Interestingly, as opposed to policy-driven provision, the demand has been driven by the students themselves or a private sector foundation (Stevenson and Lundstrom, 2005; Wilson, 2008). It has been argued that students' and

accreditation bodies' dissatisfaction with the traditional Fortune focus of education is the main trigger for the expansion of the educational offering (Solomon and Fernald, 1991, cited in Solomon, 2008). Data in the US showed that 1,200 colleges and universities have begun to offer EE and small business education (Solomon, 2007). In this same vein, Cone (2008) claims that, in the US, entrepreneurship courses are now taught in more than 2,000 universities. In addition, there are now a number of PhD programmes conferring degrees in entrepreneurship and there are many doctoral programmes where entrepreneurship is a central aspect (Katz, 2007). According to Solomon (2008), since small companies and entrepreneurial ventures are essential—especially in the US, where small businesses, similar to foot soldiers, are interdependent with entrepreneurial ventures as the tank corps— courses in small business and entrepreneurship should be offered, making a distinction between the two (Solomon, 2008).

It is considered that there are some opportunities and gaps following the further adoption of EE in the US universities (Kauffman Foundation, 2001 cited in Lundstrom and Stevenson, 2005). It is expected by scholars and industry observers that the interest in entrepreneurship will grow more, including a rising demand from students for entrepreneurship content in their courses. There is also a suggestion for integrating entrepreneurship in non-business core programmes, such as engineering, science, and the arts that is still unexplored. It, however, is necessary to set up entrepreneurship studies as a discipline within universities, instead in the current discipline of Business Schools. This will be helpful to study entrepreneurship by students from different disciplines and these entrepreneurship schools can provide greater flexible services to all the faculties within the university.

Kuratko (2003) claims that at higher education level, there are few obstacles to include EE at university level particularly in US. Still entrepreneurship is not generally accepted as an academic discipline. Some other problems include shortage of entrepreneurship educator and less innovative technologies to deliver entrepreneurship courses to students. There is a need for business schools to develop the PhD programmes in entrepreneurship as the leading researchers of entrepreneurship had an inspiration to publish in mainstream management journal.

2.3.2.2. *Entrepreneurship education in Europe*

According to Klandt and Volkmann (2006), compared with other academic disciplines, the entrepreneurship subject entered European universities in the 1990s. Numerous initiatives and programmes in entrepreneurship have been offered; nevertheless, their ability to spur competitiveness, growth, and job-creation all remain lagging behind the US (Wilson, 2008). Importantly, it is recognised that there are some obstacles hindering the development of entrepreneurship culture in Europe. Welfare system, career orientation in large organisations, and the legacy of small and medium-sized business are amongst the entry factor barriers, thus hindering the thriving of entrepreneurship. Table 2.04 summarises differences between the US and Europe in regard to establishing an environment conducive to EE.

Table 2.04: The differences of entrepreneurship education in the US and Europe

Main Issues	The US	Europe
Entrepreneurship within the university	<ol style="list-style-type: none"> 1) The growing number of US schools are offering 'concentrations' or 'majors' in entrepreneurship. 2) Many US universities have academic entrepreneurship departments, with a large percentage of schools offering entrepreneurship courses. 	<ol style="list-style-type: none"> 1) Entrepreneurship is still not fully accepted as an academic discipline. 2) Entrepreneurship professors are traditional academics, reflecting long-standing policies and practices.
Multidisciplinary learning	In a number of US universities, entrepreneurship is treated as an integral part of a multidisciplinary education process.	Increasingly, this approach is spreading across Europe, with great examples provided by the university of Cambridge, as well as a number of other institutions across Europe.
Academic-business links	US universities foster networks with entrepreneurs, business practitioners, venture capital firms, and business angels as part of a mutually reinforcing learning and sharing process.	In Europe, most universities are government-funded and, in many cases, lack the experience and incentives to initiate proactive outreach within the private sector.

Source: Adapted from Wilson (2008)

Referring to Table 2.04 above there are some explanations why European universities is considered lagging behind their counterpart in the U.S. According to Rosenberg (2003) it is because the entrepreneurial perspective has characterised the operation of American universities. In the American context, it is common to expect a university president has a sort of talent in common with entrepreneurs in business skills that led to success in fund-raising. Furthermore both public and private universities are very quick to introduce new course material that is relevant to the needs of newly emerging industries wherever that new material may have originated (Rosenberg, 2003, p.215). Whilst most universities in the European continent remain refusing the idea that centres of learning should ever be judged by a non-academically standard. Rosenberg insisted that it would be unrealistic to expect universities to remain withdrawn from the changing needs of their economic environments particularly in a world in which economic is becoming highly knowledge-intensive.

Europe, according to Wilson (2008), should learn from experiences in other countries including the United States by understanding not only what works but also why. It is also necessary to ensure that entrepreneurship programmes must be market-driven and adapted to the local ecosystem.

2.3.2.3. *Entrepreneurship education in Asia*

In Asian countries EE has been thriving since the 1990s. In Malaysia, for instance, it is a result of awareness that entrepreneurship is necessary in the development of their knowledge-based economy (Cheng *et al.*, 2009). Entrepreneurship studies have been therefore considered to benefit students as it equips them with innovative enterprise skills to seize the opportunities. Meanwhile the significance of EE in China has been triggered by reduced opportunities for graduates in existing companies (Ying, 2011). In China the rapid college expansion has, however, led to an increased supply of new graduates. Another reason for considering school-based entrepreneurship is provided by Japan. The “Home-based EE system”, which has kept Japan very entrepreneurial in the past, has begun to diminish (Ohe, 2011). As a consequence it has reduced the chance for great learning opportunity amongst Japanese children. Furthermore according to

2009 GEM report (Bosma and Levie, 2009), Japan ranks the lowest in early stage entrepreneurial activity among the wealthy, innovation-driven economies.

Activities such as conferences, seminars, short courses and training on entrepreneurship are common in Malaysia. They are offered by various organisations along with the formal EE offered by HEIs (Cheng *et al.*, 2009).

Substantial progress in EE has also been made by China's universities especially science and engineering (Ying, 2011). More than 50 per cent of universities with science and engineering programmes have been reported to hold entrepreneurship business plan competitions and offer elective courses on entrepreneurship to undergraduates. In Japan, based on a survey conducted in 2008 by Daiwa Institute of Research, 247 colleges and universities offered courses related to entrepreneurship (Ohe, 2011). While thirty-eight of them held business plan contests for students, 33 have facilities related to business incubation.

It has been acknowledged that EE in Western countries mainly the US is ahead of others (Lingyu, Lijun and Ying, 2011). They therefore suggested to use best practices in the US for Chinese reference. The US universities have been reported to have a wider variety of courses than Chinese universities. Furthermore problems to EE seem more acute in China than the US especially in relation to fund and specialised professors qualified to entrepreneurship at the university level. While the US also experience lack of space or time for elective credits, what happened in Chinese university programmes is even worse (Lingyu, Lijun and Ying 2011). Like other Eastern cultures, many Chinese parents encourage their children to have stable jobs. It is therefore not surprised China's average level of student start-ups is lower than other countries (Guirong, Jinqun and Lei, 2011). It only accounts for less than 1 per cent of entrepreneurs compared to 30 per cent in most developed countries.

Education in the broadest sense, according to Reynolds *et al.* (1999) plays a significant role in stimulating entrepreneurship since it provides individuals with a sense of autonomy, independence and self-confidence. Making students are aware of alternative career choices and making students better equipped to seize opportunities and to develop new entrepreneurial opportunities, however, are still part of responsibility of education. In Malaysia, the government especially the Higher Education Minister and the education provider has been suggested to

consider to improving the current education system and process which tends to be too rigid and do little to encourage entrepreneurial behaviour within the society (Cheng *et al.*, 2009). EE, however, should be in the mission of universities. For Chinese universities, according to Lingyu, Lijun and Ying (2011), championing entrepreneurship by high-level leaders is therefore needed since institutional characteristics determine whether entrepreneurship is a top priority for the relevant faculty and the university in general.

In different Asian countries, according to Dana (2001), it is common to train Kiznerian rather than Schumpeterian entrepreneurs. In Indonesia this training was provided by state along with large firms and other non-governmental organisations. Kiznerian entrepreneurship simply identifies an opportunity for profit rather than create one. Education in general and managerial training can contribute to the creation of this kind of entrepreneurship which is represented by small-scale and medium-sized enterprise. Indeed Dana (2001) suggests that a creation of Kiznerian entrepreneur is more attainable although it is not resulting in what Schumpeter termed “creative destruction”. Furthermore Islam, the most influential religion in Indonesia and Malaysia, endorses entrepreneurship regardless of its being opportunity or necessity driven as long as it stands on moral and ethical grounds and confirms with the Islamic code of conduct (Kayed and Hassan, 2013, p.78). Recently Islamic entrepreneurship, however, has been one new strand of thought in Malaysia (Oxford Business Group, 2010).

2.3.3. The demand side of Entrepreneurship Education

2.3.3.1. *The definition and role of stakeholders in entrepreneurship education*

EE is a process involving a number of stakeholders (Matlay, 2009; Birdthistle *et al.*, 2007; Jack and Anderson, 1999). According to Freeman (1984), in the context of strategic management theory, stakeholder is defined as:

“... any group or individuals who can affect or are affected by achievement of the organisation's objectives.” (Freeman, 1984, p.46)

From a higher education perspective, Amaral and Magalhaes (2002) define stakeholder as:

“... a person or entity with a legitimate interest in higher education and who, as such, acquires the right to intervene.” (Amaral and Magalhaes, 2002, p.2)

Matlay (2009) states that the concept of stakeholder in regard to these definitions recognises financial and non-financial aspects, which represent involvement and commitment. In some literature, the important role of stakeholder in the development of EE has been considered. Essentially, it is considered that the overall effectiveness of EE will not be achieved unless it fully understands the needs of stakeholders. A shared expectation, established through stakeholder consultation and facilitated centrally, is needed (Allison *et al.*, 2006; Clergeau and Schieb-Bienfait, 2007). Since entrepreneurship, as an overall concept, is a socially constructed phenomenon with different layers of meaning (Smith and Anderson, 2007), it is then considered necessary, at the outset, to understand what is meant by favouring EE (Surlmont, 2007). The selection of EE concept has been found to be one of the main areas of resistance and confusion in adopting an EE agenda (Allison *et al.*, 2006; Clergeau and Schieb-Bienfait, 2007; Surlmont, 2007). Therefore, there are sound academic reasons for trying to understand how the concept of EE is hindered by stakeholders. By doing so, the big issues regarding ‘how’ and ‘why’ in the context of EE will be addressed more simply (Smith and Anderson, 2007). In addition, the study of Matlay (2009) indicates that stakeholders’ perceptions and interests influence both the extent and the duration of their involvement and participation in EE.

There is no agreement, however, concerning who are considered primary stakeholders of EE. According to Jack and Anderson (1999), primary stakeholders encompass government, students, and the business world. Birdthistle *et al.* (2007) suggest that teachers, principals, pupils, and parents are key stakeholders of EE. Given the respondents’ perceptions, students and faculty members are accepted as primary stakeholders of EE (Matlay, 2009). Owing to there being a lack of relevant funding, together with a lack of student demand and a lack of interest in entrepreneurship amongst faculty members, a university may be discouraged from offering EE (Matlay and Carey, 2007); therefore, it can be argued that students, faculty members, and the government, as primary stakeholders of EE, should be taken into account. Students, faculty members and government, on the other hand, may hold different and conflicting conceptions of EE (Hannon, 2006, p.300).

In mind of the above, it is important to understand why students may want to study entrepreneurship. There are two possible reasons, namely starting up their own business or the desire to gain knowledge in dealing with careers in larger organisations (Alberti, Sciascia, and Poli, 2004). What faculty members expect of their students in terms of gaining in EE depends on what education concept they hold (Hannon, 2006). Three concepts have been identified, namely liberal, civic, and vocational (Winch and Gingell, 2004, cited in Hannon, 2006). Faculty members with a liberal concept believed they can prepare their students to be entrepreneurs through placing an emphasis on the development of the individuality of students. Otherwise, social enterprise and the role of entrepreneurship in society are more preferred by faculty members who hold a civic concept. Faculty members who tend to have a vocational concept, will focus on students as agents of economic activity. Therefore, these faculty members are then considered more likely to expect their students to have a career in self-employment and achieving business growth, which will eventually contribute to the economy.

2.3.3.2. *Entrepreneurship education: A government perspective*

It is important to understand what governments really expect to gain from EE. In developed economies (such as the US, for instance) statistics on new ventures indicate the vital role of start-ups in maintaining the economy dynamic and growth (Mitra and Manimala, 2008). In developing countries, Singh (1990) highlights that the problem of unemployment is the main reason for governments needing to support EE; in other words, fostering more entrepreneurs is believed to be an effective way of decreasing unemployment and accordingly revitalising the economy (Jack and Anderson, 1999). Nevertheless, in the case of France, Klapper (2004) has found that two contradictory purposes emerge: the French government much prefers to raise awareness for the real operation of a business, rather than the creation of business. Basically, the importance of enterprise and entrepreneurship is established amongst governments and policy makers (Atherton, 2004). Preparing students in creation of new business and/or the process of managing a business are rational outcomes of EE; otherwise, the existence of EE might be redundant as a whole (Lee and Wong, 2005). The trust

of policy behind EE, according to Gibb (2006), has shifted over time, with the 1980s pointing out employment creation through self-employment and small firm growth. In the 1990s, however, emphasis has been placed upon what enterprises and entrepreneurship might contribute to country competitiveness, thus enabling a response to social and economic dynamic resulting from globalisation. Therefore, the ways in which young people can be prepared for a world characterised by greater uncertainty and complexity in working and social life, with significant pressures for every individual to perceive and grasp opportunities, has been considered the true underlying policy trust for EE (Gibb, 2006) . With this noted, Scott *et al.* (1998) suggest that it would be necessary to separate the fundamental potential roles into three: Wealth creation, labour market, and welfare. This has been summarised in Table 2.05.

Table 2.05. The three different fundamental roles of entrepreneurship education

General Needs	Special Needs	Entrepreneurship Education Goal
Wealth Creation	<ol style="list-style-type: none"> 1) To introduce new blood in economy; 2) To help boost GDP through instigating new innovative industries; 3) To provide new competition for large established firms. 	To produce entrepreneurs capable of creating, competing and extracting value from a rapidly changing mainstream economy dominated by established and competing corporate interest.
Labour Market	<ol style="list-style-type: none"> 1) To provide a flexible pool of self-employed specialists to substitute for expensive former employees; 2) To provide a competing and efficient pool of suppliers and subcontractors for the corporate sector. 	To enhance the motivations and life skills of the flexible work force.
Welfare	<ol style="list-style-type: none"> 1) To soak up unemployment; 2) To substitute for other forms of welfare for the unemployed; 3) To alleviate poverty. 	To motivate individuals to seek marginal advantages in self-employment, and to train them to become competent enough not to fail, thus discouraging them from re-entering the welfare system.

Source: Adapted from Scott, Rossa, Klandt (1998)

The categorisation of EE might overcome the conflicting aims of EE evolve amongst educators outside of the US. It means that:

“... whilst there remains a need to create more new ventures and to

encourage graduates to start their own businesses on graduation, there is also a need to develop graduates who can be innovative and take responsibility for their own destinies not just in a business or even a market economy context.” (Kirby, 2007, p.21)

2.3.3.3. *Entrepreneurship education: Students’ perspective*

Generally, it has been acknowledged that the traditional role of higher education is a ladder to the corporate sector; particularly in business schools, these are often characterised by a ‘product’ approach rather than a ‘customer’ approach to education (Plaschka and Welsch, 1990, p.60). The top-down approach to education, however, makes it difficult to fulfil the needs of small businesses and entrepreneurs (Neck, 1981, cited in Plaschka and Welsch, 1990). Behrman and Levin (1984) also charge that there are: (1) too much emphasis placed on theory and quantitative analysis; (2) too little emphasis placed on qualitative factor; (3) too much emphasis placed on tools, concepts, and models; (4) too much emphasis placed on bureaucratic management; (5) too little emphasis placed on entrepreneurial activity; and (6) professors work towards unreal rather than important problems. The aforementioned factors lead to students’ dissatisfaction. Plaschka and Welsch (1990) suggested adopting an entrepreneurial education which is characterised by more reality and experientially based pedagogies. EE, therefore, is expected to enhance capacity to perceive an entrepreneurial opportunity, as well as personal attributes. It can be shown by setting up a new small business as opposed to a high-growth company.

It has been argued that students have been becoming more concerned with their choice and value added as purchasers of higher education (Hannon, 2005). In the UK, Gibb and Hannon (2006) state that, despite university graduates recognising the strategic role of entrepreneurial behaviour to their future needs, unluckily, they perceive the formal aspects of university experience to fail to endow them as an entrepreneurial product (Anderson and Jack, 2008; Gibb and Hannon, 2006). EE, therefore, can be considered a source of competitive advantage for a university, with students perceiving this as an exciting offering relating to the wider and increasingly more acceptable notion of the entrepreneur in society.

2.3.3.4. Demand-related issues in entrepreneurship education

Schwartz and Malach-Pines (2009) identify various studies that have dealt with demand-related issues of EE, including the educational needs of students, the preparedness and willingness of students to start a business, and students' characteristics and attitudes towards entrepreneurship. Pittaway and Hannon state that the demand-side can include perceptions of students' intentions and aspirations, their experiences and contexts, and their exposure to opportunities and network (Pittaway and Hannon, 2008, p.204). In order to achieve a better understanding of students' needs, Hills (2004) proposes a market-driven model for EE. Borrowing from the marketing literature, the concept of marketing segmentation was used which is aimed to develop:

“... a fuller understanding of a variety of perspective entrepreneurship learners, and to accordingly cluster them into subgroups by common EE needs and interest.” (Hills, 2004, p.288)

It is assumed that, through marketing segmentation, educational products and services are more likely better delivered to meet students' needs of EE. In this regard, Ghosh and Block (1993–1994, cited in Hills, 2004, p.288) suggest career aspiration, the entrepreneurial stage, and the students' current knowledge and skills as bases for segmentation. Through paying respect to students' basic career concept, universities will be able to identify and implement a competence strategy (Johannisson, 1991).

In respect of students' preparedness and willingness to start a business, numerous works can be categorised as entrepreneurial events, entrepreneurial careers, and entrepreneurial spirit studies (Shapero and Sokol, 1982; Ajzen, 1991; Dyer, 1994; Verzat and Bachelet, 2006). Such studies have examined the determinant factors believed to influence students in finding a business. A model of entrepreneurial career comprises antecedents influencing career choice, career socialisation, career orientation, and career progression. Importantly, it attempts to examine the complex relationship between individual, social and economic factors, all of which are known to influence entrepreneurial behaviour (Dyer, 1994). Shapero's model of event formation focuses on the ways in which the choice of an entrepreneurial career is formed by the cultural and social factors, with perceptions of desirability

and feasibility determining an individual starting a business (Shapero and Sokol, 1982). Whilst the individual's intention to perform a given behaviour is focus of Ajzen's Theory of Planned Behaviour (Veciana, Aponte and Urbano, 2005). As it is assumed that there is the unknown beginning of the entrepreneurial process, Verzat and Bachelet (2006) propose a model of entrepreneurial spirit. Through the adoption of this particular framework, the identity-building Past and the influence of training are considered factors affecting entrepreneurial professional projections and entrepreneurial abilities.

Scott and Twomey (1988) claim that the aspiration of students towards entrepreneurship is determined by predisposing factors, triggering factors, and the possession of a business idea. The student background, personality and perception factors that develop over several or more years are included as predisposing factors. Triggering factors include the effects of looking for work, career advice received, and the prospect of unemployment. Having a business idea, on the other hand, can be predictor for small business creation (Scott and Twomey, 1988, p.9).

2.3.4. The supply side of entrepreneurship education

2.3.4.1. *The reasons for promoting an entrepreneurship education programme*

There is a growing need to facilitate entrepreneurial success and establish closer ties between schools and start-up and small business communities; this is considered one of the main reasons for higher education being involved in EE (Sandercock, 2004). According to Jack and Anderson (2008), universities have the responsibility to shape attitudes, supply knowledge, enable their students as enterprising, and endow them as entrepreneurial product. Contributions to the society transformation towards an entrepreneurial culture should be another impact of education at university level (Blenker *et al.*, 2008). Henry, Hill and Leitch (2003) state that there are various reasons rationalising the involvement of universities in entrepreneurship programmes: For instance, whilst the development of new businesses and the creation of jobs are deemed to be the key rationale, other goals are centred on promoting entrepreneurship and contributing to the

economic development of their region and the promotion of graduate entrepreneurship. In line with Hannon (2005), who states that, since learners have become more discerning about their choices and the value added as purchases of higher education, involvement in EE will enhance the profile and reputation of universities, and will thus eventually attract more students to their universities.

Rather than being driven by the fundamental belief in the role of EE, the growth in activity by higher education represents merely a 'jumping on a new band-wagon', which is unsustainable (Hannon, 2005, p.107). Moreover, based on the UK's experience in the development and implementation of enterprise and entrepreneurial education and training, it is recognised that there has been more faith than strategic reasoning (Rosa, 1992). Some HEIs are indicated as considering only the need to be in alignment with new and changing central and regional government policy agendas when they follow what other leading institutions do (Hannon, 2005). This phenomenon also took place in Korea where entrepreneurship courses were introduced not as an area of specialisation but simply as a means to conform to general education (Lee *et al.*, 2005).

Sandercock (2004) states that EE should bring about benefit, not only for students but also for the university itself and the surrounding community; therefore it is imperative for universities to open doors within and to the outside in order to enhance readiness and the ability to perceive opportunities among students, educators and management staffs in the university environment' (Blenker *et al.*, 2008, p.61). The partnership with other stakeholders in society, according to Gibb and Hannon (2006), is a means of maintaining universities' status as the main source of intellectual property.

Debate has been evolving on this topic, which encompasses philosophical and political debate, as well as operational and strategic question (Pittaway and Hannon, 2008). Whilst the philosophical and political debate focuses on whether or not EE should be a part of a modern university, as well as whether the university itself should be more entrepreneurial, an operational and strategic question seeks to discuss the potential organisational structures, processes, and means of supporting EE (Pittaway and Hannon, 2008, p.203). According to Ropke (1998, cited Blenker *et al.*, 2008), the idea of an entrepreneurial university encompasses three dimensions: The university itself as an organisation that becomes

entrepreneurial; the members of the university (students, faculty and employees), all of whom somehow turn themselves into entrepreneurs; and the interaction of the university with the environment, the 'structural coupling' between university and region, which follows an entrepreneurial pattern (Blenker *et al.*, 2008, p.59).

2.3.4.2. *The aims and functions of university: An issue of being entrepreneurial*

Although using somewhat dated phraseology, Whitehead (1962) suggests that the rationale of university existence lies in its ability to impart knowledge imaginatively which 'enables men to construct an intellectual vision of a new world, and it preserves the zest of life by suggestion of satisfying purposes' (Whitehead, 1962, p.139). Therefore the task of a university is how to unite imagination and experience. On the other hand, Nilsson (2006) states that, although initially education institutions were considered qualified labour producers, since the 1960s, however, universities have adopted a new role of a potential engine of regional growth. It has been since 1986, however, from the point of view of the university system, an important change has been witnessed in the trend towards result-oriented management strategy, which tends to focus on issues such as achievement and output (Nilsson, 2006; Adcroft, 2004).

The UK government finds it imperative for higher education to cater to the wider aims of society (Gibb and Hannon, 2006). Three initiatives have been developed, including processes of commercialisation of intellectual property, encouraging wider engagement in the higher education sector with the stakeholder community, and the development of EE for graduates (Gibb and Hannon, 2006, p.3). In the third world, according to Singh (1990), there was a deficiency in the educational system, which has led to the phenomenon of the educated unemployed. Indeed, the failure of development efforts in developing countries has been alleged as a result of discouragement of the entrepreneurial trait in the schools. A critique was addressed by Formica (2002, p.171), who suggests that an abundance of talented scientists, researchers, graduates and students does not automatically produce a high-performing knowledge-based business community. This is evident when considering scientific and technological education failing to offer management

training to enhance the commercialisation of new development. In addition, there is tentative evidence to support that the formal aspect of the university experience does not really make a great contribution when compared with what could be achieved through enhancing all major entrepreneurial behaviours (Gibb, 2006).

This makes sense owing to the fact that, for centuries, Bowden and Marton (1998) highlighted that universities focus more towards teaching and less on learning, where students put more emphasis on studying for their exams instead of studying to learn for their forthcoming life. In the context of higher education, according to the Confederation of British Industry's report (CBI/UUK, 2009, cited in Culkin and Malik, 2011), it is necessary for graduates to have employability skills that encompass attributes facilitating success in the workplace as a complement for strong academic and technical knowledge. It has been generally accepted that universities not only be considered important in the production of scholarships and new ideas, as well as for the training of elites, but also in the development of economic progress. Essentially, the changing role of the university is an indispensable fact.

Gibb and Hannon (2006) state that there are three pressures felt by higher education around the world in becoming more entrepreneurial or enterprising. They are expected to contribute to the international competitiveness of economy via a process of commercialisation of research and more substantially to local economic and social development. They also have obligation in:

“... preparing students for a life world of much greater uncertainty and complexity involving frequent occupational, job and contract status change, global mobility, adaptation to different cultures, working in a world of fluid organisational structures, greater probability of self-employment, and wider responsibilities in family and social life.” (Gibb and Hannon, 2006, p.7)

Indeed, there are three benefits of integrating EE into a university's curriculum. Firstly, EE can become an entry point for change in universities, mainly in terms of responding to public demand in order for universities to make different to the economic development of local communities. Secondly, EE can be an action epicentre that enables technology transfer from local universities to create benefits for their corresponding communities. Finally, EE is a vital component of a modern university since it can become an impetus for logical organisational change (Gibb

and Hannon, 2006). At an undergraduate level, for example, the introduction of EE can be considered the strategic response of universities and business schools to environmental pressures, which makes entrepreneurial capabilities and action necessary (Postigo *et al.*, 2006).

Universities, according to Carnegie (1990, cited in Gibb and Hannon, 2006), should emphasise the importance of the scholarship of relevance and integration in order to be able to respond to pressures (Carnegie, 1990, cited in Gibb and Hannon, 2006). Whilst the relevance of knowledge can be reached by working in partnership with external stakeholders with a stronger focus placed upon the development of research, rather than mere publication, the integration of knowledge requires an interdisciplinary approach of research and teaching (Ghoshal, 2005, cited in Gibb and Hannon, 2006). More specifically, Galloway *et al.* (2005) state that there is an obligation for educators (including universities) to satisfy students' expectations in relation to anticipation for the economy that they will enter. Educational institutions, according to Hynes *et al.* (2009), need to ensure they respond to this obligation by preparing graduates to engage in a more enterprising and innovative manner, thus adding value to the businesses in which they work.

2.3.4.3. *Legitimacy of teaching entrepreneurship in higher education*

It has been argued that the local university is the most appropriate place in which to house EE (McMullan and Long, 1987). There are a number of reasons legitimising this view. For example, universities have provided an outstanding configuration for new knowledge creation and dissemination on a wide variety of disciplines. Accordingly, connection to a spectrum of knowledge-based resources to reinforce the development of the technologically sophisticated company is crucial to face the international competition. Fortunately, this can be provided by universities (Galloway *et al.*, 2005). There are other advantages of EE for universities; these include the capability and experience to attract the excellent educators (both academics and practitioners) to develop research that is important for the field of entrepreneurship, and to educate future academics in entrepreneurship.

According to Kiesner (1990), however, there are disadvantages associated with college and university programmes, from a small-business owner's point of view. Such owners hold the belief that educators do not have useful knowledge and experience in the real world of running a small firm, or even an appreciation of the entrepreneur as a viable subject for attention. This mistrust of universities offering entrepreneurship programmes is due to universities focusing more keenly on imparting knowledge and information, whilst entrepreneurs need implementation skills to be developed (Mitra and Manimala, 2008).

Hindle (2007) acknowledges that scepticism in terms of whether EE belongs in a university can emerge not only from practitioners but also from respected and respectable scholars within the university itself. There is low confidence in education surrounding its ability to facilitate business and entrepreneurship. Universities rarely consider entrepreneurship to be a discipline with a body of knowledge worthy of being taught and learned (Grant, 1998; Manimala, 2008).

In the case of cross-campus EE, two fundamentals need to be obtained, including cognitive legitimacy and socio-political legitimacy (West, *et al.*, 2009). Whilst cognitive legitimacy can occur when an activity is understood, it is taken for granted as an acceptable type; socio-political legitimacy will not be obtained unless new cross-campus EE conform to accepted principles, rules, and standards.

2.3.4.4. *Faculty members, and resistance towards entrepreneurship education provision*

Matlay and Carey (2007) indicate that cultural factors not supportive of entrepreneurship and small business development – namely a lack of perceived demand, lack of interest in entrepreneurship amongst staff, and inadequacy of the financial resources – are reasons for not offering EE. It also has been argued that enhancing entrepreneurial behaviour is not appropriate in line with the scope of the education system; this system is unable to meet requirements centred on autonomy and creativity, which is a foundation in entrepreneurship (Clergeau and Schieb-Bienfait, 2007).

There is also evidence in the literature to suggest that barriers to EE and

development exist, including faculty resistance, financial restrictions, existing attitudes and perceptions, and external influences (ACOA, 2004). There is a certain level of resistance towards entrepreneurship amongst senior and academic administration, faculty members, students, and alumni. Hills and Morris (1998) bear in mind that the barriers to change in academia are very strong; this can be seen when considering the fact that evaluation in the UK has indicated that implementing a narrow entrepreneurial model of enterprise as opposed to a broader view was difficult (UK Department of employment, 1991, cited in Surlemont, 2007).

There are various experiences – such as those garnered from Australia, Finland, the Netherlands and the UK– in ways in which the challenges can be overcome in the process of integrating entrepreneurship in the school system (Lundstrom and Stevenson, 2005). In order to face the resistance of communities, education officials, and even parents, Finnish officials, for instance, produced a series of local newspaper articles on the importance of entrepreneurship within the economy. There was also, for example, an 8 million gulden subsidy programme which was provided by the Dutch Ministry of Economic Affairs with the objective to encourage the members of the education community to pilot entrepreneurship projects.

2.3.5. Perceptions, aspirations and expectations of entrepreneurship education

2.3.5.1. Enterprise education or entrepreneurship education

Entrepreneurship as a concept is socially constructed phenomenon with different layers of meaning (Smith and Anderson, 2007). It also applies to the concept of EE. Enterprise education (which is a preferred term in the UK and Irish context) is focused primarily on the development of personal attributes, and does not necessarily embrace the small business project idea or the entrepreneur. On the other hand, it is linked substantially with the developing notion of an enterprise culture (Gibb, 1993; 1987).

The major objectives of enterprise education, according to Garavan and O'Connell (1994), is to prepare students to be enterprising through the use of an

appropriate learning process. The term EE, on the other hand, which is commonly used in Canada and the US, is aimed directly towards stimulating entrepreneurship, which may be defined as an independent small business ownership or the development of opportunity-seeking managers within companies (Colton, 1990, cited in Garavan and O'Connell, 1994). The US business model of EE, according to Gibb (2007), seems to sit uneasily with the traditional value of a university. The following arguments are provided by Gibb:

“Perhaps most important, it can be seen to lead to evaluation of the role of academe in commercial terms and to place a premium upon relevance and utility in research rather than upon the traditional process of discovery for its own sake.” (Gibb, 2007, p.84)

In addition, the conventional business-led model of entrepreneurship is considered inadequate in terms of helping the higher education sector to better cope with pressures from its various stakeholders. The sector faces a number of pressures – not only from the government and businesses, but also increasingly from local communities. The alternate entrepreneurship model, however, focuses on all stakeholders within society, as well as the recognition of the cause of complexity, and the uncertainty they face as individuals and organisations (Gibb, 2007).

It has also been suggested by Erkkila (2000) that a distinction be made between entrepreneurial education and EE. Erkkila (2000) used the term ‘entrepreneurial education’ to cover the field in the different contexts; it is considered that this could apply to all forms of education. The main goal of entrepreneurial education is preparing students to become more creative, innovative, and profit-oriented, whilst EE is concerned specifically with new venture-creation and innovation.

Entrepreneurial education is also characterised as the application of creativity and innovation in social, governmental, and business arenas (Gottlieb and Ross, 1997 cited in Jones and English, 2004).

Bechard and Toulouse (1998) highlight the distinction between entrepreneurial education and education for small business ownership: Whilst the former is centred on combining and carrying out a new combination of business aspects, education for small business ownership is centred on the skills required to imitate an existing business. EE, according to Greene and Rice (2007, p.xv), is wider as “it recognises small business as being a perhaps more dated term representative of

the earlier days of the field, and it refers to only small slice of possible entrepreneurial outcomes: The development, and possibly management, of a small business.”

Greene and Rice (2007) specifically focus on EE as a unique form of entrepreneurial learning. Whilst entrepreneurial learning is an important and growing area of research linking entrepreneurship, learning and knowledge, EE, according to Greene and Rice, should be considered more concerned with the programmatic side of the equation: Featuring education as built on the ideal model of the university –a place in which knowledge is created, tested, and disseminated in a constant learning cycle (Greene and Rice, 2007, p.xv).

It is also necessary to differentiate EE from training, in which the former takes place in more formal post-secondary and tertiary educational arenas (Greene and Rice, 2007). By taking it beyond mere training, however, some intellectual challenges are needed, namely philosophy, subject-critique, and self-critique (Hindle, 2007).

2.3.5.2. *Aspiration, and the basics of education*

According to the American Heritage Dictionary, there are two definitions of the term ‘aspiration’, namely “a strong desire for achievement and an object of such desire, ambitious goal” (Quaglia, 1989, p.8). Thus, it can be stated that student aspirations may be deemed as drivers for students to do more and be more than they are presently. Fillion and Dolabela (2007) have considered dreams the basis for entrepreneurship activities and learning. In this context, dreams should be understood as:

“... projective thinking that allows people to better organised, identify more clearly what they need to learn and increase their level of self-efficiency.”
(Fillion and Dolabela, 2007, p.16)

There are three categories of dreams, including the collective dream, the structuring dream, and the activity dream. The collective dream (CD) is the dream wherein society, or part of society, forms implicitly or explicitly about its future. The structuring dream (SD) has the capability to produce a life project; the realisation of individual SDs will lead to the realisation of the CD. The activity dream (AD)

allows the entrepreneur to conceive of and structure projects that will produce the SD (Fillion and Dolabela, 2007). This concept concerns potential entrepreneurs of all kinds, categories, and types –those who contribute innovation to enterprise, government, the tertiary sector, and non-profit organisations as employees, managers, autonomous professionals, and business owners.

Since dreams can be considered the basis for entrepreneurship activities and learning, the relationship between AD and SD should be emphasised in EE (Fillion and Dolabela, 2007). It is contended that a high level of motivation and emotional level will lead to persistence and the capacity to endure in an entrepreneurial process (Fillion and Dolabela, 2007). Indeed, entrepreneurial learning is characterised by high involvement, experiential or deeper learning. Thus, a level of energy and excitement are needed for both students and lecturers; both are necessary factors through which the process of EE is enhanced (Jones, 2006).

According to Quaglia (1989), high aspiration is indicated through the ability to set goals and think about the future whilst simultaneously being inspired, in the present, to reach such goals. This will occur if students and faculty members acknowledge and understand the connection between what they learn and teach, and who they want to be. In this vein, Ruohoti and Karanen (2000 cited in Gibb, 2002) argue that affective and conative aspects of the learning process in entrepreneurship are necessary. Whereas the affective aspect is concerned with “the response to the subject, the likes and dislikes and the feelings, emotions and moods”, the conative aspect relates to “the active drive to make sense of something –notions of motivation, commitment, impulse and striving” (Ruohoti and Karanen, 2000 cited in Gibb, 2002, p.255). Entrepreneurship, according to Anderson and Jack (2008) is unique since it has capacity to combine an individual’s skills and aspirations (Anderson, 2008, p.262). Aspirations must be considered an essential component of the motivation to achieve, operating somewhat like a self-fulfilling prophecy, as projective thinking, aspirations or dreams thereby engender people to become better organised and to be clear about what they need to learn, and thus enhance their level of self-efficacy (Fillion and Dolabela, 2007). Learning, however, will take place if students are actively involved in the process (Johannisson, Halvarson and Lovstal, 2001).

2.3.5.3. *The objectives of entrepreneurship education*

There are a number of scholars who propose the aim of EE. In the UK, according to Krueger, Reilly and Carsrud (2000), EE implemented by universities in the UK is aimed at changing students with latent entrepreneurial inclinations into potential starters. It is focused on equipping students with skills that remove perceived entrepreneurship barriers. More specifically, Johansen and Eide (2006 cited in Johansen, 2010) argued that the objective of entrepreneurial education is to develop young people's entrepreneurial competencies in order to establish and run an enterprise.

It has been suggested by Alberti (1999) that entrepreneurship programmes could be specific with immediately measurable objectives such as student knowledge, but could be more generalised and complex such as comprising entrepreneurial success or career satisfaction (Alberti, 1999, p.70). Whilst according to European Commission, the objectives of entrepreneurship teaching should be tailored to the various different stages of education (EC, 2002). At the level of primary education, attention should be directed towards fostering in children personal qualities such as creativity, spirit of initiative, and independence. These capabilities will lead to the emergence of entrepreneurial attitude. This would be the most appropriate goal. Increasing the overall appreciation of students regarding self-employment as a promising career path, and followed by learning by doing such as by, for instance, running mini-enterprises or offering focused training on business creation (exclusively in vocational or technical schools) are options that might be suitable for entrepreneurship teaching in this intermediate phase of education. Finally, at the level of further education, there should be the provision of specific training on starting and running a business, together with enhancing students' capability to outline a real business plan, and the skills relating to the ability to identify and assess business opportunities; this could be an ideal aim of entrepreneurship teaching (EC, 2002, p.15). More recently, the European Commission has revised an objective of EE at university level by suggesting the adoption of "a broadly defined set of outcomes" not only on a narrow indicator of the number of start-ups created (EC, 2006, p.46).

McMulan and Long (1987) consider the rationale for EE to correspond with the

aims of economic development and suggest the following indicators: The number of companies created and job creation, the kind of company and jobs, the company's ability to achieve growth and to compete internationally, and the company's contribution to the local economy (McMulan and Long, 1987, p.266). However, starting a business as representative of entrepreneurial activity, should not be the only indicator of the effectiveness of the EE programme. Another indicator such as the emergence of creative and innovative young people is also necessary. This kind of generation is believed more likely to be outstanding in all its endeavours. Therefore, simply focusing on producing more, new business start-ups would be recklessness (Clergeau and Schieb-Bienfait, 2007).

Indeed, not all individuals will seek or strive to demonstrate their capabilities within a business context (Hannon, 2005). It has been evidenced that only a minority will become graduate entrepreneurs and after a considerable time lag of up to ten years after exiting the university environment (Hannon, 2005). This means that the vast majority of graduates will work within an existing organisation. In addition, Jones (2010) argues that a programme where its graduates are directed to start a venture immediately after completion of their studies is not achievable for the vast majority since it demands a high resource profile (social, human, and financial capital). EE, therefore, according to Jones (2010), should focus on enabling students to manage their own career and live in an entrepreneurial way. This can be pondered as a general or universal objective in terms of promoting the EE programme, although it may seek more specifically to create more entrepreneurial students who will choose to be independent entrepreneurs (Hytti and Gorman, 2004). It can be argued that the process of education has dissipated students' spirit of adventure and their willingness to take initiative and risk – factors that are the soul of entrepreneurship. Therefore EE should not be focused on delivering something new for young people, but rather on rebuilding the students' self-confidence and self-esteem (Rabbior, 1990).

The education systems, higher education in particular, according to Johannisson (1991), should have the ambition to prepare students to become businessmen. It means that educating students simply to become enterprising, according to Johannisson (1991), is only satisfied but not an ambitious goal. Indeed, all the rationales behind developing enterprising graduates seem to overlook another

significant problem, unemployment. With regard to this issue, Watts (1984) warns that:

“... it could smuggle in the notion that if only young people were enterprising enough, there would be no unemployment.” (Watts, 1984, p.5)

At a rough count, the world, according to Wissema (2009), needs 1 million start-ups every year in order to offset the jobs lost in mature companies. In the Indonesian case, during the period 2003 to 2008, the statistics show that entrepreneurs accounted for only 0.18% of the total population (Ministry of Small Business and Cooperatives, 2008, cited in Sembiring, Sandjaja and Antonio, 2011). For a country with a population of over 250 million people, this is a dismal figure. Experts believe that at least 2% of a country's population should be engaged in creating innovative, high-growth ventures. Two million entrepreneurs, according to Ciputra (the Indonesian entrepreneur) are needed in order to reduce the unemployment problem in Indonesia.

It is necessary, however, to avoid confused purpose and outcomes of entrepreneurship programmes. Three questions – including what, for whom, and who decides – might help to devise a clear objective (Hannon, 2006). For instance, Jones and Matlay (2011) contend that, due to students' heterogeneity in relation to resource profiles, including social, human, and financial capital, it is suggested that different learning outcomes need to be set. They can encompass social entrepreneurship, or being a servant to society; to intrapreneurship, or building a career as a worker; buying an existing business, or being a saviour to the seller; or the process of being the creator of a new business (Jones and Matlay, 2011, p.696).

Testa (2010) found in her research, that certain characteristics of students are required by an EE programme whose aspiration is developing graduate entrepreneurs. She insists that it is almost impossible to change a student with no entrepreneurial attitude into “an opportunity-seeker, risk taker and money-making genius” (Testa, 2010, p.245). Whilst from a supply-side perspective, the aspiration to be an entrepreneur can flourish if the desirability and feasibility of entrepreneurship as a career path are provided by the university's environment.

It means that the objective of an entrepreneurship programme must consider both sides: students and institution. It is important to universities, therefore, to reflect

upon whether or not they are inclined to place high priority on the business start-up, along with innovation, risk taking and independence values (Shapero and Sokol, 1982) and celebrate student/graduate entrepreneurs and their success (Arronson, 2004). It is also important to note that for students whose aspiration is to be an entrepreneur, additional skills are required to accompany enterprise skills. These extra skills, according to Sewell and Pool (2010), should encompass:

“... the ability to generate creative ideas, take risks in implementing them and be motivated to get them off the ground.” (Sewell and Pool, 2010, p.91)

More specifically, Johannisson (1991) argues that the limitations attached on traditional business schools in both time and scope must be resolved in order to be able teach their students to become entrepreneurs.

2.3.5.4. *Student's career aspirations*

It is generally accepted in the theory of entrepreneurial careers that an entrepreneurial career refers to the journey towards self-employment and starting one's own business (Dyer, 1994; Hannon, 2007; Scott and Twomey, 1988). The aspiration of students towards entrepreneurship, according to Scott and Twomey (1988), is determined by predisposing factors, triggering factors, and possessing a business idea. The student background, personality, and perception factors that develop over several or more years, are included as predisposing factors. Triggering factors include the effects of looking for work, career advice received, and the prospect of unemployment. The possessing of a business idea, on the other hand, is the key to small business aspirations (Scott and Twomey, 1988, p.9).

According to Hannon (2007), propensity toward self-employment can be enhanced through desirability and feasibility factors. Therefore an EE course or programme, according to Ronstadt (1990), can be a means of helping to make entrepreneurship more visible to students as a career possibility. Nonetheless there are several career options within entrepreneurship (Plaschka and Welsch, 1990). They are starting a new venture; seek employment in a newly established firm; seek employment within established firm as a change agent in middle

management role; or serving as an entrepreneurial executive (Plaschka and Welsch, 1990, p.59). Notably, Fayolle (2008) divides three main categories of objectives that can be achieved via the entrepreneurship learning process, including becoming an enterprising individual, becoming an entrepreneur, or becoming academic (teacher or researcher) in the field of entrepreneurship (Fayolle, 2008, p.199).

2.3.5.5. *Entrepreneurship education and entrepreneurial intention*

Krueger and Casrud (1993) insist on the adoption of the intention model in the educational domain. According to Fayolle (2008), there are two advantages associated with intention models, including pedagogical manual and evaluation mechanism of educative process. Fayolle (2006) makes some recommendations for teachers regarding the value of the 'Theory of Planned Behaviour' as a tool for EE assessment. Firstly, the process of entrepreneurial intentions formation should be understood by teachers in order to establish the roles of each intentional antecedent. In addition, the composition of antecedents, which enable the achievement of high and stable intentions in different entrepreneurial situations, should be explored. Secondly, the understanding of students' motivation and intentions can be enhanced, thus enabling teachers to adjust their offering. Finally, the Theory of Planned Behaviour can be employed to analyse the impact of businesses plan preparation process on entrepreneurial intention (Fayolle, 2006, p.81).

Research by Raposo *et al.* (2008), which seeks to examine those factors that influence most to the intention to start-up a business, indicates that EE is the most significant factor. Some entrepreneurship researchers have developed a variation of intention models, which seek to integrate Ajzen's "Theories of Planned Behaviour" and Bandura's "Perceived Self-efficacy and Social Learning" (Boyd and Vozikis, 1994).

2.3.5.6. *Entrepreneurship education and employability*

Universities are under increasing pressure from governments to embrace

employability (Culkin and Malik, 2011). Employers, according to Yorke (2004), see non-academic achievement such as the possession of soft skills as being important in the recruitment of graduates. According to Davies (2002), from the employer's perspective, graduates should indicate a good performance from the first day they come to the work. Moreover, graduates should be aware of many other aspects that will affect their career paths. Having such skills will enhance the possibility of graduates to gain initial employment and to accordingly maintain it. This also means that they have the capability to be flexible within employment. Therefore there is a need for graduates to develop not only disciplinary expertise but also personal and intellectual attributes (Davies, 2000).

This concept, however, must be distinguished from other concepts, such as enterprise and entrepreneurship, when HEIs set to embed them (Sewell and Poll, 2010). It is considered that it would be dangerous to use enterprise and employability interchangeably; this also applies for enterprise and entrepreneurship. Employability includes enterprise skills (generic skills), and is a basic aspect of educational provision at all levels. Enterprise, according to Rae *et al.*, (2012), must be understood as skills, knowledge and personal attributes required to implement creative ideas and innovation to practical situations. It encompasses:

“... initiative, independence, creativity, problem solving, identifying and working on opportunities, leadership and acting resourceful to effect change.” (Rae, 2012, p.387)

Having a risk-taking attribute may benefit graduates who are intent on setting up their own business: this element may not be fitting for those intending to be employees (Sewell and Poll, 2010). The reason is a great deal of employers will “welcome and value” a graduate who shows enterprise skills but will avoid a graduate who indicates entrepreneurial intention (Sewell and Poll, 2010, p.93). Wissema (2009) holds a different argument in this vein, stating that:

“... for the corporation, it is much more attractive to hire former entrepreneurs who have proven themselves in the market and who know the ins and outs of entrepreneurship, rather than studious MBAs who may be good analysts but not necessarily good business leaders.” (Wissema, 2009, p.94)

It is known that enterprising graduates as an outcome of EE are in general more

employable (Rae *et al.*, 2012). Nonetheless it has been suggested by Culkin and Malik (2011) that universities should not focus simply on delivering employment-ready graduates, as there is a radically altered world of work. Therefore it has been suggested by Rae *et al.* (2012) that equipping graduates with entrepreneurial skills in order to be capable in projecting and developing their path rather than hunting jobs should be the aim of the graduate career and future employability.

2.3.5.7. Segmentation concept and students' needs and interest

Questions regarding who should learn in the EE programme have been discussed elsewhere (McMullan and Long, 1987; Block and Stumpf, 1992; Acs and Audretsch, 2005; Vesper, 2004; Klandt and Volkman, 2006). This is an essential question to pose as the learner, customer, client and/or students are considered primary stakeholders of EE (Birdthistle *et al.*, 2007; Jack and Anderson, 1999; Matlay, 2009). With this noted, the following questions in regard to customers should be addressed, including:

“... the category of customer, which should be recruited to which classes, and how such classes should be tailored to them.” (Vesper, 2004, p.16)

Mohan-Neill (2001) contends that it is widely recognised that the students interested and who attend an EE programme are heterogeneous in terms of entrepreneurial level, entrepreneurial background, skills, experience, expectations and needs. Moreover, students with prior experience and knowledge require advanced entrepreneurship courses and expect the curriculum to give them tools in order to cope with the relevant challenges (Schwartz and Malach-Pines, 2009). Furthermore, Schwartz and Malach-Pines (2009) suggest that entrepreneurship programmes make a distinction between students according to entrepreneurial experience and future entrepreneurial plans; if not, they will miss the mark. An adequate response is needed, particularly for students with a more entrepreneurial background. This means that it is important not to combine different groups of students into the same EE programmes; dissatisfaction amongst students as a result of discrepancies in basic knowledge and expectations can be avoided (Schwartz and Malach-Pines, 2009).

McMullan and Long (1987) argue that there is a need for a selection strategy

which considers not only traditional indicators, such as grades and scores on entrance tests, but also other factors, such as indications of previous success. When distinguishing more entrepreneurial individuals, it is necessary to develop psychometrically sound selection instruments. An entrepreneurship programme should ultimately be a combination of traditional student cohort of undergraduate programmes and graduate programmes, as well as talented practitioners (McMulan and Long, 1987). Rushing (1990), on the other hand, argues that it is difficult to definitely identify those very young students possessing entrepreneurial potential. Hence, EE should encompass students who might later fulfil the role of entrepreneur.

Furthermore, Block and Stumpf (1992) state that the definition of the audience for EE will be determined by the underlying assumption of EE and the definition of entrepreneurship used; students can encompass those who wish to start new businesses, either independently or in a corporate framework, the self-employed, the small business starter, the starter of a high-growth potential businesses, business acquirers, and pure deal-makers (Block and Stumpf, 1992, p.19). Klandt and Volkmann (2006) contend that the main purpose of academic EE is, primarily, centred on sensitising students with regard to entrepreneurial thinking and acting, whilst a further step offers the possibility to impart EE to actual or potential entrepreneurs. Indeed, the target group will be broadened for those who are involved in the entrepreneurship field. They may encompass young scientists, researchers or teachers in the field, and intermediaries, such as advisers, staff of venture capital companies, other investors, and business promoters (Gibb, 2002). Gibb (2002) argues that complexities and uncertainties affect all kinds of people with different jobs not just in the business situation. Therefore the audience of EE, both potential individual and organisational customers, should thus cover:

“Priests and the church, doctors in their practices, consultants and nurses in the health service, head teachers and school staff, social community workers, bankers, actors, musicians and the arts, scientists in universities, consultants, the unemployed and researchers, and people of all abilities leaving school.” (Gibb, 2002, p.244)

University can never be a mass-marketer (Hindle, 2007). On the demand side, Hindle (2007), however, insists that:

“... only students who subscribe to the principle of vocational transcendence should study entrepreneurship at university.” (Hindle, 2007, p.116)

The university, according to Hindle (2007), must consider the distinctive competencies and needs of the particular students it wishes to attract. It is the supply side perspective which, although not less important for consideration, is what is needed to answer the question in terms of who should learn entrepreneurship at university. Instead of a mass-marketing strategy, there are two other approaches—namely: Mass customisation and segmentation. Not using a mass-marketing strategy tends to resolve the critique addressed to business schools that adopt a product approach rather than a customer approach to education. Essentially, it is considered that schools with a product approach will ‘pump out’ whatever they have rather than what is needed (Plascha and Welsch, 1990).

2.3.5.8. *Didactic, pedagogic and contextual aspects to meet students' expectations*

In designing a new degree programme, the main focus is directed towards the knowledge content and its structure (Gibb, 2002). This makes sense, according to Gibb (2002), since the contract between a university and a student is focused on “the delivery and acceptance of knowledge, rather than on the development of the person” (Gibb, 2002, p.136). Gibb also offers the idea of a conducive environment approach for learning and entrepreneurship (Gibb, 2002), which enables true learning as part of the doing process, which will take place. This notion will bring about new challenges relating to:

“... the way in which the classroom is organised; the ways institutions organise knowledge; the context applied for knowledge; and the values and beliefs underpinning the learning approach.” (Gibb, 2002, p.136)

Indeed, the successful education or learning in entrepreneurship must balance three interrelated elements, including didactic, pedagogy, and university context (Blenker *et al.*, 2008). The didactic element encompasses the content of EE. The content can be identified once the target group and purpose are well-defined (Gibb, 2002). Notably, there are various queries surrounding the content, namely:

“... (a) teaching should be for entrepreneurship or about entrepreneurship; (b) the way in which the substance of what is taught is formulated – whether entrepreneurship is conceptualised as an art or science; (c) what kind of behaviour should be taught.” (Blenker *et al.*, 2008, pp.55-56)

Enterprising behaviour rather than small business management or entrepreneurship, according to Blenker *et al.* (2008), should be focussed and well-defined since the former enables more impact on society. Therefore EE should not be limited to build science parks and incubator businesses in order to enable university spin-offs (Blenker *et al.*, 2008). Vesper (2004), on the other hand, proposes one simple way of classifying knowledge useful to entrepreneurs, including business-general knowledge, venture-general knowledge, opportunity-specific knowledge, and venture-specific knowledge.

The new knowledge relating to entrepreneurship, according to Ronstadt (1990), suggests a need for new and better pedagogical approaches. Kickul and Fayolle (2007), for example, argue that one critical consideration of an entrepreneurship programme is the way in which students gain a learning experience; there needs to be a combination of theory and practice. Furthermore, this can be enhanced by co-participation in knowledge-creation, with instructors as facilitators. In addition, a multi-delivery approach and deductive-inductive learning are required.

Gibb (2002) suggests that the identity, strategy, academic norms, and structures of the institution influence the ways educators teach. Autio *et al.* (1997) argue that, a university can inspire its students to be involved in start-up projects through its policy, incentives and behaviours by which a positive attitude of entrepreneurship as a career path is evident. Therefore, in an EE programme, there are variables that constitute a satisfactory point of departure –mainly the learning process, institutional environment and resources (Fayolle and Degeorge, 2006, p.83). It is important to understand the way in which students and faculty members expect to utilise these three families of variables. In order to enable entrepreneurial aptitudes and capabilities to flourish together, ensuring keen insight into business matters and understanding, enterprising environments and approaches to learning have to be developed (Kirby, 2004).

Kraaijenbrink, Bos and Groen (2010), who conducted research in one Australian and four European universities, found that it is imperative to investigate students'

perceptions of the entrepreneurial support available in their universities. Such an examination would reveal what their universities do and should do in regard to “education, concept development, and business development support” (Kraaijenbrink, Bos and Groen, 2010, p.115). In addition, since the perceptions and desires of entrepreneurial students differ from those of non-entrepreneurial students, this could facilitate universities' differentiation of their entrepreneurial support measures. A particularly important differentiation here is that between students who want to learn about entrepreneurship and those who want to become entrepreneurs.

2.3.5.9. *The role of educator (pedagogical style and attitude) on learning outcome*

The important role of educators as primary stakeholders of EE has been recognised in much literature (Matlay, 2009; Birdthistle *et al.*, 2007; Jack and Anderson, 1999; Richardson and Hynes, 2008; Hannon, 2006). Indeed, the critical factor of the educator has emerged since programmes have been in the infancy stage of their development. Both the lack of entrepreneurship as a discipline with well-defined scientific content (Kyrö and Carrier, 2005) and the low-level of academic status and recognition by educational systems inhibit professors in teaching entrepreneurship (Grant, 1998; Teach *et al.*, 2007). Furthermore, the notion of enterprises has not been accepted fully since the spirit of enterprise is deemed impractical in a university setting (Clergeau and Schieb-Bienfait, 2007).

There is a lack of consensus between policy makers and faculty members concerning EE (Atherton, 2004). Governments and political parties hold an economic perspective as the main reason for supporting EE. Importantly, having more graduate entrepreneurs is believed to be an effective way of decreasing unemployment and revitalising the economy (Jack and Anderson, 1999).

The question regarding who should teach entrepreneurship has been addressed in other works (Acs and Audretsch, 2005; Klandt and Volkmann, 2006; McMullan and Long, 1987; Sexton and Kasarda, 1992; Hindle, 2007). McMullan and Long (1987) highlight the continuing problem of meeting an effective balance between academic and practitioner viewpoint. Academics, according to McMullan and Long

(1987) have advantages in that they are experts in research and able to provide scientific evidence from their studies, whilst practitioners are able to provide “real examples” because of their involvements in transferring their expertise to community. (McMullan and Long, 1987, p.268). At university, there are two contrasting views: From an established entrepreneur or someone who believes that they are an entrepreneur, it can be argued that only those have practical experience have a right to teach entrepreneurship. Klandt and Volkmann (2006), for example, argue that entrepreneurs cannot be employed as lecturers unless they have academic and didactic ambitions, and have been proven to be successful. On the other hand, the opposite view claims that only highly trained, educational specialists are ideal for teaching entrepreneurship. Professor McMullan of the University of Calgary argues that entrepreneurship is a field characterised by “missing educators”. He believes the problem is particularly acute at a professorial level (Hindle, 2007). However, according to Klandt and Volkmann (2006), only a few professors have their own experience on enterprising. In order to resolve this dilemma, Hindle (2007) proposes a higher proportion of team-teaching and multiple examples within the one subject. The reason is that, through the provision of multiple perspectives and the differing strengths of differing people, it may then be possible to avoid the worst excesses of an inadequately prepared faculty (Hindle, 2007). Notably, the definition of the term “educator”, however, should be expanded upon so as to include professor, entrepreneur, alumni, and student as well (EC, 2006). However, passion must be a main characteristic of entrepreneurship educators. Hindle (2007) states that, as in every discipline:

“... the fundamental ingredient in great entrepreneurship education is a passionate teacher addressing students with open minds and together working on the mutual imaginative development of knowledge: A kind of reciprocal apprenticeship.” (Hindle, 2007, p.123)

In addition, the level of commitment and the skill-base of the faculty member, according to (Birdthistle *et al.*, 2007), will determine the success of EE.

2.3.5.10. The university commitment to support entrepreneurship teaching and learning

It has been argued that the success of EE initiatives needs teachers who are very motivated and committed (Birdthistle *et al.*, 2007). Institutional support for teachers is necessary. In a study by Birdthistle *et al.* (2007), teachers highlight that there are two main obstacles experienced, including a lack of resources available and relevant training provided.

Resources, such as material, financial, and intellectual, are needed so as to support entrepreneurship teaching and learning (Fayolle and Degeorge, 2006).

This may encompass:

“... the availability of fund, support networks, entrepreneurship centre, business incubators, a broad supply of entrepreneurship programmes, entrepreneurship institutes, and specialised libraries.” (Fayolle and Degeorge, 2006, p.84)

Without special resources in funding in particular, according to McMullan and Long (1987), a professor will have difficulties in:

“... putting together a sufficiently large set of quality ventures at the appropriate stage of development for classroom requirements.” (McMullan and Long, 1987, p.269)

Indeed, there is also the need to have faculty members who are well-trained and motivated to make a career in entrepreneurship (Cooper, 2003). An appropriate reward system, however, is also needed. For instance, the US foundation offered staff across the university financial incentives in order to develop their own curriculum (Gibb and Hannon, 2006).

Myrah and Currie (2006) highlight the negative consequences that may arise if there is not sufficient institutional commitment. Educators may compromise their pedagogical choices to suit the organisational system. In addition educators will consider entrepreneurship as an insignificant and untrustworthy career choice. Eventually the growth and development of the EE field will be at risk (Myrah and Currie, 2006).

2.3.6. Quality of entrepreneurship education

2.3.6.1. *What is the criteria and how to measure the effectiveness of EE?*

Effectiveness, according to Block and Stumpf (1992), might be defined as the degree to which objectives are met. Assessing the overall effectiveness of EE is important for various reasons, mainly from cost-benefit analysis (McMullan *et al.*, 2001). There are some cost considerations that need to be addressed, such as money from sponsors, time for participants, and other additional costs in relation to guest speakers, mentors and unpaid consultants. Block and Stumpf (1992) highlight that it is important to develop a research methodology for measuring EE effectiveness; this enables the availability of data, and the generalisation of conclusions. However, it is difficult to evaluate an EE programme as there is no agreement relating to the most appropriate method of effectiveness measurement (Westhead, Storey and Martin, 2001). Block and Stumpf (1992) are concerned with the importance of evaluation criteria, the availability of control groups, the specific design for each member of the audience, and considering factors other than education. With regard to evaluation criteria, according to Alberti, Sciascia and Poli (2004), no common indicators is owed to the heterogeneity of a number of factors characterising EE, such as target groups, university/school versus EE/training focus, objectives of EE, levels of analysis, and time dimension (Alberti, Sciascia and Poli, 2004, pp.15-17).

Owing to the logic of EE needing to be parallel with economic development purposes, McMullan and Long (1987) suggest seven criteria for the measurement of the success of EE, namely:

“How many companies created? How many jobs created? What kinds of companies? What kinds of job? How fast do these companies grow? Do they compete internationally? Do they contribute to the local economy?” (McMullan and Long, 1987, p.266)

Instead of using creation of venture and job as criteria of the value and effectiveness of EE, Fayolle and Degeorge (2006) state that the “Theory of Planned Behaviour” can be an alternative tool to evaluate EE programmes. Another non-objective indicator of the effectiveness of EE in schools and colleges is proposed by Black, Curbin, and Smith (2003). With this in mind, EE will be

considered as effective when ideas in relation to enterprise and entrepreneurship are installed in students' 'world view' (Black *et al.*, 2003, p.4). This criterion is at an advantage owing to the fact that it can be measured shortly after students undertake an enterprise project. Lena and Wong (2003) also argue that, since the link between EE and venture start-up is not straightforward and direct, attitudes in relation to EE provide a predictive measure that new venture creation will be created (Lena and Wong, 2003, p.343). Furthermore, Fayolle and Degeorge (2006) argue that there are two objections to using the creation of business and job to indicate the efficacy of EE programme: First, it is centred on the delayed effects, which make it challenging –if not impractical– to assess reasonably within a tolerable time frame; Second, simply rely on objective criteria can impede the other indicators for being used and valued. The impacts of certain pedagogical criteria must be considered. They consist of:

“... knowledge-acquisition, the relevance and effectiveness of a given teaching strategy, awareness of an area of economic or social life, and the development of the entrepreneurial mindset and entrepreneurial intention.” (Fayolle and Degeorge, 2006, p.85)

Vesper and Gartner (1997), on the other hand, nominate the use of a standardized approach developed with the “Malcolm Baldrige National Quality Award”. This particular method can prove to be useful as it considers the formal recognition of performance excellence for the EE provider.

2.3.6.2. *Who is evaluating entrepreneurship education?*

Other issues can emerge in regard to who evaluates an EE course. In this vein, Michalski and Cousins (2000) propose a stakeholder-based evaluation as a means of supporting broadening participation and involvement in programme evaluation. Stakeholders are the distinct groups interested in the result of an evaluation –either because they are affected directly by (or involved in) programme activities, or otherwise because they must make a decision about the programme (Gold, 1983, cited in Michalski and Cousins, 2000). According to Cardoza Clayson *et al.* (2002, cited in Hytti and Kuopusjarvi, 2007), all aspects of evaluation – namely design, implementation, outcomes, and uses – are all shaped by the power relationship amongst the stakeholders. As students and faculty

members can be considered primary stakeholders of EE (Matlay, 2009; Jack and Anderson, 1999; Birdthistle *et al.*, 2007), the definition relating to a domain of EE effectiveness should be generated from these stakeholders.

2.3.7. Models of entrepreneurship education

2.3.7.1. *Process model*

A process model of EE was originated by Hynes (1996). This framework, synthesized in Figure 2.01, according to Myrah and Curry (2006), offers an integrated approach since it comprises three elements, namely input, process, and output. The process framework has one key advantage: Adjustment can be made in order to customise courses based on specific demand from a certain industry (Richardson and Hynes, 2008). Student particular figure and personality characteristics will form the input of EE. The process, on the other hand, encompasses content and teaching methods which will be tailored in order to develop specific skills that may be required by certain sector. In this regard, Richardson and Hynes (2008) argue that “action-learning, problem-based learning and discovery teaching” are deemed important in terms of creating the elements of output relating to personal aspects, knowledge, confidence, and career (Richardson and Hynes, 2008, p.188).

The entrepreneurial-focused students within the certain industry are the ultimate goal of EE based on the process model. Furthermore, there are various reasons providing justification of the industry approach for EE. To improve the effectiveness of EE, a transformation in the specific industry eventually will lead to change in educational focus (Richardson and Hynes, 2008). The sector-orientation of EE also permits the faculty member to be aware of any real-world challenges that emerge. It has been confirmed that industry sector-specific entrepreneurship programmes prevail globally (Richardson and Hynes, 2008). However, in some industry sectors such as creative and media industries, the majority of its employment and commercial activity take place within small businesses (Rae, 2004). A focus of EE is that simply to accommodate the radical shake up of workplace and employee needs is not enough. Culkin and Malik (2011) suggest

Figure 2.01. Process model of entrepreneurship education

Input Students	Content Focus	Teaching Focus	Output Students
<ul style="list-style-type: none"> • Prior knowledge base • Motivation • Personality • Needs/Interests • Independence • Attitudes • Parental influence • Self-esteem • Values • Work experience 	<ul style="list-style-type: none"> • Definition of entrepreneurship • Intrapreneurship • Innovation • New product development • Idea generation • Market research • Feasibility of idea/s • Finance • Production • Regulations • People management • Teamwork • Business • Marketing • Management 	<ul style="list-style-type: none"> • Didactic (reading/lectures) • Skill building (case studies, group discussions, presentations, problem solving, simulations, teamwork, projects) • Discovery (brainstorming, personal goal setting, career planning, consultancy) 	<ul style="list-style-type: none"> • Personal (confidence, communication) • Knowledge (enterprise, initiative, self-employment, business, management and market skills, analytical, problem solving, decision making, communication, presentation skills, risk taking) • Career (improved knowledge, broader career options, broader less structured career perspective)

Source: Hynes, B. (1996, p.13).

that universities should not focus simply on delivering employment-ready graduates, as there is a radically altered world of work amidst the government around the world's response to the latest economic crisis.

It, however, must be noted that educating students to work for entrepreneurs and educating students to become entrepreneurs is not the same thing (Arronson, 2004). According to Birch (Arronson, 2004), it is possible for universities to train students to work within an entrepreneurial company by equipping them with skills needed to become enterprising. Whilst in order to enable entrepreneurs to emerge from higher education, the availability of legitimacy and esteem to those who pursue the entrepreneurial route is necessary (Birch in Arronson, 2004; Formica, 2002; Shapero and Sokol, 2002). The importance of the cultural and social environment as a part of institutional environment to influence perceptions of

desirability and feasibility of new venture creation is also highlighted by Veciana, Aponte and Urbano (2005). This issue seems not to be taken into account by Hynes (1997) with his Process Model of EE.

2.3.7.2. Market-driven model

In a market-driven model of EE, the basic step is having a fuller understanding that there is variation of potential entrepreneurship learners (Hills, 2004). Importantly, the universal EE needs and interests, according to Hills (2004) can be employed in an attempt to cluster the learner into subgroups. Accordingly, the programme will be customised for each group. Many segmentation bases for EE market are available, including:

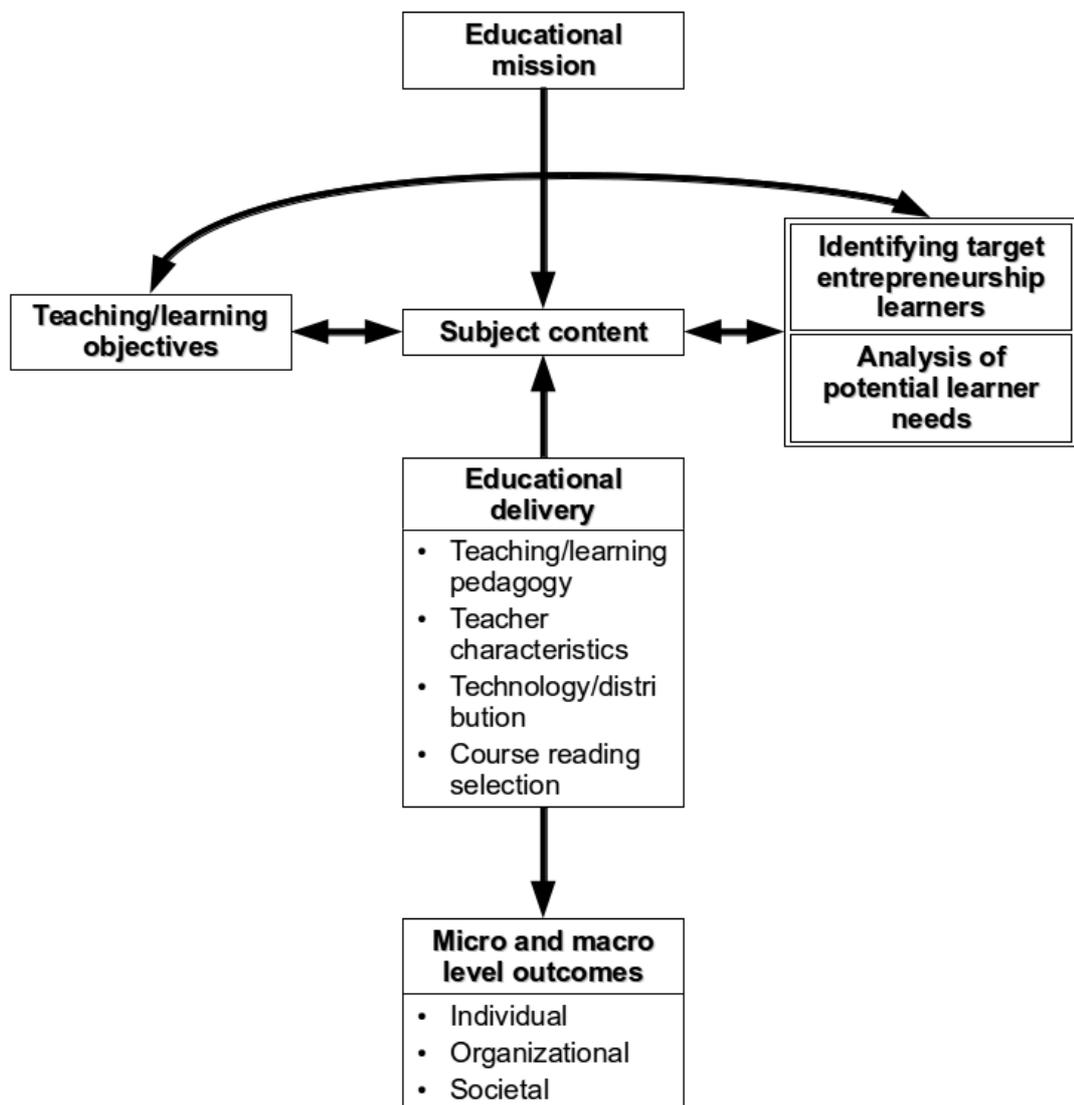
“... geographic area, demographics, delivery preferences, personal/business goals, industries, types of opportunity, stage of entrepreneur/business life-cycle, benefits sought/problem-solving, learning styles, behavioural intentions, behaviour, company size, and psychographic.” (Hills, 2006, p.293)

Ghosh and Block (1993-1994) suggest three main bases for segmentation: Career aspiration, stage of the entrepreneurial process, and the current knowledge and skills of the individual. The intention to start a business, according to Malach-Pines (2009), can be a means of differentiating the target audience. It may provide an introductory course suitable for all students, and an advanced course for those with a more entrepreneurial orientation (Malach-Pines, 2009, p.229). Whilst Gibb (2002) contends that apart from a new venture or small business context, there are markets for corporate and social entrepreneurship; these may call for their own programme.

In the market-oriented model of EE, synthesized in Figure 2.02, subject content is defined by the analysis of potential learner needs (Hills, 2004), whilst teaching/learning objectives and educational mission will eventually influence the characteristic of educational delivery and micro- and macro-level outcome. Educational delivery will comprise teaching/learning pedagogy, teacher characteristics, technology/distribution, and course-reading selection (Hills, 2004, p.289). The EE outcome will take into account individual, organisational, as well as societal dimensions.

Inadequate attention has been paid by this model toward the role of educator or faculty members as another main stakeholder of EE. According Hannon (2006), the education concept that educators hold will affect what they expect their students to gain in EE. It has also been indicated by Matlay (2009) that knowledge, experience and activities relating to entrepreneurship will influence faculty members' motivation and their teaching style. Accommodating educators' or faculty members' perspective into an EE model, therefore, can be a

Figure 2.02. Entrepreneurship education: A decision process model



Source: Hills, G.E. (2004, p.290).

fundamental aspect in order to enhance its effectiveness.

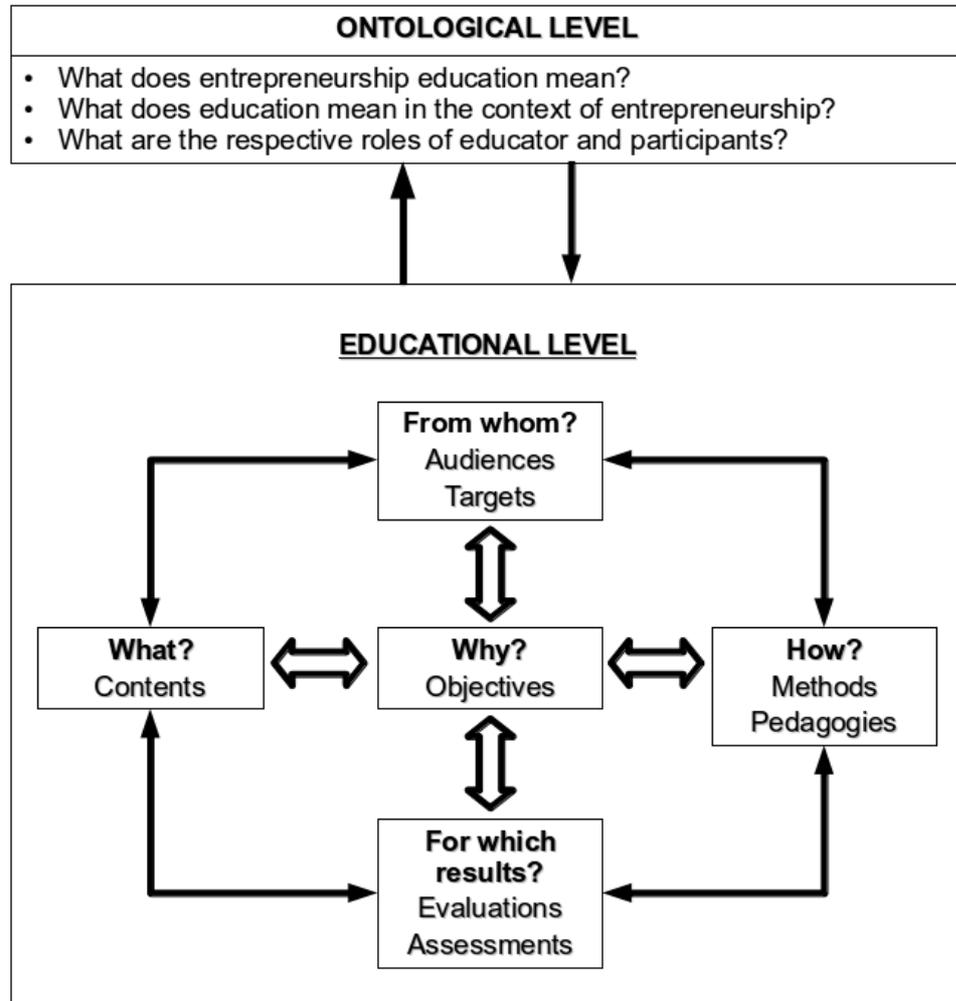
2.3.7.3. Teaching model

The concept of teaching model, according to Fayolle and Gailly (2008), incorporates a number of aspects related to both the ontological and educational dimensions. as shown in Figure 2.03. There are two dimensions in the ontological level: (1) a conception and understanding of EE; (2) and an understanding of what education means within the entrepreneurship context and its implication for educators and students. The five specific interrelated questions form the educational dimension of a teaching model for EE which encompass: Why (objectives, goals); For whom (targets, audiences); For which results (evaluations, assessments); What (contents, theories); And How (methods, pedagogies) (Fayolle and Gailly, 2008, p.572).

The relevance of teaching models, according to Bechard and Gregoire (2007), comes from observations that experienced educators generally do teaching based on guiding conceptions and principles. In turn, these conceptions and principles will guide educators during teaching entrepreneurship (Bechard and Gregoire, 2007). In a Teaching Model, therefore, there is a need for educators to be clear in that of their understanding of teaching domain itself, the role of entrepreneurship educators and students and the type of knowledge which should be taught (Bechard and Gregoire, 2007, p.263).

What is interesting from the framework suggested by Fayolle and Gailly (2008) is that there is an acceptance of the variation of contexts, perspectives, definitions and methods found in entrepreneurship courses and programs and leverage them as opportunities for the learners (Fayolle and Gailly, 2008, p.586). In addition, to a certain extent, according to Fayolle and Gailly (2008), it will guide every educator to answer the following basic questions: What? For whom? Why? How? For which results? By adopting such a framework, it will enable entrepreneurship educators and teachers along with program managers when designing entrepreneurship teaching programs and enhancing the effectiveness of learning processes in EE (Fayolle and Gailly (2008).

Figure 2.03. Teaching model framework for entrepreneurship education



Source: Fayolle, A and Gailly, B. (2008, p.572).

Given that entrepreneurship and EE as concepts are socially constructed phenomenon with different layers of meaning (Smith and Anderson, 2007) and bearing in mind that students are also primary stakeholders of EE (Matlay, 2009), it appears inadequate to take into account educators' or faculty members' ontological position at the expense of students' perspective. Indeed accommodating entrepreneurship and EE definition from the students' as well as faculty members' point of view will enable programme managers to understand other big issues such as "how" and "why" (Smith and Anderson, 2007, p.169).

2.4. Entrepreneurship education: The Indonesian context

2.4.1. The urgency of entrepreneurship education development in Indonesian higher education

Indonesia is far behind Thailand and Malaysia in its business competitiveness (Daquila, 2005). This leads to slow economic growth and inadequate job creation. Unsurprisingly, Indonesia suffers from high unemployment. According to Research Bureau Indonesia (Statistics Indonesia, 2009), between 2004 and 2008, the number of unemployed every year reached ten million, and the numbers of unemployed college and university graduate tended to increase. The statistics also show that, in 2008, entrepreneurs accounted for only 0.18% of the total population (Ministry of Small Business and Cooperatives, 2008, cited in Sembiring, Sandjaja and Antonio 2011). For a country with a population of over 250 million people, this is a dismal figure. Experts believe that at least 2% of a country's population should be engaged in creating innovative, high-growth ventures.

In Indonesia, education tends to inhibit rather than promote the growth of entrepreneurship. The Indonesian education system has thus far placed a great importance on students' cognitive attainment (Darmaningtyas, 2004 cited in Raihani, 2007). Learning objectives have been devised in order for students to achieve certain targets of curriculum content, while the issue of knowledge application in real life has been overlooked (Joni, 2000 cited in Raihani, 2007). Consequently, there are many school leavers that fail to contribute in the community and cope with change and competition (Raihani, 2007).

As a typical developing country, Indonesian schools and universities remains vacant from ambition and values to become entrepreneurs, and thus do not encouraging working hard with the aim of achieving long-range goals (Whyte and Braun, 1965). Therefore, there is a lack of entrepreneurship skills amongst university graduates, as well as poor attitude towards entrepreneurs, with entrepreneurship argued as evidence of the urgency of EE in Indonesia – especially at higher education level (Statistics Indonesia, 2009; Purwadi and Tantra, 2007; APEC, 2004).

2.4.2. Commitment of Indonesian Government in fostering entrepreneurial culture

The Indonesian government, however, has focused on entrepreneurship since 1994 (APEC, 2004). Nevertheless, there are some problems faced by Indonesia in terms of developing entrepreneurship throughout the country, such as Indonesia's confrontations with the unfavourable climate for the growth of an entrepreneurial society. Following the completion of their education, most Indonesian people, owing to cultural influences, prefer to become government officers rather than being entrepreneurs. In this same vein, it is pertinent to highlight that Indonesia is lacking good programmes geared towards entrepreneurship development. Given this experience, in 2009, the Indonesian government allocated 37 billion rupiahs (approximately GBP2 million) to fostering EE for students in higher education; it was intended that this would prepare students to be able to assess and take risks as independent people, rather than being focused only on employment (Kompas, 2008). This initiative may provide opportunities and challenges in regard to teaching, and research in the EE field. Table 2.06 and Table 2.07 provide differences between the previous programmes of entrepreneurship and the 2009 programme.

Table 2.06. The Indonesian previous entrepreneurship programmes

Year	Name of the programme	Focus
1997	Entrepreneurship course (Faculty of Economics and Business).	Theory
1997	Entrepreneurship course plus small business internship.	Theory and Practice
1997	Internship in small, medium, or big business.	Practice
1997	New business incubator.	Theory, Practice and Guidance
1997	Business consultation and job placement.	Consultation
2003	Cooperative Academic Education.	Practice

Source: Student Entrepreneurship Programme 2009: first year experience and lesson learnt (Agung Purwadi, 2011)

Table 2.07. The Indonesian 2009 students entrepreneurship programme

Name of activity	Focus
Short training (< a week).	Theory*
Internship (in small business).	Practice
manual and consultation, during internship.	Business plan development
Grant (MoEC): at most Rp 8 million (approximately £600) per student or Rp 40 million (approximately £3000) per group of 5 students.	Start-up funds
Consultation and close supervision.	New business starts

Source: Student Entrepreneurship Programme 2009: first year experience and lesson learnt (Agung Purwadi, 2011)

*Provided mostly by university lecturers who were prepared through Entrepreneurship Trainer of Trainers for Lecturers, coordinated with Ciputra Foundation (of Entrepreneurship)

The Indonesian Ministry of Education made the plan to include entrepreneurship within the school curriculum, beginning in the 2010-2011 academic year, the aim of which was to prepare school graduates having entrepreneurial spirit and skills to engage in business or other employment activities. In addition, the government has reformed the existing teaching methods by which students can play an active role in the teaching and learning process (The Jakarta Post, 2009). The emergence of the entrepreneurship spirit – through which students would be able to provide their own job opportunities rather than rely on the job market – is the ultimate goal of such reformation. An increase in the number of entrepreneurs is desperately needed in the context of Indonesia owing to the fact that not many entrepreneurs are acknowledged, with this figure not even reaching 1% (Ciputra, 2009).

Since the US has been considered a leader in the field of EE, the Indonesian government has established a programme for the selection of bright, energetic, young people, who they are to send to the United States for graduate training in business (Carland *et al.*, 2004). Citizens chosen for this programme have their education financed by the government. In return, the participants have a service obligation to return to Indonesia and train others in business.

2.4.3. Universitas Ciputra and development of EE in Indonesia

UC was founded by the Indonesian entrepreneur, Ciputra, Chairman of Ciputra Group, in 2006. The UC comprises three faculties and six undergraduate study programmes with approximately 900 students (Universitas Ciputra, 2009). The goal of the UC is to create a study place wherein entrepreneurship values are integrated fully in order to increase the success rate of students who want to become entrepreneurs in their respective fields of studies. The UC exists owing to the fact that Indonesia needs more entrepreneurs. Indonesia has approximately 250 million people, but not enough entrepreneurs. Depending only on big corporations and multinationals is certainly not adequate in terms of sustaining an entire economy. Accordingly, Ciputra has the dream of creating four million entrepreneurs in the next four years as an answer to the problem. This number would represent at least 2% of Indonesia's population for better economic sustainability (Sembiring, Sandjaja and Antonio, 2011).

UC has the vision of being the best university in Indonesia, encompassing the entrepreneurial spirit throughout the university. All students must take an entrepreneurship course, in combination with their discipline; this is implemented with the aim of instilling in them entrepreneurial skills and spirit so as to encourage students to become entrepreneurs from the start of their studies. Innovation and creativity create the core of the entrepreneurial spirit, and are embedded through all departmental programmes (Universitas Ciputra, 2009). At the centre of UC's model of teaching entrepreneurship is a combination of three critical factors: Knowledge, spirit of mentoring, and real project (Sembiring, Sandjaja and Antonio, 2011). The educators comprise faculty members and professionals (the entrepreneurs in residence). The former provides the conceptual and theoretical foundations needed by students to develop their creativity and innovation; the latter are external experts who are invited to share their experiences and knowledge to inspire students. Importantly, such individuals bring into the classroom the practical experience and ground realities of doing business. Together, the faculty members and professionals are not simply "just teachers", but are rather facilitators and mentors –entrepreneur enablers– who are assigned the task of helping students to create new ventures.

It has been argued by UC that there are five competitive advantages to UC with regard to entrepreneurship teaching and learning compared to other traditional universities functioning in Indonesia. It offers unique teaching methods with curriculum guidance and entrepreneurship skills with real entrepreneurial experiences. It also provides mentoring programme and venture capital for alumni alongside with the creation of synergy and unlimited opportunity in Ciputra group networking. Finally, entrepreneurship education in Ciputra University is delivered by academic expert faculty members with entrepreneurial mindset (www.universitasciputra.org).

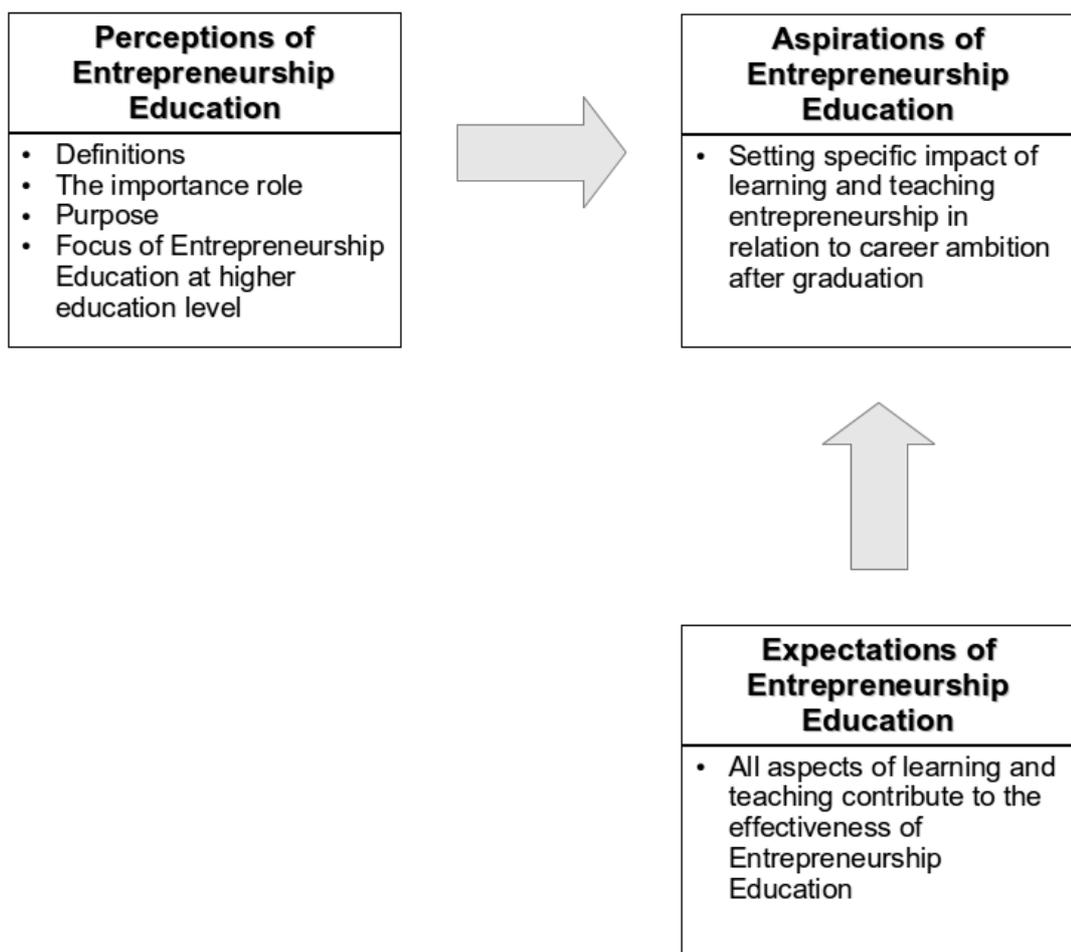
Up until the present time, UC has been successful in graduating two batches: The first batch (2010) comprised 145 graduates, with 103 businesses; the second batch (2011) comprised 288 graduates with 125 businesses run by 159 people. These are significant achievements—despite the fact that UC does not benchmark its success based on how many students have started their own ventures. Whilst the students are definitely encouraged to do so, the ultimate goal of the UC is to inculcate an entrepreneurial mindset. In the long run, UC would actively track new venture creation through its students and alumni, and possibly use this as the primary benchmark for evaluating the overall effectiveness and success of its programmes.

2.5. The relationship between perceptions, aspirations and expectations of entrepreneurship education

This section will provide a summary by which the relationship between three main issues in EE can be considered: Perception, aspiration, and expectation. The link between these elements will be made clearer. Perception encompasses a general understanding of EE in relation to definition, the value of its role, purpose and emphasis; aspiration will be concerned specifically with the relationship between career ambition after graduation, and entrepreneurship learning/teaching; expectation is centred on all aspects of learning and teaching, wherein the effectiveness of EE will be accomplished. The figure below indicates the relationship between the three main aspects in EE upon which this study will focus.

It is important to put perceptions of EE as the point of departure, meaning that what belief people hold in EE will lead to the specific impact of its learning and teaching. At a higher education level, goal-setting must be put in the context of students' career plans after graduation. The extent to which an EE programme and initiative meets its goal is another crucial issue; thus, it is necessary to gain insight into all key success factors contributing to EE effectiveness. Ensuring a clear understanding of these three basic elements is imperative –especially in the Indonesian context where EE is considered a new phenomenon compared with other leading countries, such as the US and the UK.

Figure 2.04. The relationship between perceptions, aspirations and expectations of entrepreneurship education



Source: Author (2013).

2.6. Concluding remarks

This chapter has demonstrated that EE is a worldwide phenomenon throughout the 21st Century. There is a remarkable growth in EE initiatives in the developed as well as developing countries. Nonetheless, recent studies have indicated issues relating to definition, goal and effectiveness of this new type of education still remain. At the higher education level, in particular, there is an unresolved debate as to whether a broader or narrower concept of EE must be adopted in order to enhance its academic legitimacy, whilst the contribution of EE towards entrepreneurship and economic development is also still questioned.

The Indonesian government, however, has focused on EE over two decades. Despite the effort, from 2,679 Indonesian private universities and 82 public universities, only a few of them have a high commitment to EE. It is UC, a relatively new university, which has high confidence to claim it is an entrepreneurial university. In that university, entrepreneurship values are integrated fully in order to increase the success rate of students who want to become entrepreneurs in their respective fields of studies. The emergence of this university has given new blood for the growth of EE in Indonesia.

It has been acknowledged that US universities are currently leading the way in EE. The literature shows that, based on the UK and other European experience, it is necessary to develop their own appropriate model rather than importing models from other countries that might not be applicable. There is no doubt that aim and purpose are fundamental in EE. The problem is what purpose, for whom and who decides. Basically, the importance of enterprise and entrepreneurship is established amongst governments and policy makers but not amongst university members such as senior management, faculty staff and students. The identifying of the varied understanding of EE among HEIs, therefore, can be a critical point of departure in order to build a model of EE to suit the Indonesian context.

A selected research approach must have the capability to help policy makers, universities and practitioners better understand phenomena and significance of EE. It must also be characterised by its ability to explore the variation in people

understanding and describe conceptions, aspirations and expectations of EE in a holistic and integrated way. Since the generalisation of the research outcome is needed, the research approach must be focussed on groups of people rather than individuals.

CHAPTER 3. METHODOLOGY

3.1. Introduction

This research study aims to investigate the variations in students' and faculty members' perceptions, aspirations and expectations of EE. It is necessary, however, to present a brief discussion related to general issues in research methodology in order to provide justification for the research method chosen to find answers to the research questions outlined in Chapter 1. This chapter therefore begins with a discussion of the definitions of research, including the importance of the philosophy which will underpin the choice of research technique and procedure. It will be followed by assumptions held in this research study and a description of its research method: A phenomenographic approach. Finally, it will provide a concise report of data collection in seven Indonesian HEIs.

3.2. What is research?

People, according to Neuman (1991), constantly encounter research in the modern world. Research, in the broadest sense of the word, can be defined as activities including any gathering of data, information and facts in order for knowledge to be advanced. This means that reading a factual book, surfing the internet or watching the news may be categorised as research. Saunders, Lewis and Thornhill (2007), however, asserted that in research, data should be collected and interpreted systematically. Indeed, research should have a clear purpose: To find things out. Saunders, Lewis and Thornhill (2007), therefore, define research as:

“... something that people undertake in order to find out things in a systematic way, thereby increasing their knowledge.” (Saunders, Lewis and Thornhill, 2007, p.5)

It seems that two phrases are essential in the definition of research: “Systematic” and “to find out things”. Ghauri and Gronhaug (2002) stated that in order to be

considered as systematic, research must be based on “logical relationships and not merely beliefs” (Ghauri and Gronhaug, 2002, p.12). Burn (2000) insisted that a scientific researcher should be different from a lay person. The former is likely to employ objective, systematic investigation with analysis of data. The scientific researcher will avoid a patchwork of likes and dislikes, rules of thumb, analogy and prejudice, half-truths and old wives' tales when he/she tries to understand “what actually is the case” (Burn, 2000, p.4). The credibility of research outcomes, however, will rest heavily upon the conduct of the investigation (Williams and May, 1996).

The scientific approach, according to Burn (2000), also has its strengths and limitations. The characteristics of the scientific approach consist of control, operation definition, replication, and hypothesis testing, providing answers which:

“... have a much firmer basis than the lay person's common sense or intuition or opinion.” (Burn, 2000, p.9)

Unfortunately, especially for researchers in education and behavioural science, this can be difficult, since studying human beings is far more complex than the inert matter in physical science. Burn (2000), therefore, indicated limitations of the scientific approach, including:

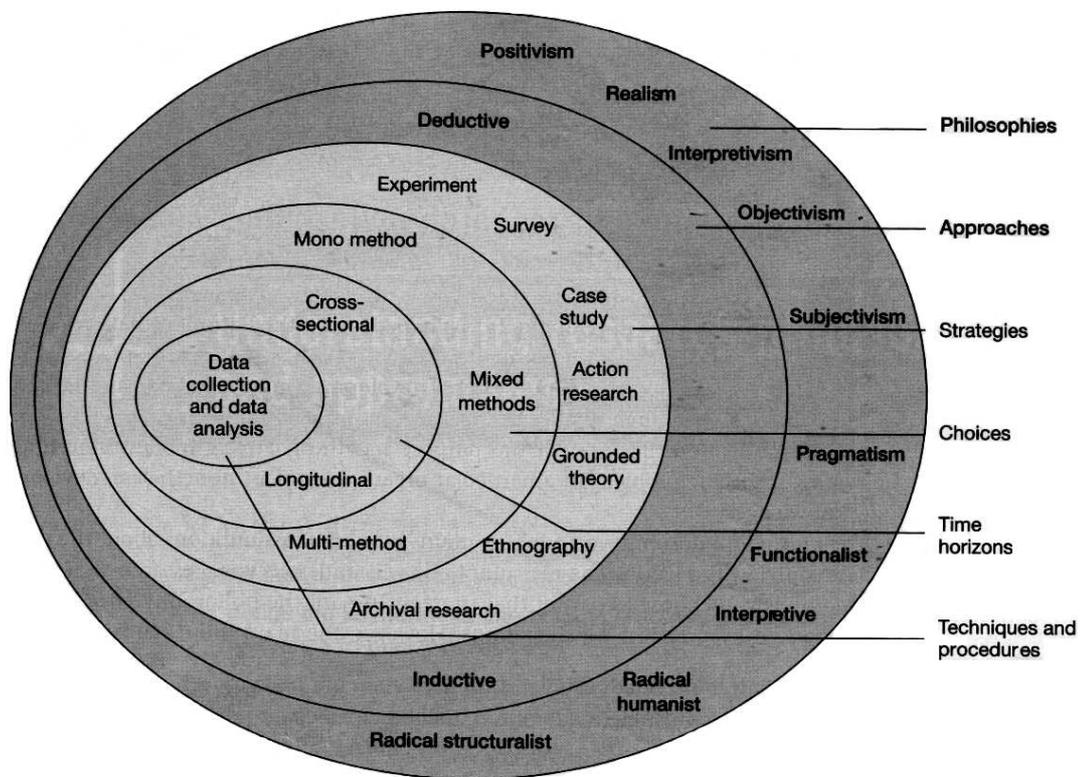
- 1) Ignorance of the individuality of humans and their thinking ability, since the notions of freedom, choice and moral responsibility have been excluded because of their mechanistic ethos.
- 2) Quantification instead of understanding the human condition as its goal.
- 3) Production of a synthetic puppet show rather than a rich dynamic melange of human behaviours (Burn, 2000, p.10).

Research, according to Burn (2000), should be addressed to find answers to a problem. In social science, research is conducted for many reasons, including to answer questions, to make more informed decisions, to change society, and to seek answers to questions that will build basic knowledge about society (Neuman, 1991).

Saunders, Lewis and Thornhill (2007), however, introduced the research term “onion” to depict five layers that need to be peeled away before coming to a central point consisting of data collection and analysis. The six layers building a

research onion will encompass philosophies, approaches, strategies, choices, time horizons, and techniques and procedures (Saunders, Lewis and Thornhill, 2007, p.112). The research philosophy should be clear at the outset, since it indicates the way in which the world is being viewed by the researcher. Subsequently, research philosophy will guide research strategy and methods (Saunders, Lewis and Thornhill, 2007).

Figure 3.01. Research onion



Source: Saunders, Lewis and Thornhill (2007, p.102)

3.3. Research philosophy

Research is an endeavour to discover something about the world, a world conceived in terms of concepts that characterise a discipline, whatever it might be (Hughes, 1993). Philosophical questions, according to Russel (1983, cited in

Williams and May, 1996), will make social researchers better because they will enlarge the conception of what is possible, enrich intellectual imagination, and diminish assurance, which closes the mind to speculation. Since the epistemological issue has been raised, researchers will face questions, including what the procedures are. It is important, however, for researchers to provide a guarantee regarding the procedures that have been chosen. In Neuman's view, it is research methodology that can characterise social science to be scientific. Social researchers will therefore choose from alternative approaches to be scientific (Neuman, 1991).

A research philosophy will be the basis of what researchers claim as “intellectual authority” and which makes them superior (Hughes, 1990, p.11). The aspects of research philosophy, according to Saunders, Lewis and Thornhill (2007), will influence the way a researcher thinks about the research process. It will enable a researcher to think about what kind of evidence is required to be gathered. Accordingly, it will provide good answers to the basic questions being investigated in the research (Easterby-Smith, Thorpe, and Jackson, 2008).

Two more benefits of understanding philosophical issues have been suggested by Easterby-Smith, Thorpe, and Jackson (2008), namely:

- 1) Knowledge of philosophy can be guidance when the researcher recognises the limitations of particular approaches. The researcher, therefore, has to consider the best design for his/her research.
- 2) Knowledge of philosophy will enable the researcher to determine and even establish a design when past experience about it is absent (Easterby-Smith, Thorpe, and Jackson, 2008, p.56).

3.3.1. Ontology

This term, according to Easterby-Smith, Thorpe, and Jackson (2008), is the point of departure for most of the debates amongst philosophers. Borrowing what Saunders, Lewis and Thornhill stated as the purpose of research, namely “to find out things” (Saunders, Lewis and Thornhill 2009, p.5) it is important for a researcher to be clear about “what kinds of things are there in the world” (Hughes,

1990, p.5). Ontology is:

“... an understanding of the nature of reality and assumptions researchers hold about the way the world operates and commitment held to particular views.” (Saunders, Lewis and Thornhill, 2009, p.110)

Whilst Blaikie (1993) stated that ontology is about “the science or study of being” or “claims about what exists, what it looks like, what units make it up and how these units interact with each other” (Blaikie, 1993, p.8). In fact there are two different assumptions on the nature of reality “whether it is an objective reality that really exists, or only a subjective reality, created in our minds” (Saunders, Lewis and Thornhill, 2009, p.110).

All philosophical positions and accompanying methodologies, according to Williams and May (1996), explicitly or implicitly maintain a view about social reality. Consequently, this view will lead to an understanding of what can be characterised as logical knowledge. This means that the ontological shapes the epistemological (William and May, 1996, p.69).

3.3.2. Epistemology

Definitions of epistemology include:

- 1) general set of assumptions about the ways of enquiring into the nature of the world (Easterby-Smith, Thorpe, and Jackson, 2008, p.60).
- 2) the theory or science of the method or grounds of knowledge expanding this into a set of claims or assumptions about the ways in which it is possible to gain knowledge of reality, how what exists may be known, what can be known, and what criteria must be satisfied in order for something to be described as knowledge (Blaikie,1993, p.8).

Hughes (1990), however, argued that epistemological questions are not about techniques or matters of fact but about what should count as facts.

From the discussion about ontology and epistemology above, it is worth noting that:

- 1) Ontological and epistemological issues are strongly connected

- 2) Philosophical questions are to be resolved by reason, not by empirical inquiry (Hughes, 1990, pp.5-6).

3.3.3. Axiology

The term "axiology", according to Saunders, Lewis and Thornhill (2007), is concerned with value judgement. Since researchers want credible results from their research, their own values will be reflected in all stages of the research process. For instance, a researcher may prefer interviewing as a proper strategy for collecting data. From the axiological perspective, this means that personal interaction with respondents has been considered to be more valuable than anonymous views expressed through a questionnaire. Since philosophers are concerned with what it is that makes human beings what they are, there will be questions dealing with morals, including:

- 1) Are there certain things that we should, or should not, do?
- 2) Are there values that transcend history and different societies?
- 3) Can we say what counts as the 'good life' is the same for all?

A research practice, however, should be based on these moral guidances (Williams and May, 1996, p.7). Indeed, John Stuart Mill (1806-73, cited in Williams and May, 1996) called the social sciences 'moral' sciences. As researchers, we will encounter epistemological, ontological and moral issues.

3.3.4. Methodology

The methodological question, according to Guba and Lincoln (1994), can be reduced to a question of methods which the latter must be fitted to the former. The methodological question will encompass:

“... how can the inquirer (would be knower) go about finding out whatever he or she believes can be known.” (Guba and Lincoln, 1994, p.108)

The answer to the methodological question, however, will depend on the answers given to the ontological and epistemological questions. For instance, a real reality pursued by an objective inquirer calls for control of possible confounding factors

for both qualitative and quantitative methods.

3.4. Schools of thought and major methodological approaches

Debates among philosophers, namely natural scientists and social scientists, about ontology and epistemology have been reflected in the emergence of two contrasting schools of thought. The two traditions, according to Easterby-Smith, Thorpe, and Jackson (2008), are positivism and social constructionism.

3.4.1. Positivism

The blooming of European thought in the sixteenth and seventeenth centuries, according to Hughes (1990), has been considered as the starting point of the emergence of positivist epistemology, with two figures clearly standing out: Bacon (1561-1626) and Descartes (1596-1650). At that time Bacon and Descartes were looking for an intellectual method to overcome scepticism which would provide a new certainty for knowledge of the world (Hughes, 2000). In the social sciences, the French philosopher Auguste Comte (1853), was the first person to proclaim the positivist view (Hughes, 1990; Easterby-Smith, Thorpe, and Jackson, 2008).

According to Giddens (cited in Hughes, 1990), there are some assumptions which underpin positivist philosophy in its widest sense:

- Reality consists of what is available to the senses.
- Philosophy, while a distinct discipline, is parasitic on the findings of science.
- The natural and the human sciences share common logical and methodological foundations.
- There is a fundamental distinction to be made between fact and value; science deals with the former, while the latter belongs to an entirely different order of discourse beyond the remit of science (Giddens, cited in Hughes, 1990, p.20).

To put it simply, Easterby-Smith, Thorpe, and Jackson (2008) cited the Comte

statement:

“All good intellects have repeated, since Bacon's time, that there can be no real knowledge but that which is based on observed facts.” (Easterby-Smith, Thorpe, and Jackson, 2008, p.57)

This means that reality is external and objective (the ontological assumption) and observation of this reality is a valid way to gain knowledge (the epistemological assumption). When a researcher adopts the positivist or the philosophical stance of the natural scientist, his or her research design and strategy might be influenced as follows:

- Since it has been argued that only phenomena can be observed, this will enable the production of credible data. The research strategy by which these data will be collected will involve the development of hypotheses using existing theories.
- Since a highly structured methodology should be adopted in order to enable replication, quantifiable observations will be suggested because they enable researchers to conduct statistical analysis (Saunders, Lewis and Thornhill, 2009, p.113).

3.4.2. Social constructionism

Reality has been acknowledged “not to be objective and exterior but socially constructed and given meaning by people” (Easterby-Smith, Thorpe, and Jackson, 2008, p.58), it has signalled the emergence of a new paradigm which indicates an objection of application of positivism to the social sciences (Easterby-Smith, Thorpe, and Jackson, 2008). Whilst Easterby-Smith, Thorpe, and Jackson (2008) called this new school of thought social constructionism, Hughes (1990) preferred to call it the interpretivist or humanistic paradigm. The positivist method, according to Hughes (2000), not only gives a partial account of social life, but that they distort its nature in profound ways. For instance, Hughes (1990) stated that:

“... the regularities we discover by studying society are only the external appearances of what the members of a society understand and, thereby, act upon.” (Hughes, 1990, p.95)

Social constructionism, in contrast, takes a different position, which can be

described as follows:

- Reality is not objective and based on external factors but is determined by people. The role of the social scientist, therefore, is to acknowledge the variation of constructions and meanings that people attach upon their experience. This means that the aim of research in a social world is not addressed at examining the frequency of when certain patterns occur.
- The focal point of social research should emphasise what people, individually and collectively, think and feel. The ways people communicate with each other, verbally or non verbally, should be the main concern.
- Understanding and explaining the reasons why people have different experiences is too far important than explaining behaviour by finding external causes and fundamental laws (Easterby-Smith, Thorpe, and Jackson, 2008, p.59).

Furthermore, Table 3.01 indicates how social constructionism can be distinguished from positivism by which its implications on methodology become more obvious.

Table 3.01. Contrasting Implications of Positivism and Social Constructionism

	Positivism	Social Constructionism
The observer	must be independent	is part of what is being observed
Human interests	should be irrelevant	are the main drivers of science
Explanations	must demonstrate causality	aim to increase general understanding of the situation
Research progresses through	hypotheses and deduction	gathering rich data from which ideas are induced
Concepts	need to be defined so that they can be measured	should incorporate the stakeholder perspective
Unit of analysis	should be reduced to simplest terms	may include the complexity of the 'whole' situation
Generalisation through	statistical probability	theoretical abstraction
Sampling requires	large numbers selected randomly	small numbers of cases chosen for specific reasons

Source: Easterby-Smith, Thorpe and Jackson (2008, p.63)

Neuman (1991), on the other hand, suggested three approaches, which are based on a significant re-evaluation of social science that took place during the late 1960s and early 1970s: Positivist social science, interpretive social science, and critical social science. The first two, according to Newman (1991), illuminate the most ongoing research. As with Easterby-Smith, Thorpe, and Jackson (2008), Newman organised the assumptions and ideas of the approaches in order for them to help to answer the following eight questions:

- 1) Why should one conduct social scientific research?
- 2) What is the fundamental nature of social research?
- 3) What is the basic nature of human beings?
- 4) What is the relationship between science and common sense?
- 5) What constitutes an explanation or theory of social reality?
- 6) How does one determine whether an explanation is true or false?
- 7) What does good evidence or factual information look like?
- 8) Where do social/political values enter into science? (Neuman, 1991, p.45).

There are different social science definitions based on these three research traditions. Positivism defines social science as:

“... an organised method for combining deductive logic with precise empirical observations of individual behaviour in order to discover and confirm a set of probabilistic causal laws that can be used to predict general patterns of human activity.” (Neuman, 1991, p.46)

The interpretive approach, on the other hand, describes social science as:

“... the systematic analysis of socially meaningful action through the direct detailed observation of people in natural settings in order to arrive at understandings and interpretations of how people create and maintain their social world.” (Neuman, 1991, p.50)

The most recent approach, called critical social science, offers a third alternative which defines social science as:

“... a critical process of inquiry that goes beyond surface illusions to uncover the real structures in the material world in order to help people change conditions and build a better world for themselves.” (Neuman, 1991, p.56)

The critical social science criticises positivism together with the interpretive approach, as positivism ignores "the meanings of real people and their capacity to feel and think", neglects the social context, and is "anti-humanist" (Neuman, 1991, p.55). Critical researchers, however, disagree with the interpretive approach, since the latter has been considered to be too subjective and relativist.

Table 3.02. Summary of the Differences between the Three Approaches to Research

	Positivism	Interpretive Social Science	Critical Social Science
Reason for research	To discover natural laws so people can predict and control events	To understand and describe meaningful social action	To smash myths and empower people to change society radically
Nature of social reality	Stable pre-existing patterns or order that can be discovered	Fluid definitions of a situation created by human interaction	Conflict-filled and governed by hidden underlying structures
Nature of human beings	Self-interested and rational individuals who are shaped by external forces	Social beings who create meaning and who constantly make sense of their worlds	Creative, adaptive people with unrealized potential, trapped by illusion and exploitation
Role of common sense	Clearly distinct from and less valid than science	Powerful everyday theories used by ordinary people	False beliefs that hide power and objective conditions
Theory looks like	a logical, deductive system of interconnected definitions, axioms, and laws	a description of how a group's meaning system is generated and sustained	a critique that reveals true conditions and helps people see the way to a better world
An explanation that is true	is logically connected to laws and based on facts	resonates or feels right to those who are being studied	supplies people with the tools needed to change the world
Good evidence	is based on precise observations which others can repeat	is embedded in the context of fluid social interactions	is informed by a theory that unveils illusions
Place for values	Science is value-neutral, and values have no place except when choosing a topic	Values are an integral part of social life; no group's are wrong, only different	All science must begin with a value position; some positions are right, some are wrong

Source: Neuman (1991, p.85)

Furthermore, ontological and epistemological assumptions which lead to a certain research philosophy will guide the researcher in considering the choice of strategy for his or her research. This means that there will be a combination of techniques adopted to investigate a specific situation. Whilst Saunders, Lewis and Thornhill (2009, p.124) called this term "research approaches", others prefer to use the term

"methodology".

The concepts of methodology and method, according to Blaikie (2000), are frequently interchangeable. Methods refer to the techniques or procedures used to collect and analyse data; methodology, however, is concerned with the discussion of:

- 1) how research is done and should be done, and critical analysis of the research methods
- 2) the logical enquiry of how new knowledge is generated and justified, including what kinds of logic should be used, what a theory looks like, what criteria a theory has to satisfy, how it relates to a particular research problem, and how it can be tested
- 3) alternative research strategies and methods and how they have been critically evaluated.

Saunders *et al.* (2007) stated that a strategic question in relation to the design of a research project will depend on theory that has been formulated at the beginning of research. There are two main research approaches, namely the deductive approach and the inductive approach (Saunders *et al.*, 2007).

3.4.3. Deductive approach

This approach is characterised by a theory which identifies which four main characteristics of the scientific research should be met, namely control, operational definition, replication and hypothesis testing (Burn, 2000; Saunders *et al.*, 2007). Control is needed in order to ensure the researcher is able to identify the causes of his or her observation (Burn, 2000), since the goal of research is an attempt to explain the causal link between variables (Saunders *et al.*, 2007). The operational definition indicates how to measure the concepts or variables more precisely. This means facts should be quantitative. Therefore, confusion in meaning and communication can be eliminated. Burn (2000) stated that reliability of data obtained in an experiment is vital, otherwise descriptions and explanations will be useless. It is aimed to fulfil the requirement of science, namely replicability. Accordingly, generalisation can be made. Whilst a sophisticated researcher will

test the relationship systematically in the field or in the laboratory, the lay person will merely choose evidence to fit the hypothesis (Burn, 2000). Deduction, according to Saunders *et al.* (2007), requires the researcher to be independent from participants or what is being observed. In addition, a sufficient numerical sample size is needed.

3.4.4. Inductive approach

As an alternative approach, induction is "an understanding of the way in which humans interpret their social world" which emerged to criticise the deductive approach (Saunders *et al.*, 2009, p.126). Theory in an inductive approach would follow data. Theory, according to Burn (2000), is a manageable set of generalisations which are obtained from pulling together individual facts into a cluster. Hence induction, in Saunders *et al.* (2007)'s view, is theory building. The inclination to employ a fixed methodology that resists alternative explanations of what is happening has been considered as other disagreement induction follower toward deduction (Saunders *et al.*, 2007). Furthermore, implications of adoption of an inductive approach are:

- 1) that the context in which an event takes place will be crucial
- 2) that it will involve a study of a small sample of subjects
- 3) qualitative data and a variety of methods to collect these data are common to be used in order to investigate different understandings of phenomena (Saunders *et al.*, 2009, p.126).

The flexibility of inductive research compared to the deductive research can be "its greatest strength" and can be the "more appropriate approach" to research in the management field in general and consultancy area in particular (Lancaster, 2005, pp.25-26). The establishment of a priori theories or hypotheses can be replaced by building theories based on observation and this in turn allow researchers to approach a problem or issue with considerably different perspectives (Lancaster, 2005, p.26).

3.5. Quantitative research

Quantitative research methods, according to Burns (2000), are termed as the traditional scientific approach, which has been the conventional approach to research in all areas of inquiry. The positivist approach to science is a paradigm which relies primarily on assumptions based on quantitative research. For example, the quantitative approach is based on the epistemological assumption that "there exist definable and quantifiable social facts" (Rist 1975, p.18, cited in Burns, 2000, p.10). Researchers, therefore, who employ quantitative methods will deal with a number of preoccupations, including measuring concepts, establishing causality, generalising, replicating, and focussing on individuals (Bryman, 1988, cited in Blaikie, 2000). Understanding of language and ideas of quantitative research design, however, is an essential component for a researcher in order to conduct a high quality quantitative research project (Neuman, 1991).

1) Measuring Concepts

In quantitative research the process of measurement is the third step after a research question has been formulated and the variables and unit analysis have been determined (Neuman, 1991). Indeed, an operational definition is necessary as it defines the steps or operations used to measure the concepts (Burns, 2000). It aims to eliminate confusion in meaning and communication. Consequently, a researcher must identify the empirical referents, or terms and as a result minimise ambiguity. Since quantitative researchers believe that they are dealing with external reality, they will find that reliability and validity are their main concern (Blaikie, 2000). The concepts of validity and reliability combined with generalisation, according to Kvale (2002), have obtained the status of a scientific holy trinity. Achieving maximum reliability and validity of indicators, therefore, will lead to the trustworthiness of the final findings (Neuman, 1991). On the other hand, Kvale (2002) seems to disagree with Neuman, stating that:

“The current concerns with the positivist trinity of knowledge (validity, reliability and generalisation) may serve as an exorcism, as a way of combating doubt and of bolstering a crumbling belief in one objective and true universal reality.” (Kvale, 2002, p.322)

2) Establishing Causality

The idea of cause has long been a debate among philosophers. Causes, in Hume's view, were actually observed constant conjunctions between events (Williams and May, 1996). Hume's statement, however, leads to question regarding the ability to identify the necessary and sufficient conditions that comprise a cause in the social world. Basically, there are two positions when dealing with causality (Neuman, 1991). The first position claims that causality exists in the empirical world, but it is impossible to be validated. Researchers, however, "can only try to find evidence for causality", as it is considered to be "out there" in objective reality (Neuman, 1991, p.87). The second position, on the other hand, argues that causality is "a mental construction, not something real in the world", therefore, it "is only an idea that exists in the human mind" (Neuman, 1991, p.87).

In order to establish causation, according to Blaikie (2000) and Neuman (1991), three conditions should be provided:

- Association between variables. It indicates that there should be a link between two or more variables.
- Elimination of plausible alternatives. The relationship is not the result of the presence of a third variable that produces changes in the other two variables.
- Temporal order between variables. There is a temporal order between the variables, such that one has the possibility of causing the other.

An addition, a causal link that fits with a theoretical framework can be an implicit fourth condition (Newman, 1991, p.87).

The use of an experimental and control group will enable the researcher to achieve those criteria. In contrast, cross-sectional studies such as social surveys find it difficult to meet the second two conditions (Blaikie, 2000).

3) Generalising

In quantitative studies, generalisation of research findings can be

considered as the ability for them to be applicable beyond the population that is studied (Blaikie, 2000). Three technical issues should be resolved to generalise from a sample to a population: The representativeness of the sample, achievement of a high response rate, and selection of the appropriate statistical test.

4) Replicating

To be replicable, according to Burns (2000), the data from an experiment must be reliable. Reliability means that the indicator is able to provide information which does not vary due to "the characteristics of the indicator, instrument, or measurement device itself" (Neuman, 1991, p.125).

Although perfect reliability is difficult to achieve, it is possible to increase it through: (1) clearly conceptualising constructs, (2) using a precise level of measurement, (3) using multiple indicators, and (4) using a pilot test (Neuman, 1991, pp.127-128). One of the major criticisms of qualitative methods is that reliability and validity do not lend themselves to replication because there is too much of the researcher in the data (Blaikie, 2000). That is very little of replication which quantitative researchers actually do.

5) Focusing on Individuals

Since quantitative research has been dominated by the use of survey methods that are administered to individuals, it serves to its tendency to focus on individuals (Blaikie, 2000). The methods, however, have been considered as failing to get very close to the social world that respondents live in.

Quantitative research design adopts a deductive logic in which the process begins with a general topic, then becomes more focused on research questions and hypotheses, and in the end tests hypotheses against empirical evidence (Neuman, 1991, p.118). Structured observation, self-administered questionnaires, structured interviews, and content analysis of documents are commonly used in quantitative data-gathering methods. Precision and control have been considered as the main strengths of the scientific approach (Burns, 2000). In order for control to take place, design and sampling must be concerned. Precision, on the other hand, can be obtained through quantitative and reliable measurement.

Traditional deductive methodology, as represented by quantitative research is "failing to follow rapid change wherein result in diversification of life world" (Flick, 1998, p.2) . Consequently, social researchers will be forced to face new social contexts and perspectives. Therefore using inductive approaches rather than starting from hypotheses and testing them would be more useful (Flick, 1998).

3.6. Qualitative research

Authors, according to Creswell (1998), often define qualitative research by contrasting it with quantitative research. The word "qualitative", according to Denzin and Lincoln (2003), indicates its focus on the qualities of entities and processes. It is very different from "quantitative", in which meanings will not be obtained from experiments, nor be measured in terms of quantity, amount, intensity or frequency. Words, sentences and paragraphs, therefore, characterise qualitative data (Neuman, 1991). This makes sense, since qualitative researchers' endeavours focus on discovering answers to questions that accentuate how social experience is constructed and given meaning (Denzin and Lincoln, 2003). In addition, the language of research, such as variables, reliability, statistics, hypotheses, replication and scales, is rarely used by researchers who adopt a qualitative approach.

The following definitions of qualitative research have been provided by Denzin and Lincoln (1994) and Creswell (1998):

- 1) Qualitative research is "... multi-method in focus, involving an interpretive, naturalistic approach to its subject matter." (Denzin and Lincoln, 1994, p.2)
- 2) Qualitative research is "... an inquiry process of understanding based on distinct methodological traditions of inquiry that explore a social or human problem. The researcher builds a complex, holistic picture, analyses words, reports detailed views of informants, and conducts the study in a natural setting." (Creswell, 1998, p.15)

Neuman (1991) offered three ways to contrast qualitative research with quantitative:

1) A Non-Positivist Perspective

Qualitative researchers who hold a non-positivist stance (interpretive or critical) will emphasise "the socially constructed nature of reality, the intimate relationship between the researcher and what is studied, and the situational constraints that shape inquiry" (Denzin and Lincoln, 2003, p.13). Quantitative research, on the other hand, uses positivism as its foundation. Assuming that concepts can be conceptualised as variable, accordingly, can develop objective, precise measures of important features of the social world and turn them into numbers are positivist stances (Neuman, 1991).

2) A Logic in Practice

Whilst concepts in quantitative research are based on reconstructed logic, qualitative research uses more logic in practice. Reconstructed logic, according to Neuman (1991), implies that formal and systematic style characterise the rationale of how to do research. Whilst fewer set directions and judgement norms accepted among qualified researchers characterise logic in practice.

3) A Non-Linear Path

Qualitative researchers adhere to a more non-linear and cyclical path. This path can be described as making "successive passes through steps, sometimes moving backward and sideways before moving on" (Neuman, 1991, p.324). Quantitative researchers are different since they are likely to follow a fixed sequence of steps. A cyclical path is more appropriate when it is aimed at "handling tasks such as translating languages, where delicate shades of meaning, subtle connotations or contextual distinctions can be substantial" (Neuman, 1991, pp.324-25).

Burns (2000) suggested that qualitative research can be contrasted with the quantitative based on their assumptions, purposes and methods.

Table 3.03. Comparison between Qualitative and Quantitative Research

	Qualitative	Quantitative
Assumptions	<ul style="list-style-type: none"> • Reality socially constructed • Variables complex and interwoven; difficult to measure • Events viewed from informant's perspective • Dynamic quality to life 	<ul style="list-style-type: none"> • Facts and data have an objective reality • Variables can be measured and identified • Events viewed from outsider's perspective • Static reality to life
Purposes	<ul style="list-style-type: none"> • Interpretation • Contextualisation • Understanding the perspectives of others 	<ul style="list-style-type: none"> • Prediction • Generalisation • Causal explanation
Methods	<ul style="list-style-type: none"> • Data collection using participant observation, unstructured interviews 	<ul style="list-style-type: none"> • Testing and measuring

Source: Burns (2000, p.391)

Qualitative research should not be chosen because a researcher is trying to avoid a statistical or quantitative study (Creswell, 1998). A strong rationale must exist before a researcher decides to engage in qualitative investigation. This might include compelling reasons such as: The characteristic of research question, the topic is explorative in nature, a detailed view of the topic is required, the importance of natural setting, interest in writing in a literary style, there are no time and resources constraints, qualitative research is more preferable for the research audience, being an active learner rather than expert is sought (Creswell, 2009, pp.18-19).

Denzin and Lincoln (2003), however, highlighted the academic and disciplinary refusal to qualitative studies since qualitative researchers are labelled journalists, or soft scientists, their work is described as unscientific, or only explorative or subjective. Nonetheless, the exponential growth in qualitative research as alternative paradigm research has emerged, indicated by the launch of several recent journals in this area and the phenomenal sales of books on this topic (Denzin and Lincoln, 2002).

Both qualitative and quantitative research, according to Howe and Eisenhardt (1990, cited in Creswell, 1998), should meet five standards in order for their quality to be assessed:

- 1) They assess a study in terms of whether the research questions drive the

data collection and analysis rather than the reverse being the case;

- 2) They examine the extent to which data collection and analysis techniques are competently applied in a technical sense;
- 3) They ask whether the researcher's assumptions are made explicit, such as the researcher's own subjectivity;
- 4) They wonder whether the study has overall warrant, such as whether it is robust, uses respected theoretical explanations, and discusses dis-confirmed theoretical explanations;
- 5) The study must have value both in informing and improving practice (the "so what?" question) and in protecting the confidentiality, privacy and truth telling of participants or the ethical question (Howe and Eisenhardt, 1990, cited in Creswell, 1998, p.195).

In addition, Lincoln (2002), with her "emerging criteria", suggested eight standards to assess quality in an interpretive framework. Interpretive or qualitative research should meet the following standards:

- 1) standards for judging quality in the inquiry community, such as guidelines for publication
- 2) position, or standpoint judgement, in which detachment and author objectivity must be avoided
- 3) the standard in which the community as arbiter of quality for all research takes place
- 4) the standard by which alternative voices can be heard
- 5) the standard to be critically subjectivity for the researcher
- 6) the standard of reciprocity, to enable intense sharing, trust and mutuality between the researcher and participants
- 7) the standard for the researcher to show the sacredness of the relationship in the research-to-action continuum
- 8) the standard in that sharing of privileges is made by the researcher for persons whose lives they describe.

It should be noted that these criteria need to be applied with caution since they

might be suitable for specific kinds of research or certain stages of the inquiry (Lincoln, 2002).

3.7. Mixed method

There has been increasing agreement in support of the idea of combining different types of methods (Blaikie, 2000; Curran and Blackburn, 2001; Neuman, 1991). This has been described in different terms, including multiple operationism, combined operations, mixed strategies, linking data, combining quantitative and qualitative research, multi-method research, mixing methods, and mixed methodology (Blaikie, 2000).

The term multi-method is exemplified by Tashakkori and Teddlie, 2003 (cited in Saunders *et al.*, 2007), where no single data collection technique is adopted with associated analysis techniques, but this is only applicable for either a quantitative or qualitative approach. It means that when multi-methods are adopted, a researcher will not combine quantitative and qualitative techniques and procedures.

On the other hand, mixed methods is the general term for "combining quantitative and qualitative data collection techniques and analysis procedure in a research design" (Saunders *et al.*, 2009, p.151). There are two types of mixed methods. Mixed method research uses quantitative and qualitative data collection techniques and analysis procedures either simultaneously or sequentially; in the latter case, according to Creswell (1998), qualitative methods should be first.

There are several reasons to employ a multiple method. One should try to mix methods to some extent since this will provide more perspectives on the phenomena being examined (Easterby-Smith, Thorpe, and Jackson, 2008). Fielding and Fielding (1986, cited in Easterby-Smith, Thorpe, and Jackson, 2008) argued that combining quantitative and qualitative methods leads to good effect in researching organisations such as the National Front in Britain. According to Saunders *et al.* (2007), there are two major advantages to choosing to use multiple methods in the same research project. It can not only handle different objectives in a study but also enables triangulation to be made.

Regarding the use of multiple methods, Blaikie (2000) offered some notes of caution:

- 1) Combining research strategies with different ontological assumptions should be avoided.
- 2) A combination of methods with different ontological assumptions should be used in sequence, with careful attention being paid to the shifts in ontological assumptions that are involved.
- 3) Cooperation between paradigm communities is more productive than sectarian wars since there is no ultimate way to settle which of the research strategies is the best one, and they have their specific uses as well as advantages and disadvantages (Blaikie, 2000, p.261).

3.8. Triangulation

Triangulation, in social research, can be defined as the use of different types of measures, or data collection techniques, in order to examine the same variable and this is a special use of multiple indicators (Neuman, 1991, p.138). The concept of triangulation was introduced into the social sciences by Webb *et al.*, based on the ideas of Campbell and Fiske, and was taken up and elaborated by Denzin (Blaikie, 2000). A desire to improve the validity of the measurement was the ultimate goal to use diverse indicators (Blaikie, 2000; Neuman, 1991). It is worth noting that rather than suggesting a combination of different methods to produce more reliable results, Webb *et al.*, advocated the use of different measures of the same concept in a hypothesis testing (Blaikie, 2000). Denzin (1970, cited in Blaikie, 2000), in contrast, allowed the use of two types of triangulation, including within-method and between-method triangulation. In within-method triangulation, various measures within one method, such as a survey questionnaire with different scales measuring the same empirical unit, is advised. Between-method triangulation, on the other hand, combines different methods to measure the same unit or concept. Denzin seemed to favour between-method triangulation since the weaknesses of one method are often the strengths of another and by combining methods it is possible for the researchers to "achieve the best of each, while

overcoming their unique deficiencies" (Denzin, 1970 cited in Blaikie, 2000, p.263).

There are different reasons for the use of triangulation by the quantitative and qualitative researcher (Neuman, 1991). Two objectives will be accomplished by a quantitative researcher who employs triangulation. First, it aims to get a better fix on objective reality when testing hypotheses. Second, it enables a reduction of method effects.

Triangulation is also advocated by qualitative researchers for three reasons, namely:

- 1) to increase the sophisticated rigour of data collection and analysis.
Therefore, close examination of methods can be made more apparent;
- 2) to reveal the richness and variety of social context.

Despite the advantages of using triangulation, however, serious difficulties in its implementation must be acknowledged (Blaikie, 2000). Blaikie suggested stopping the use of the concept of triangulation in social science based on the following reasons:

- lip-service is paid to it but few researchers use it in its original conception as a validity check (mainly because convergence is very rare);
- it means so many things to so many people; and
- it encourages a naïve view of ontology and epistemology (Blaikie, 2000, p.270).

3.9. Research into entrepreneurship and entrepreneurship education

3.9.1. The state of the research on entrepreneurship

According to Hisrich (2006), there are four indicators of the increase in interest in entrepreneurship: Increasing research, entrepreneurship courses and seminars, media attention towards entrepreneurship, and new enterprise creation. The journey of research in entrepreneurship can be classified by time scale, Europe's

position, geographical/cultural dominance, and principal scientific fields (Fayolle, Kyro and Ulijn, 2005). The time horizon of entrepreneurship research starts from the modern transition towards the industrialisation era and to the 21st century. Although entrepreneurship was born in Western Europe in the 1700s, the United States took over Europe's position at the end of the 19th century. From then, entrepreneurship research has still been dominated by North America and Europe, with a global view. Domination of the economics field in entrepreneurship research in the early stage of entrepreneurship development is expected to re-emerge in the 21st century after experiencing a decline in modern and post-modern transition. In the modern era, social psychology, sociology, management and organisation science and anthropology have replaced the economics position as the main view of entrepreneurship research. An interesting phenomenon occurred when the marketing and education fields entered the arena of entrepreneurship research in the post-modern transition. While it is expected that management and marketing education will be the principle scientific fields in entrepreneurship research, the methodological related fields of science philosophies and economics are predicted to be important (Fayolle, Kyro and Ulijn, 2005).

Changes have also been taking place regarding the motive, target of the research and methodological aspects of entrepreneurship research (Fayolle, Kyro and Ulijn, 2005). Support for and understanding of the process of business creation and welfare in multiple cultural contexts at the level of the individual and collective have been the main reasons for studying entrepreneurship in the 21st century. The underlying assumption is that economic progress relies on the emergence of productive entrepreneurs. While in modern transition studies aimed to investigate the link between the individual entrepreneur and the economy, in the future the processes and dynamics of creating new value and economic activities which call for individuals, small business organisations and networks to be included should be investigated. Therefore trait theories and functional theories of business activities are a little relevant as more rigorous and comprehensive theories and culture-bound approaches are required. Cooper (2006) states that the field of entrepreneurship suffered from a lack of central research paradigm which ignored the issues of validity and reliability. While the analytical methods have been recognised as crude, the definition of entrepreneurship remains a concern. On the

other hand, despite its developments in terms of definitions, research problems, methodologies and theories, Davidsson and Wiklund (2001) and Busenitz *et al.* (2003, cited in Lindgren and Packendorff, 2009), suggest that the emerging field of entrepreneurship should discuss and define the ontological and epistemological positions of the underlying view of reality, knowledge and ideology. It has been suggested that the "non-dualistic view of reality with more comprehensive bases" in future entrepreneurship study is required in order to accommodate the complexity of the phenomenon (Fayolle, Kyro and Ulijn, 2005, p.7). There is no agreement, however, on what priority should be emphasised between positivist and non-positivist perspectives (see Table 3.04).

Table 3.04. Comparison between Positivist and Non-Positivist Perspectives

Aspect of Quality	Positivist	Non-Positivist
Theory	<ul style="list-style-type: none"> • Theory is the ultimate aim of science, which will give guidance in investigating phenomena (Kerlinger, 1986) • It is the theory-based, hypothesis- testing research studies that tend to meet scholarly journal standards for publication, which is so important to academic faculty for tenure and promotion (Block and Stumpf, 1992) 	<ul style="list-style-type: none"> • Entrepreneurship is in the pre-theory stage; accordingly, painstaking observations are essential, with more empirical models that describe observed phenomena as accurately as possible (Bygrave, 2007; Davidsson, 2004). • Entrepreneurship needs to develop its own methods and theories without being obsessed with sophisticated methods as that of physics. In addition, a deductive model does not seem appropriate for entrepreneurship, which is an infant paradigm (Bygrave, 1989).
An accepted definition	<ul style="list-style-type: none"> • A consensus definition is imperative as it will bring about commonality and comparability of the research (Low <i>et al.</i>, 1988 and Brockhaus, 1987, cited in Watson, 2001). • High variation or vague definitions lead to the low quality of entrepreneurship research (Watson, 2001) since they will affect other aspects such as purpose, data collection, sampling and findings. 	<ul style="list-style-type: none"> • Since the search for the best definition is difficult, it should be treated as a low priority in order not? to hinder making progress in future research (Bygrave, 1989; Bull and Willard, 1993).
Approach	<ul style="list-style-type: none"> • A hypothesis-testing research study should be emphasised rather than an empirically examined case study. 	<ul style="list-style-type: none"> • A quantitative statistical model is not really suitable for research entrepreneurship as its essence is a change of state. A qualitative approach can be considered to be more suitable, as it adopts a holistic process in which the existing stability disappears (Bygrave, 2007) • Since entrepreneurship has been understood as a process of becoming, in-depth longitudinal case studies that will help to understand the process of start-up are needed. This enables researchers to observe the process happening in the field (Bygrave, 2007).

Source: Adapted from Kerlinger (1986), Bygrave (1989), Block and Stumpf (1992), Bull and Willard (1993), Watson (2001), Davidsson (2004), and Bygrave (2007)

Both qualitative and quantitative researches are helpful in enhancing understanding of entrepreneurship (Davidsson, 2004). Nevertheless, it has been argued by Chandler and Lyon (2001) that there is still a domination of positivist

approaches and research methods in journal publication. Lack of sufficient methodological detail and rigour can be considered to be the reason why qualitative research in entrepreneurship is often rejected by mainstream journals (Gartner and Birley, 2002). The following examples will present several qualitative research methods in researching the entrepreneurship phenomenon.

1) Phenomenology

Phenomenological approach, according to Berglund (2007), can be adopted to investigate how entrepreneurs experience, attach meaning and translate it into action the "popular concepts and common events in entrepreneurship" (e.g. opportunity discovery, risk-taking, business planning) as well as "less explored aspects" (e.g. involvement of self, view of time) (Berglund, 2007, p.89). A phenomenological method was also used by Cave, Eccles and Rundle (2001) who conducted phenomenological interviews to gain deep understanding in relation to entrepreneurs' attitudes towards entrepreneurial failure in the UK and US.

2) Ethnography

Advantages regarding the use of ethnographic method for studying entrepreneurship have been provided by Johnstone (2007). This approach can uncover distinctions in social settings and underlying cultural trends and shifts in meaning. Greater understanding of entrepreneurial behaviour along with new insights into how entrepreneurial ventures emerge and grow can also be investigated by using ethnography. The strength of this approach is its ability to reveal "the cultural and institutional factors that surround and either constraint or enable the emergence of a venture" (Johnstone, 2007, p.119).

3) Semiotic analysis

Properly constructed, semiotic analysis, according to Smith and Anderson (2007), can allow an understanding of the actual signs and symbols of a given system as they occur naturally rather than de-constructing the texts of others. The virtue of semiotic analysis is that it "permits us to recognise meaning" (Smith and Anderson, 2007, p.189)

Making decisions on whether to use quantitative or qualitative research, it

should be noted that "there has to be a proper match between the research question and the chosen approach" (Davidsson, 2004, p.59).

3.9.2. The state of research into entrepreneurship education

3.9.2.1. *Typologies of entrepreneurship education research*

Bechard and Gregoire (2005) in their study indicated four major categories of education research preoccupations which characterise their sample of EE articles: (i) social preoccupation (four subtypes: A sociology perspective on the demand for education, a sociology perspective on the organisations of education (the supply side), an economic/human capital perspective on the demand for education, and an economic/value-added perspective on the organisations of education (the supply side)), (ii) technological preoccupation (three subtypes: A focus on instructional design, a focus on multimedia environments and a focus on curriculum development), (iii) academic preoccupation (four subtypes: Specialized contents taught from a teaching paradigm, generalist contents taught from a teaching paradigm, specialized contents taught from a learning paradigm and generalist contents taught from a learning paradigm), and (iv) personalist preoccupation (two subtypes: An emphasis on students' needs and differences).

Blenker *et al.* (2008) state that there are two streams of research in EE: One which focusses primarily on didactics and pedagogy and other studies which attempt to relate universities to their context. Other scholars underscore the important studies relating to demand-side and supply-side issues in EE (Schwartz and Malach-Pines, 2009; Pittaway and Hannon, 2008; European Commission, 2008). Demand-side issues, according to Schwartz and Malach-Pines (2009), cover the educational needs of students, the preparedness and willingness of students to start a business (entrepreneurial events, entrepreneurial careers and entrepreneurial spirit studies), and students' characteristics and attitudes towards entrepreneurship. Pittaway and Hannon (2008) add some studies regarding students' intentions and aspirations along with perceptions of the availability of support in relation to opportunities and networks. Supply-side issues, on the other hand, encompass studies aimed at analysing the entrepreneurship programmes

offered by universities and addressing issues such as their components, their process of EE, and their outcomes (Schwartz and Malach-Pines, 2009). The European Commission (2008) employed dimensions of the supply-side such as strategy, institutional infrastructure, teaching and learning, outreach, development, resources and barriers to EE.

3.9.2.2. *Link between education and the entrepreneurship field*

At first, research in EE focused on core theoretical developments and problems relating to real-life business surrounding entrepreneurs. Meanwhile, not much attention has been paid to research at the interface of education and entrepreneurship (Bechard and Gregoire, 2005). The deficit in the legitimacy of education-related research is its main obstacle. According to Bechard and Gregoire (2005), scholars have ignored the important role of research concerning teaching and other related activities. Indeed, these types of research are deemed to be low priority research. Bechard and Gregoire (2005) argued that research on theoretical development especially the study of real-life business situations is considered as more rigorous than research that links education to entrepreneurship.

Block and Stumpf (1992) argued that EE must be studied in the context of entrepreneurship research. The economics perspective, not just the educational point of view, should be the basis for conducting EE research (Mahlberg, cited in Erkkila, 2000). The reason is that what successful entrepreneurs do and not just what they are successful at must underpin studies of EE. According to Kyro (2006), since entrepreneurship has been perceived as an individual and business-orientated, rather than an educational and social-orientated, phenomenon, there are a few contributions of researchers and educators in educational discipline and institutions in enhancing the conceptual debate on EE. The importance of focusing on key dimensions and concepts and to perceive entrepreneurship as an educational and social oriented phenomenon should be a priority in EE research (Kyro, 2006). Therefore, it is important to link entrepreneurship and education through the well-founded philosophies of adult education (Hannon, 2006). Meanwhile, Fayolle and Gailly (2008) propose the examination of the ontological

and the educational levels to establish a teaching model of EE.

Bechard and Gregoire (2005, p.38) argued that developing a scholarly expertise in the dual fields of entrepreneurship and education is very important. It is necessary to have expertise in education in order for the literature on EE to not only be driven by practical and contextual concerns but also supported by references to what is already well established theoretically and empirically” (Bechard and Gregoire, 2005, p.38). In line with Bechard and Gregoire, Hindle (2007) insists that the field of entrepreneurship is in dire need of more reflection on the educational portion of EE. In accordance with this statement, Fayolle and Gailly (2008) proposed a teaching model framework for EE in which both the ontological and educational levels are incorporated.

3.9.2.3. *Review of research in entrepreneurship education from 1982 to 2010*

EE research, according to Block and Stumpf (1992), has emerged as a new research discipline. Block and Stumpf conducted review of EE research during the early stage of the development of the discipline from 1982 to 1988 and indicated that the focus of research was:

- 1) the appropriateness of the course content
- 2) the selection and usefulness of course concepts
- 3) the efficacy of different techniques to improve teaching performance and student learning within specific educational settings (Block and Stumpf, 1992, p.412)

Lack of generalizability of research was the main concern raised by Block and Stumpf (1992). This was because many of the research questions addressed areas only relevant to a faculty member's particular course, or to a school's programme. In an 'infant' discipline, this research, however, was acknowledged to be useful and suitable for the development of courses and instructors as it provided the researcher with feedback on his or her classroom activities in relation to various short-term criteria that can be used to redesign a course, alter a teaching style, and/or target a course to students with learning objectives that correspond to those of the instructor. Another criticism by Block and Stumpf was that the case study

rather than hypothesis testing research study appeared to dominate. In order to meet the scholarly journal standards for publication which are required for tenure and promotion of within an academic faculty, Block and Stumpf insisted that EE research should be theory-driven and hypothesis-testing research.

Finally, according to Block and Stumpf (1992), the following themes are necessary for future research in EE: Understanding of target audiences along with their career aspirations, learning styles and the types of content to be accommodated for each audience, and which specific instructional method will most effectively satisfy their educational aspirations (Block and Stumpf, 1992, p.40).

Hannon (2006), however, argues that the underlying assumptions for the design and delivery process are a fundamental concern for the current offering in EE. Hannon suggests that connecting entrepreneurship and education through "the well-founded philosophies of adult education" can be the point of departure for building the foundation (Hannon, 2006, p.298). Kickul and Fayole (2007) argue that there are new questions and new insights for future research in entrepreneurship. These are changing paradigms, renewing methods, and understanding content. It would be necessary to assist entrepreneurs to survive in the twenty-first century. Kickul and Fayole suggest that an integration of different learning methods is needed. This means that there must be the opportunity to bring real business issues into the classroom. It is also important to focus on all stages of the growth and development of ventures.

Fayolle and Gailly (2008) argue that the research questions regarding the idea of the 'teaching model' and its utilisation in entrepreneurship can be considered to be prospective research, coupled with the idea of the learning process in entrepreneurship. These research questions are:

- 1) What are the main (the most used) configurations of the 'teaching model' in entrepreneurship?
- 2) What are the most successful configurations of the 'teaching model' in entrepreneurship?
- 3) Do educators use similar configurations to teach professionals, such as consultants, coaches and entrepreneurs?
- 4) How do educators integrate more, from a longitudinal point-of-view, the

'time' variable in the learning processes in entrepreneurship?

- 5) To what extent can educators assess the appropriateness of a 'teaching model' configuration to a specific context? How can learning processes in entrepreneurs be further studied? (Fayolle and Gailly, 2008, p.587)

In order to have a highly authoritative position within the university, an entrepreneurship programme should carry out an important first step, including a diagnosis to identify the heterogeneous needs, characteristics and expectations of the targeted customers (Mendes and Kehoe, 2009). Diagnosis is an integral part of a '4-D' approach adopted to identify, prioritise and implement an entrepreneurship programme: (i) diagnosis (ii) design (iii) delivery (iv) determination, which should encompass the following components:

- 1) administrator stakeholder interviews
- 2) needs assessment survey of faculty
- 3) faculty career development study
- 4) graduate student survey
- 5) inventory of entrepreneurial interests and activities of faculty members (Mendes and Kehoe, 2009, p.74). There are four main objectives for the stakeholder interviews:

- determination of how the concept of entrepreneurship is defined and operationalised campus wide.
- identification of campus wide entrepreneurial needs and opportunities and desired Academy objectives.
- obtaining candid opinions on the challenges the Academy faces.
- surface the success criteria by which key stakeholders will evaluate the Academy.

Fayolle (2010) contends that it is important to gain insights from an international perspective on EE. The answers to the following questions would therefore be significant in order to enhance the legitimacy and effectiveness of EE:

- 1) How can we learn from methods?

- 2) How can we learn from differences?
- 3) How can we learn from minorities?
- 4) How can we learn from the institutional culture? (Fayole, 2010).

3.10. My methodological assumptions

3.10.1. Ontology

Ontology is ideas about reality and how it is constituted (Kyro, 2006). In this study, it refers to EE. The reality of EE exists through the interpretations made by individuals, groups of individuals and different cultures in society (Erkkila, 2000). What is included in EE may vary depending on which group of people are asked; in this case, students and faculty members. This study is concerned with how EE appears to these people. Therefore, it holds a non-dualistic ontology. Rather than seeking what students and faculty members think about EE per se, this study is interested in the critical aspects of ways of perceiving, aspiring and expect to EE. As Marton and Booth (1997) suggest:

“... in order to make sense of how people handle problems, situations, the world, we have to understand the way in which they experience the problems, the situations, the world that they are handling or in relation to which they are acting.” (Marton and Booth, 1997, p.111)

3.10.2. Epistemology

Epistemology is interested in how knowledge about reality can be acquired (Kyro, 2006). Knowledge about EE is knowledge about how individuals and collectives perceive, define, produce and re-produce the meaning, purpose and value of EE in society. Therefore, this study is less interested in making deductive studies with fixed operationalised concepts, since knowledge and concepts are created in interaction between people (students and faculty members) and their interpreted environment (EE). With this view of EE, knowledge cannot be seen as objective and true, but rather as inter-subjective constructs (Lindgren and Packendorff, 2009).

3.10.3. Methodology

The purpose of this study is to identify the range of students' and faculty members' perceptions, aspirations and expectations of EE as a basis for developing an EE model for Indonesian higher education. In order to fulfil this purpose and befitting ontological and epistemological positions, the methods should meet the following criteria:

- 1) qualitative in nature with an interpretive orientation.
- 2) ability to assess the variation in ways students' and faculty members' experience EE.
- 3) creating the possibility to describe the conceptions, aspirations and expectations of EE in a holistic and integrated way.
- 4) focus on groups of students and faculty members.

3.10.3.1. Qualitative approach

Qualitative research is perhaps most commonly associated with certain schools which fall broadly within what is known as the interpretive sociological tradition, particularly phenomenology, ethnomethodology and symbolic interactionism (Mason, 2002). For interpretive researchers, developing an understanding of social life and discovering how ideas are constructed by people in a natural setting is main objective for their research (Neuman, 2000).

Entrepreneurship can be seen as an isolated and individualistic activity as well as a social phenomenon and that its blossoming reflects the social values, cultures and dynamics from which entrepreneurs emerge (Julien, 2005, cited in Fayolle, 2007). Social reality for the interpretive researcher emerges as a result of people's interpretations. Interpretive social science, according to Neuman (2000), acknowledges the possibility of multiple interpretations of human experience or realities. As it assumes that the perceptions, aspirations and expectations of EE are not objective and representative of universal truth in nature, the qualitative method with an interpretive approach is considered as the best choice to

accomplish the research objectives. It is argued that many of the perceptions, aspirations and expectations of EE are influenced by "culture, faith, ethics and power" (Hannon, 2006, p.301) and usually "lie at ideological level which are rarely explicit" (Smith and Anderson, 2007, p.170).

Since entrepreneurship and EE are deemed as not being fully developed (Stewart 1998, cited in Brush *et al.*, 2003; Bygrave, 1989), an inductive method with an empirical orientation is needed. Lindgren and Packenkorff (2009) highlight the problem relating to the mainstream preoccupation with deductive, quantitative, hypothesis-testing research: These approaches experience a lack of underlying basic assumptions. In addition, Bygrave (1989) argues that the deductive approach with statistical analysis is not suitable for entrepreneurship phenomena, as a disjointed, discontinuous, non-linear and usually unique event characterise entrepreneurship. Therefore methods developed for examining smooth, continuous, linear and (often repeatable) process cannot be adopted to study it successfully (Bygrave, 1989, p.7).

3.10.3.2. *Phenomenography not Phenomenology*

This study deals with human experience as its object, not human behaviour or mental state, or the nervous system. A phenomenographic approach has been chosen rather than phenomenological approach as the research objective was to describe the different ways a group of students and faculty members perceive, aspire to and expect from EE. This study did not focus on the essence of EE perceptions and expectations and aspirations. In this study, the researcher was less interested in the individual experience of students and faculty members and more interested in obtaining their collective meaning. Nevertheless, all four features of phenomenography, the relational, experiential, contextual and qualitative, are also characteristic features of phenomenology (Marton, 1986). Phenomenology is a philosophical method based on the development of a single theory of experience, thus philosophers engage in "investigating their own experience" (Marton and Booth, 1997, p.116). Phenomenography, on the other hand, is empirical in nature, since phenomenographers study the experience of others.

Marton (1986, p.40) argued that there are three areas of disagreement between the phenomenographic approach and phenomenological tradition.

Phenomenology is a first-person enterprise in which researchers "bracket" (suspend judgement) their preconceived notions and depict their immediate experience of the studied phenomenon through a reflective turn. Attempts to characterise the variations in experience rather than focussing on the essence of experience is seen as the second point of disagreement between phenomenography and phenomenology. The most fundamental difference, according to Marton (1986, p.41), is that while phenomenographers do not make use of a distinction between immediate experience and conceptual thought, phenomenologists should "bracket" the latter and search for the former. Marton (1986) contended that immediate experience, conceptual thought and physical behaviour are all manifestations of the relationship between individuals and various aspects of the world around them.

According to Marton and Booth (1997), phenomenography and phenomenology have different purposes. Phenomenology aims to capture the richness of experience; it is assumed that a person has the fullness of all the ways of experience and it describes the phenomenon of interest. Phenomenography, on the other hand, aims to investigate the critical aspects of ways of experiencing the world that make people "able to handle it in more or less efficient ways" (Marton and Booth, 1997, p.111). It is a rule, as it is impossible for people to apprehend and indicate all aspects of a reality "simultaneously in focal awareness" (Marton and Booth, 1997, p.113). Those aspects may be experienced in sequence. It is also likely that a person can have the capability to show more complex or fuller ways of experiencing something than others. As it can be applied to EE phenomena, students and faculty members may share the ways of perceiving the meaning, value and purpose of EE. At the same time, students and faculty members may have differences in ways of seeing the relationship between their career aspirations and the value of EE. In addition, despite the fact that they may be embedded in the same teaching and learning situation, they may not share the same ways of discerning aspects of the environment which may influence their learning performance.

3.10.4. Method: Phenomenographic approach

3.10.4.1. History of Phenomenography

Phenomenography was developed by Marton and his colleagues in the 1970s, with the initial publications using the method appearing in the beginning 1980s (Marton, 1986). It saw remarkable growth in the 1990s not only in Sweden, its place of origin, but also in the UK, Australia and Hong Kong (Bruce and Gerber, 1997, cited in Akerlind, 2005). According to Marton and Bruce (1997), rather than a philosophical method, the basis of phenomenography is empiric. By development, the ontological and epistemological assumptions were developed at the end of twentieth century.

Phenomenographic research has evolved in three stages of development (Marton, 1986). Firstly, it is content-oriented in nature which investigates the variations in students' learning outcomes as a result of the variations in their learning approaches. Secondly, it moved on to the learning of basic concepts and principles in particular disciplines, such as physics, economics and mathematics. Thirdly, the research focussed on how people in their everyday lives conceive various aspects of their reality. Marton described the third line of development as pure phenomenography. While Hasselgren and Beach (1997) considered pure phenomenography as discursive phenomenography. Whilst developmental phenomenography, according to Bowden (2000), is aimed at investigating how people perceive some aspect of their world, and then enabling others or even themselves "to change the way their world operates" (Bowden, 2000, p.3).

By definition, phenomenography is:

"... a research method for mapping the qualitatively different ways in which people experience, conceptualise, perceive, and understand various aspects of, and phenomena in, the world around them." (Marton, 1986, p.31)

The investigation of this research approach is not directed at the phenomenon as such, but at the variation in people's ways of understanding it. This is referred to as a second-order perspective (Marton, 1986). Phenomenography can be distinguished from traditional psychology since the former is more concerned with

the content of thinking rather than act of perception or conceptualisation itself which aims to characterise the process of perception and thought in general terms. Uncovering conditions to enable the "transition from one way of thinking to a qualitatively 'better' perception of reality" can be facilitated through "a careful account of the different ways people think about phenomena" (Marton, 1986, p.33).

Phenomenography is the most appropriate approach for this study as it reveals variations; uncovers students' and faculty members' understanding of entrepreneurship and EE and how students and faculty members may differ with respect to their aspirations towards and expectations of EE and provides outcomes which are readily applicable to implement an effective EE. Another advantage of the phenomenographic approach is that collective human experience, in particular students' and faculty members' experiences of EE, can be described comprehensively despite the fact that different students and faculty members in different circumstances may have different perceptions, aspirations and expectations of EE (Akerlind, 2005).

Phenomenography, as distinguished from other research approaches, according to Trigwell (2000), has five prominent characteristics: (i) it holds a non-dualist ontology, in that reality is considered as the relation between the individual subjects and an aspect of the world; (ii) it is qualitative in a grounded way because data is analysed to describe a phenomenon not befitted to predetermined categories; (iii) it holds a second order approach, as the base of investigation is the experiences of others, not the researcher; (iv) it places more emphasis on the variation in the ways an aspect of the world has been experienced; and (v) it is able to produce results in a set of categories that are internally related (Trigwell 2000, p.77). Indeed, the capability of the phenomenographic approach to describe the qualitative differences and link between categories of description is considered to be one of the strength of phenomenography (Bowden *et al.*, 1992).

3.10.4.2. The idea of Phenomenography

1) The driving force of phenomenography

The driving force of phenomenography is the belief that understanding how

people perceive, conceptualise, apprehend the problems, situations and the world which are related to their actions is a prerequisite to understand how people deal with problems, situations and the world (Marton and Booth, 1997, p.111). Therefore, the capability to experience something will determine the capability to act in a certain way.

2) The object of phenomenographic study

The term 'conception' which is often used to describe individuals' ways of experiencing a specific aspect of reality or phenomenon is the prime interest for phenomenographic study (Reed, 2006, p.3). More specifically phenomenography seeks to describe individuals' conceptions as faithfully as possible (Sandberg, 1997, p.130). Conceptions, according to Johansson *et al.*, (1985, p.249), can be considered as the unit of analysis in phenomenography.

3) The outcome of a phenomenographic analysis

The emergence of categories of description and an outcome space are the outcomes of a study using phenomenography. An explanation that conceptions are not the same with categories of description is provided by Johansson *et al.* (1985). They argue that:

“Conceptions, which make up our unit of analysis, refer to whole qualities of human-world relations. They also refer to the qualitatively different ways in which some phenomenon or some aspect of reality is understood. When trying to characterize these conceptions, we use some categories of description. The categories are, however, not identical with the conceptions – rather they are used to denote them.” (Johansson *et al.* 1985, p.249)

The outcome space, on the other hand, is 'the logically structured complex of the different ways of experiencing an object' (Marton 1994, p.92). It must be noted that the outcome space is not the phenomenon or aspect of the world itself, the first order perspective, but the phenomenon or aspect as it is understood, the second order experiential perspective (Marton 1981, p.180).

3.10.4.3. *Some methodological aspects of Phenomenography*

In particular, the focus of phenomenographic research is variation in other peoples' experiences of phenomena and the architecture of the variation. It contrasts with phenomenology, which tries to develop a single theory of experience (Marton and Booth, 1997). Data collection in phenomenographic research aims to capture the utterances of the participants. There is no immersion in the culture by the researcher, as in ethnography. A breadth of data collection techniques, as in grounded theory (Strauss and Corbin, 1998), is not common, nor is the outcome the generation of a substantive theory; rather, the aim is description and understanding.

There are different sources of information to understand how people experience various aspects of their world, including observation, written essays and interviews (Marton, 1986). The choice of techniques is determined by the context of the study and the aim to capture the widest possible variation in conceptions (Schembri and Sandberg, 2002). Observation, while it has the advantage of gaining understanding relating to service encounters, may be overly time consuming and impractical. Written reports, on the other hand, resolve the obstacle concerning time. Nevertheless, written essays suffer the risk that participants may provide poor and fragmented descriptions of their experience (Schembri and Sandberg, 2002). Interviewing, however, is considered as a primary method of phenomenographic data collection (Ashworth and Lucas, 2000). There are two advantages of interviewing. Using interviews, researchers can help participants to give rich accounts of their particular experience. Follow-up questions can be used to clarify and elaborate particular points. In addition, interviews enable researchers to meet the validity requirements of the phenomenographic method through the ability to check and recheck their interpretation of a particular conception (Schembri and Sandberg, 2002). To carry out interviews, researchers need to pay attention to what questions are asked and how to ask them. Marton (1986) proposed that the questions should be open-ended to enable participants to "choose the dimensions of the question they want to answer" (Marton, 1986, p.42). Indeed, these dimensions are a fundamental source of data since they indicate "an aspect of the individual's relevance structure" (Marton, 1986, p.42).

The data analysis approach used in phenomenography is a form of iterative content analysis such as is used in many qualitative approaches. However, analysis of participants' utterances is not undertaken in a sceptical way as in ethnography; rather, utterances are taken at face value (Richardson, 1999). The analytic procedure in phenomenography consists of "an ongoing interpretive and iterative practice" that occur in turn repeatedly between what constitutes a phenomenon and how participants understand a phenomenon (the variation in understandings of phenomenon) (Lamb, Sanberg and Liesch, 2011, p.678).

Akerlind (2005) highlighted that collective, not individual, experience as the focus of phenomenography is not commonly understood. Exploring the range of meanings within a sample group, means that every transcript, or expression of meaning, should be interpreted within the context of the group of transcripts or meanings as a whole "in terms of similarities to and differences from other transcripts or meanings" (Akerlind, 2005, p.323). In concrete terms, the process of data analysis will be undertaken as follows:

"... quotes are sorted into piles, borderline cases are examined, and finally the criterion attributes for each group are made explicit." (Marton, 1986, p.43)

3.10.4.4. *Utilisation of the Phenomenographic approach*

Phenomenographic research methodology was originally developed in response to educational questions, including thinking and learning (Marton, 1986). There seem to be three areas in which the application of phenomenography has been evolving. They encompass the experience of learning, the ways in which content is understood and internalised, and the variations people experience or understand the phenomenon (Marton, 1992). This study refers to the different ways students and faculty members experience or understand EE. However, phenomenography is also used in other disciplines. Recent phenomenographic studies include that of Larson and Holmstrom (2007), which reveals anaesthesiologists' understanding of work and of Chen and Partington (2004; 2006), who found three different concepts of construction project management work. In the marketing field, Schembri and Sandberg (2002) suggested that phenomenographic methodology will allow a first-

person perspective of service quality. Erkkila (2000) discussed the outcomes of her research into mapping the perceptions of entrepreneurial education terminology and concepts in three countries. Lamb, Sandberg and Liesch (2011) have proved that compared to other qualitative approaches such as ethnography or semiotics "phenomenography has enabled new insights into multiplicity of firm internationalisation practices" (Lamb, Sandberg and Liesch, 2011, p.672).

Some limitations of phenomenography have been discerned by Marton and Booth (1997). Other methods for further data analysis may be needed in order to enrich the findings. Moreover, in some respects the outcome space from a phenomenological study may not be as rich as outcomes from other qualitative research methods. Categories of description as a set of "ways in which a phenomenon is experienced at a collective level" ignore individual characteristics and contextual factors (Akerlind, 2005, p.323). Obviously, the contemporary phenomenon within a real life context can be captured best through a case study (Marton and Booth, 1997). The focus of the case study remains on individual examples of the phenomenon and presents a full description of the phenomenon within a specific context.

3.10.5. Methodological procedure

3.10.5.1. Sampling

It is widely acknowledged that students belong to the primary stakeholder category in EE (Matlay, 2009; Birdthistle *et al.*, 2007; Jack and Anderson, 1999). This means students are the main source of data in the investigation into what the constitution, purpose and value are of EE, together with their expectations and aspirations.

Faculty members are considered as the other main source of data, since their position as primary stakeholders in EE has been accepted (Matlay, 2009; Birdthistle *et al.*, 2007; Jack and Anderson, 1999). The faculty members' perceptions, expectations and aspiration can influence significantly the development and effectiveness of EE.

Purposive sampling, in which respondents are specifically sought, is used in a

phenomenographic study. The group of students who have enrolled on an EE course or engaged in an entrepreneurship programme in the seven HEIs were selected on the basis of certain characteristics such as family background, prior experience in entrepreneurial activity, gender, and faculty background. This is also valid for the sample of faculty members. Faculty members who are teaching entrepreneurship or are engaged in an entrepreneurship programme will be selected according to factors such as teaching and research experience, entrepreneurial activity, training related to entrepreneurship, gender and faculty background. Hence students and faculty members will be selected to obtain as many variations in their perceptions, aspirations and expectations as possible.

The core participants of this study were 70 interviewees from seven Indonesian HEIs, including 35 students and 35 faculty members. In addition, one senior management member from each institution was interviewed. In order to ensure that the questions exhibit the sorts of data required to deal with the focus of the research and to raise phenomenographic interviewing skills, a pilot interview was conducted. This pilot interview is with one faculty member of Universitas PGRI Adhibuana, Surabaya, Indonesia. The actual interviews were conducted after the instrument had been reworked.

This study is proposed within seven institutions: Universitas PGRI Adibuwana (PGRI Adibuwana University, Surabaya), Universitas Atmajaya Yogyakarta (Atmajaya University of Yogyakarta), Sekolah Tinggi Ilmu Ekonomi BPD Jateng (BPD Jateng Business School, Semarang), Politeknik Negeri Semarang (State Polytechnic of Semarang), Universitas Gadjah Mada (Gadjah Mada University, Yogyakarta), Universitas Ciputra (Ciputra University, Surabaya), and Universitas Muhammadiyah Surakarta (Muhammadiyah University of Surakarta). The interviews therefore took place at these universities which were different in size, location, age, category, and commitment toward EE.

Whilst Universitas Gadjah Mada is the oldest and largest university in Indonesia and was founded on December 9, 1949, UC was founded by the Indonesian entrepreneur Ciputra, Chairman of the Ciputra Group, in 2006 (Ciputra Group is a holding company which encompasses hotels, construction, property, education, etc). Universitas Muhammadiyah Surakarta and Universitas Atmajaya Yogyakarta, on the other hand, represented religion-based universities. Universitas PGRI

Adibuana was included to represent a university which is initially focused on educating teachers. STIE BPD Jateng Semarang and Politeknik Negeri Semarang were involved in this study in order to have deep insight into EE in different types of HEIs. The former is a business school and the latter a polytechnic. These seven HEIs are situated in four cities, namely Semarang, Surakarta, Yogyakarta and Surabaya.

UC has been recognised as a pioneer in EE in Indonesian HEIs, since its vision is to be the best university in Indonesia, with an entrepreneurial spirit throughout the university (Universitas Ciputra, 2009). The remaining universities, on the other hand, seem to be resistant to change in their vision regarding current trends in EE.

It is assumed that the inherent differences between the seven HEIs will have an influence on the teaching approaches and organisation of EE. Indeed, they will eventually lead to the variation in students' and faculty members' perceptions, aspirations and expectations of EE.

3.10.5.2. *In-depth semi-structured interview*

An individual in-depth interview can be defined as "... an unstructured personal interview which uses extensive probing to get a single respondent to talk freely and to express detailed beliefs and feelings on a topic" (Webb, 1995, p.121, in Stokes and Bergin, 2006). Whilst speed and cost are considered as extrinsic advantages of focus groups, individual in-depth interviews have intrinsic advantages relating to the quality of the research outcome (Stokes and Bergin, 2006, p.26). Webb (1995), in Stokes and Bergin (2006), listed specific preferential outcomes: (1) more precise interpretation is allowed as it is possible to ascribe the views to individual respondents; (2) improving the quality of the data as it provides the opportunity to build a close rapport and a high degree of trust; (3) and non-conformity expression is allowed (Stokes and Bergin, 2006, p.28).

Schembri and Sandberg (2002) characterise the phenomenographic interview as a non-traditional research interview, since an open-ended approach replaces standardised and predefined questions. 'What' and 'how' questions, not 'why' questions, are used to prompt descriptions oriented towards the experience being studied. Follow-up questions and probing help clarify what respondents mean by

particular statements.

The key research questions developed are as follows:

- RQ1: What do you understand by the term 'EE'?
- RQ2: What would you desire most as the impact of EE?
- RQ3: What do you consider to be the best way to enhance the effectiveness of EE?

These three central research questions will be directed to both students and faculty members.

3.10.5.3. Data analysis

The major outcomes of a phenomenographic study are what are called categories of description and outcome space (Marton, 1986). In this study, the categories of description are the description and organisation of the variations in what and how students and faculty members at seven Indonesian HEIs perceive, aspire to and expect from EE. An outcome space will give a description of the logical relationship between the categories of description. They can be accomplished through analysis of the interviews transcribed verbatim in the data collection process. Identifying "variation in meaning across the set of transcripts" will be the main focus (Akerlind, 2005, p.324). According to Sandberg (1994, p.86) there will be five phases of phenomenographic analysis: (i) becoming familiar with the transcripts; (ii) discovering the referential dimension in what interviewees perceive in, aspire to and expect from EE; (iii) discerning the structural dimension of the ways of perceiving, aspiring to and expecting from EE; (iv) describing the subject-object relations that comprise the different ways of perceiving, aspiring to and expecting from EE, labelling them and constituting the categories of description; (v) establishing the outcome space.

As a result of the data analysis there will be six outcome spaces. There are two different foci of developing the outcome space in this study, which mainly focuses on student and faculty members. Since it focuses on students as a whole three outcome spaces will be created to map students' perceptions, aspirations and expectations for mix seven universities, with a similar number for faculty members'

perceptions, aspirations and expectations for mix seven universities.

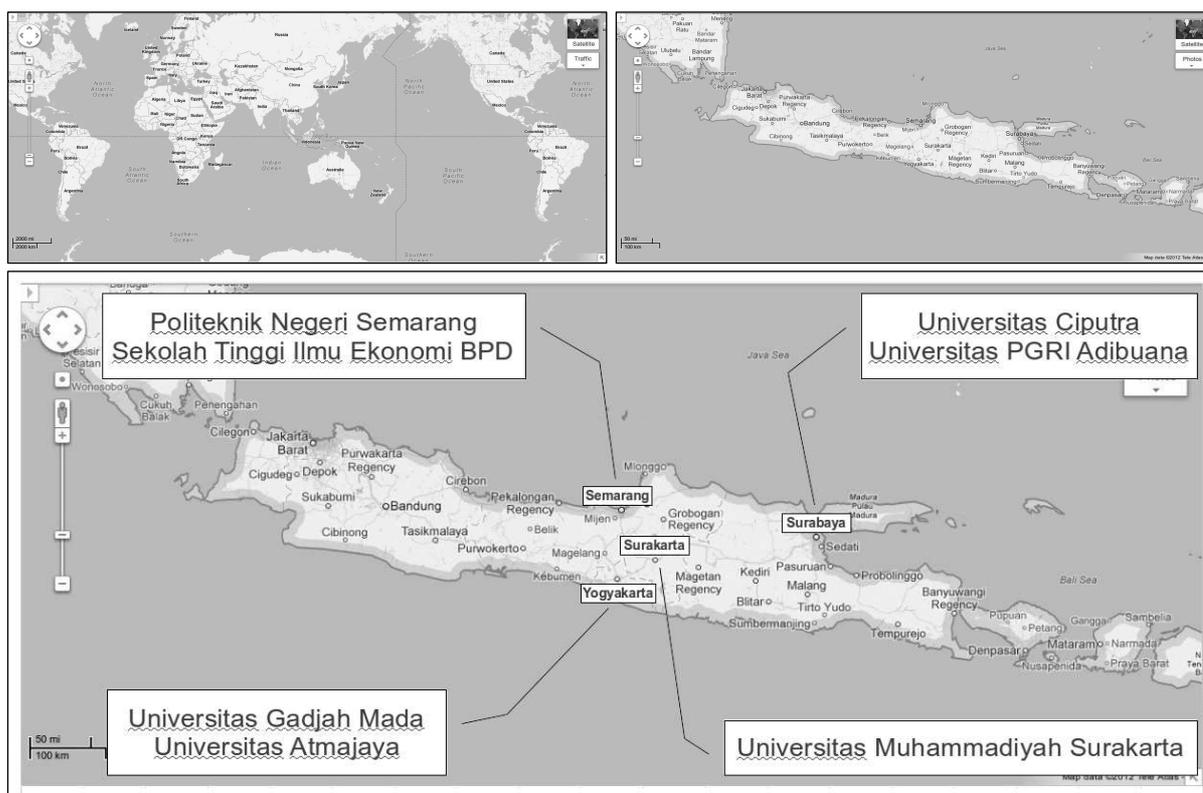
3.11. Data collection report

3.11.1. Overview

The data collection process started when the interview guidance was ready to use. In order to ensure the questions met the criteria required by phenomenographic approach and were understood by the respondents, a pilot study was carried out. This pilot study was conducted via Skype with faculty members of Universitas PGRI Adibuana Surabaya, Indonesia in July 2010. From this pilot study, the researcher decided to make some changes to the interview guidance.

In this study participants came from different settings, both geographically and institutionally. The geographical areas for this study cover East Java Province (Surabaya City), Central Java Province (Semarang City and Surakarta City), and Yogyakarta Province (Yogyakarta City). The type of selected HEIs consisted of universities, a polytechnic, and a business school. Five universities, one polytechnic and one business school agreed to take part in this study. A total of 77 participants were interviewed, including 35 faculty members, 35 students and 7 senior management members. These interviews began at Politeknik Negeri Semarang on September 27th 2010 and ended at STIE BPD Jateng Semarang on November 20th 2010. Figure 3.02 shows a map of Indonesia, Java Island and City where the seven HEIs are situated.

Figure 3.02. Indonesia, Java Island and The Universities



Source: Adapted from Internet.

3.11.2. Agreed-upon procedures

It was important to first approach the key person in each HEI in order to obtain permission to interview the senior management, students and faculty members. The key person could be the secretary of the rector, the research manager or deputy of student and public affairs. A research proposal which indicated the aims, objectives, benefits and research activity plan were passed to these persons before reaching the rector or director.

An interview arrangement was made for either senior management or all participants, including faculty members. At UC, mainly, a schedule of interviews was fully arranged by a research and publication manager for all participants. This procedure enabled the process of interviews to be efficient and effective. As a result, only three days were needed to complete all the interviews at UC. STIE BPD Jateng Semarang, which is as small as UC, was the second institution where interviews were conducted, in a relatively short time, four days. The bigger the

institution, the longer the interviews took to conduct. The other institutions, namely Politeknik Negeri Semarang, Universitas Muhammadiyah Surakarta, Universitas Atmajaya Yogyakarta and Universitas Gadjah Mada, however, are well established and large, therefore one to three weeks were needed to make interview appointments. Snowball sampling was applied to find faculty members and students who would agree to take part in this research.

Explicit consent from the participants (universities, faculty members and students) needed to be obtained before the research took place. Indeed, there were written and spoken explanations relating to the procedure, benefits, participants' rights and rewards for participation, particularly for students and faculty members. All participants signed a consent form which indicated that they understood and agreed to be interviewed. All interviews took place at the campus of each participant.

3.11.3. Findings

There were two types of information that participants needed to provide: First, students needed to indicate background of study, year of study, entrepreneurial activity and career aspirations. As with the students, faculty members supplied answers corresponding to academic achievement, training and experience of entrepreneurship including year of teaching, and background of study. Second, students and faculty members were asked to articulate their perceptions of, aspirations towards and expectations of EE. Therefore, their perceptions, aspirations and expectations would be analysed using the phenomenographic approach.

1) Student Characteristics

Students who were chosen to participate in this study must have previously been involved in one or more EE initiatives such as entrepreneurship course, government entrepreneurship programs, and entrepreneurial projects. The predominant study background of students who were involved in this study was Business, being 43% of the sample. The second largest group were students from Engineering, at 31%. The rest came from

the Faculties of Science, Psychology, Education and other. Regarding entrepreneurial activity, almost half the students in this study were engaged in an entrepreneurial project. Since project-based learning is part of the core curriculum at UC, running a business project is obligatory for all students. At the other universities, however, conducting an entrepreneurial project is voluntary. Recently, the Indonesian Government has offered a student entrepreneurship programme. This programme aims to facilitate students who are interested in business creation. A feasible business plan is required in order to obtain funding support. A team which consists of bank, small business enterprise and higher education institution is entitled to assign a student business proposal.

Apart from an entrepreneurial project, students might be involved in other types of activity, such as start-up business, self-employed, selling, family business, and multi-level marketing. It is not uncommon, however, for students of UC to run both an entrepreneurial project and a start-up business during their study. Massive business exposure encouraged all students at UC to be the boss of their own business. Intense challenges come from their teachers and friends. All the students who were interviewed without exception indicated their excitement in business. As a result, these students decided to continue their business until and after graduation. One student from Universitas Gadjah Mada, who had been running multiple business start-ups, intended to look for a job after graduation but only if his business was earning less than fifteen million rupiahs a month (approximately 1,000 GBP).

Among the students, only one was interested in multi-level marketing. This type of business, however, was an alternative for students who wished to raise income during their studies. Self-employed status was chosen by two students of UC and Universitas PGRI Adibuana. A convenient way to do business during studies is selling products such as clothes, souvenirs and telephone vouchers. This selling activity, however, was simply a temporary business. One student of STIE BPD Jateng preferred to engage in business with her mother.

Although having one's own business is common for student career

aspirations, it does not seem to be short-term planning. Almost fifty percent will start their own business between five years graduation. Capital/funding was considered as the main obstacle to engaging in business immediately. It is generally acknowledged that the main objective in getting a degree is to get a job in an established firm. Having a business later in their career means doubling ones income. These characteristics have been summarised in Table 3.05.

Table 3.05. Student characteristics

Study background	Business	15	42.9%
	Education	2	5.7%
	Engineering	11	31.4%
	Pharmacy	1	2.9%
	Physiotherapy	1	2.9%
	Psychology	2	5.7%
	Science	3	8.6%
		<hr/>	35
Year of study	First year	0	0.0%
	Second year	3	8.6%
	Third year	16	45.7%
	Fourth year	13	37.1%
	Fifth year	3	8.6%
		<hr/>	35
Entrepreneurial activity	Business owner	5	14.3%
	Family business	1	2.9%
	Multilevel marketing	1	2.9%
	Online marketing	1	2.9%
	Self-employed	2	5.7%
	Selling	25	71.4%
		<hr/>	35

Source: Author (2013).

2) Faculty Member Characteristics

The inclusion and participation of faculty members in this study were based on their involvement in the one or more EE initiatives such as an entrepreneurship course, government entrepreneurship programs, and entrepreneurial projects. Faculty members involved in this study consisted of 22 males and 13 females. Their predominant study background study is at Master's level, at 82% of the sample. Senior management who were interviewed consisted of four rectors, a director, a vice director and a

student affairs director. One of them was a woman. Five of the seven senior management members hold a doctoral degree. There are six types of entrepreneurial activity of faculty members: Professional, self-employed, business owner, multi-level marketing, selling, and family business. Being a business owner, however, is not uncommon for faculty members in this study. Ten faculty members continued their business during their career in higher education, while two decided to terminate it. Nonetheless, four identified that they lacked of entrepreneurial experience. They engaged in entrepreneurship teaching after attending institutional entrepreneurship training. Such training, for the most part, was held either by the government or the HEIs themselves. Three faculty members, two from UC and one from Universitas Gadjah Mada, had the opportunity to be Kaufman scholars. These scholars were invited by the Kaufman Foundation to study entrepreneurship. In addition, some faculty members attended private entrepreneurship training or seminars at their own expense.

Furthermore, faculty members were asked to indicate their achievements in teaching, research and community service in the entrepreneurship area. These achievements can include writing a book or module, publishing a paper or journal article, teaching or receiving a research grant, being the chief of an entrepreneurship centre or being an entrepreneurship coach. Since all faculty members of UC underwent compulsory and regular training in entrepreneurship, they should eventually offer themselves to be coaches for entrepreneurial projects. Faculty members from other institutions were partially engaged in entrepreneurial projects when their institutions acquired entrepreneurship grants from the government. Almost fifty percent of faculty members in this study, however, have been in charge of an entrepreneurial project. These characteristics have been summarised in Table 3.06.

Table 3.06. Faculty member characteristics

Degree	Master	28	80.0%
	PhD	7	20.0%
		<hr/> 35	<hr/> 100.0%
Entrepreneurial activity	Professional	5	14.3%
	Business owner	11	31.4%
	Family business	5	14.3%
	Multilevel marketing	1	2.9%
	Self-employed	3	8.6%
	Selling	10	28.6%
		<hr/> 35	<hr/> 100.0%
Entrepreneurship training	Institutional training	27	77.1%
	Private training	5	14.3%
	Kaufman foundation	3	8.6%
		<hr/> 35	<hr/> 100.0%

Source: Author (2013).

3.12. Concluding remarks

This study seeks to answer the questions relating to the perceptions, expectations and aspirations of EE from student and faculty member perspectives. It will represent a comprehensive understanding of primary stakeholders' views, dealing with the what, where, when, how and why in EE. More interestingly, this study will take place in the context that is not a mature and stable economy such as in the United States or Europe, but in Indonesia, where aspects of culture, faith, ethics and power may contribute to stakeholders' views of EE. Seven Indonesian HEIs, which represent different types of establishment and commitments to EE, will be involved in this study.

The understanding of what and how students and faculty members define, aspire to and expect from EE will contribute to developing an alternative model of EE. This alternative model of EE is a breakthrough, as none of the previous models have integrated the demand side and supply side. A total of seventy respondents consisting of thirty-five faculty members and thirty-five students will be involved in this study, which will eventually lead to an improvement in how EE should be designed and delivered at the higher education level.

As it assumes that the perceptions of, aspirations to and expectations of EE are

not objective and universally true in nature, a qualitative method with an interpretive approach is considered as the best choice to accomplish the research objectives. It is argued that many of the perceptions of, aspirations to and expectations of EE are influenced by culture, faith, ethics and power and usually lie at the ideological level, which is rarely explicit (Hannon, 2006; Smith and Anderson, 2007).

Phenomenography rather than phenomenology has been chosen as the goal of the research is to describe the different ways a group of students and faculty members perceive, aspire to and expect from EE. This study does not focus on the essence of the students' and faculty members' perceptions, aspirations and expectations concerning EE; this essence of experience is emphasised in the phenomenological approach. In this study, the researcher is less interested in the individual experience of students and faculty members and is more interested in obtaining their collective meaning.

Some limitations of phenomenography have been discerned by Marton and Booth (1997). Other methods, however, for further analysis data may be needed in order to enrich the findings. It should be realised that in some respects the outcome space from a phenomenographic study may not be as rich as outcomes from other qualitative research methods. Categories of description, as sets of ways in which a phenomenon is experienced at a collective level, ignore individual characteristics and contextual factors. Obviously, contemporary phenomena within a real life context can be captured best through a case study. The focus of a case study remains on individual examples of the phenomenon and presents a full description of the phenomenon within a specific context.

CHAPTER 4. PERCEPTIONS OF ENTREPRENEURSHIP EDUCATION: PHENOMENOGRAPHIC FINDINGS, ANALYSIS AND DISCUSSION

4.1. Introduction

This chapter is the first of three to present and discuss the findings from the analysis of the phenomenographic interviews which were conducted for this study in order to answer the following research questions:

- 1) What are the variations in students' and faculty members' conceptualisation of entrepreneurship education (EE)?
- 2) What are the similarities and differences in students' and faculty members' perceptions?
- 3) Is there any support from senior management for students' and faculty members' aspirations?

As this chapter is the first to discuss the interviews, it is necessary to explain in detail the process of analysis which was carried out in order to establish the categories of description, focusing specifically on the variation in students' and faculty members' perceptions of EE, as the object of analysis. The findings from this analysis are then presented as categories, followed by a discussion of the structure of these categories and the chapter concludes with a discussion of these findings with respect to relevant literature in the area.

4.2. Interview data analysis process

In this study, in order to analyse the interview data, the five phases of phenomenographic analysis suggested by Sandberg (2000, p.13) were employed. They are:

- becoming familiar with the transcripts;

- discovering the referential dimension of the ways of perceiving EE;
- discerning the structural dimension of the ways of perceiving EE;
- describing the subject-object relations that comprise the different ways of perceiving EE, labelling them and constituting the categories of description;
- establishing the outcome space.

All the stages above were applied to both students' and faculty members' transcripts.

In the first stage, the set of interview transcripts was read from start to finish many times in order to become familiar with them. The transcripts remained in the original language, Indonesian. By doing this, it was intended to make the process of understanding the transcripts easy and fast. Indeed, this stage was an iterative process. How the students or faculty members made their definition of EE had to be focused on first, then careful attention given to aspects of the definition that the students or faculty members concentrated on.

In the second stage, summary notes of each of the transcripts were made, while all the information that was considered to be critical to the students' and faculty members' understanding of EE was underscored and recorded. The aim of this stage was to discover the 'how' and the 'what' aspects of the students' and faculty members' responses, i.e. how is the explanation given? And what is it focused on?

In the third stage, the summary notes, cases of agreement and underlined cases of critical variation were highlighted, as they were considered to be the important aspects of the understanding of EE. Accordingly, the pages of notes and transcripts were grouped physically together or near each other depending on the similarities and differences between them.

The aim of the fourth stage was to describe the categories whose main focus was on a search for holistic meanings within the similarities and differences and for aspects of critical variation and themes, rather than on the overall structure of the categories.

Furthermore, it was important to move the focus onto the similarities and the differences in order to constitute the meaning and structure of the categories.

By identifying the critical aspects of understanding which were present in some of

the transcripts and not in others and also within individual transcripts, the categories of description were constituted and labelled.

In the fifth stage, once tentative categories had been constructed, their structure was then examined, although the structure became more evident through constant re-iteration. The aim was to identify what was focused upon within each overall meaning. In other words, it was a search for themes of expanding awareness that were present in each preliminary category, although at different levels, which served to distinguish between the categories and further identified the hierarchical structure.

4.3. Variations in students' perceptions of entrepreneurship education

4.3.1. Categories of description

The analysis of the interview transcripts found the set of categories that describes the variations in the students' understanding of the concept of EE:

- 1) EE is about starting and managing a small business
- 2) EE is about developing awareness of an entrepreneurial career
- 3) EE is about developing enterprising attributes
- 4) EE is about entrepreneurial learning

It is suggested that all categories are internally related and indicate the 'collective mind' of the students, as they are based on simultaneity, variation and discernment.

The detail of each category will be described below using the empirical data within the transcripts. The meaning and the logical and empirical structure of the categories were constituted. Themes of expanding awareness that were present in the data were located in order to distinguish the aspects of critical variation and to underscore the structural relationship between the categories. It should be noted that the four distinct categories which describe the variations in the students' understanding of the EE concept are related in an inclusive hierarchy, increasing in

completeness.

Within the conceptions (categories of description) themselves, a number of factors or aspects of variation, demonstrating themselves as phenomenographic “dimensions of variation” and listed below, could be considered to link and distinguish one category from another.

The key dimensions of variation are:

- 1) That the rationale of the importance of EE in higher education was stated.
- 2) That the students' beliefs about entrepreneurship and/or EE were indicated.
- 3) That the focus of EE at the higher educational level was suggested.

In Table 4.01 the perceptions of EE, along with the dimensions of variation which link and distinguish one category from another, are presented. It outlines the logical evidence for the inclusive hierarchy.

Table 4.01. Outcome Space of Students' Perceptions of Entrepreneurship Education

Category of Description	Dimension of Variation		
	Rationale	Beliefs about Entrepreneurship or EE	EE at Higher Education Level
EE is about starting and managing a small business	Whilst the entrepreneurial spirit has already been established, a well-prepared business is necessary	EE is knowledge about starting and managing small businesses	Teaching to write a business plan
EE is about developing awareness of an entrepreneurial career	The educational system has been oriented to create employees	EE is a business awakening program	Sensitizing students about careers in entrepreneurship
EE is about developing enterprising attributes	The lack of enterprising attributes amongst graduates is a fact	Entrepreneurship is a trait	Nurturing enterprising attributes
EE is about entrepreneurial learning	The lack of action-oriented education is a fact	EE is entrepreneurial education to create entrepreneurs	Enabling students to experience entrepreneurial learning

Source: Author (2013).

1) EE is about starting and managing a small business

Within this category, EE was considered to be a means to help students start and manage their own business. Students found it is reckless to start a business without good preparation, although it was assumed that the entrepreneurial spirit already existed. Knowledge of management functions, including finance and marketing, would be necessary. In this category of description students suggested that EE should equip them with an ability to prepare a business plan in order to give a more comprehensive understanding of the business they would like to enter. Students seemed to realise that having a business plan would make them feel secure about starting their own business. It is believed that all efforts should be undertaken to minimise the risk of business failure. EE should take this concern into consideration. The following excerpts will indicate students' perception of EE as a help to starting business:

“Entrepreneurship knowledge should be acquired by everyone because the entrepreneurial spirit exists in individuals. It is impossible for us to practise it straight away, so we need theory first. It prevents us from doing something without good planning.”
(S4b)

“Other subjects never talk about markets or consumers or how to convince customers of the advantages of our product.” (S2e)

“Entrepreneurship education is learning about how to run a business. Entrepreneurs are independent people. Students learn how to get capital and financial management.” (S5e)

It appears that this is an interesting finding, as EE is perceived to be important by students who have already established their small business. It has been evidenced that management knowledge, mainly about financial aspects, has made a difference in preventing a business from being mismanaged. This acknowledgement of the importance of the role of EE in managing a small business is illustrated further in the excerpt below:

“Having an entrepreneurship course enabled me know how to deal

with pricing. The entrepreneurship course really benefited my business. I was surprised when pricing for a tailor service (making clothes by order) should be based on model, material and labour cost. The entrepreneurship course taught me about depreciation cost as well. Afterwards I always set aside money for machine replacement.” (S1a)

2) EE is about developing awareness of an entrepreneurial career

EE is discussed within this category as a means of making students aware of entrepreneurship as a career option. It is generally acknowledged that Indonesian higher education students still aspire to be employed by established firms after graduation, despite the fact that the ability of big companies to provide jobs is believed to be diminishing. The educational system, however, according to the students in this category, must bear the responsibility for this narrow perspective of careers. Therefore, it has been suggested that EE should play an important role in sensitizing students to careers in entrepreneurship. Since students have been encouraged to have only one career path in the large companies for a long time, the presence of EE can be a means to awaken students' awareness of alternative careers. Students in this category suggested that rather than relying on big enterprises, micro industries offer abundant career opportunities. EE, however, should be able to convince students of the advantages of being entrepreneurs for individual and national wealth. Independence, money and graduate unemployment are themes that can be chosen to arouse students' entrepreneurial spirit. The following excerpts will indicate how students perceived that EE might be able to address these concerns:

“Entrepreneurship education, in my opinion, sounds like a 'poison education'. If the poison fails to reach our body, it means that it isn't our mentality to start a business. I believe that entrepreneurship is a deviant way to be rich.” (S6d)

“It changes students' mindset that in the future working in an architectural bureau is not the only one possible career for them. It

prepares students to be independent.” (S2d)

“It nurtures entrepreneurial spirit (how to run one's own business and not be employed). It's so important since many opportunities are available in micro industry.” (S1e)

3) EE is about developing enterprising attributes

Within this category, EE is understood as the development of enterprising attributes. Students approached the importance of EE from the position of graduate unemployment. By citing the Harvard Business Review a student argued that it is a lack of enterprising attributes that was its root and high unemployment should not be considered as simply a ratio of supply and demand. Rather than focusing on the decrease in big companies' capacity to provide jobs for graduates, it would be wise for HEIs to emphasise the employability of graduates. EE should therefore pay more attention to how to equip students with enterprising attributes, skills and behaviours. It is believed by students that once these qualities are embedded, one should expect the emergence of graduate entrepreneurs. It is necessary to not confine the concept of entrepreneurship to merely doing business.

Entrepreneurship should be conceived as a trait. The following quotations will indicate how EE is understood by students:

“Based on an article I read from the Harvard Business Review, in actual fact ... the real problem is not inability of industry to absorb graduates that leads to unemployment. Indeed, students themselves lack employability skills. Many graduates don't have N'ach (need for achievement) or lack entrepreneurial attributes.” (S3a)

“There is a misconception about entrepreneurship. It has been generally accepted that someone who is running a business is called an entrepreneur. Actually, entrepreneurship is about traits, namely persistence and courage.” (S3a)

“Entrepreneurship education ... imparts character and attitude or

the mindset to be brave or persistent. We won't say that we must run a business. As we have an entrepreneurial mindset we will proceed to start a business. Capital is not really a matter.” (S3a)

4) EE is about entrepreneurial learning

Whilst the three previous categories of description focused on the content of EE, within this category its pedagogy was highlighted. It could be suggested that the important role of EE should move away from the fact that there is a predominance of theory-based learning in higher education. The recent era requires a shift from past practices to the embracing of a more action and experience learning orientation. EE, fortunately, was considered by students to be a learning breakthrough which enables them to have the opportunity to utilise theory in a real situation. Accordingly, it was hoped by students that enterprising attributes, along with an entrepreneurial spirit and business skills, would be acquired at the same time. Eventually, graduate entrepreneurs will be allowed to emerge. The following quotations indicate how EE is understood by students:

“Today, practice is so important. I chose this university because of its tag line: 'creating world class entrepreneurs'. Since I was in secondary school I have wished to be here. I don't like theory or simply sitting on a chair.” (S3b)

“While other subjects are only about theory, the subject of entrepreneurship is an innovation because we can put theory into practice. It's not simply theory.” (S4d)

“Not remembering, but practising. Everything we learned should be brought to the market. We really know about business. Entrepreneurship education changes the mindset, so it leads to students being creative and thinking differently.” (S3c)

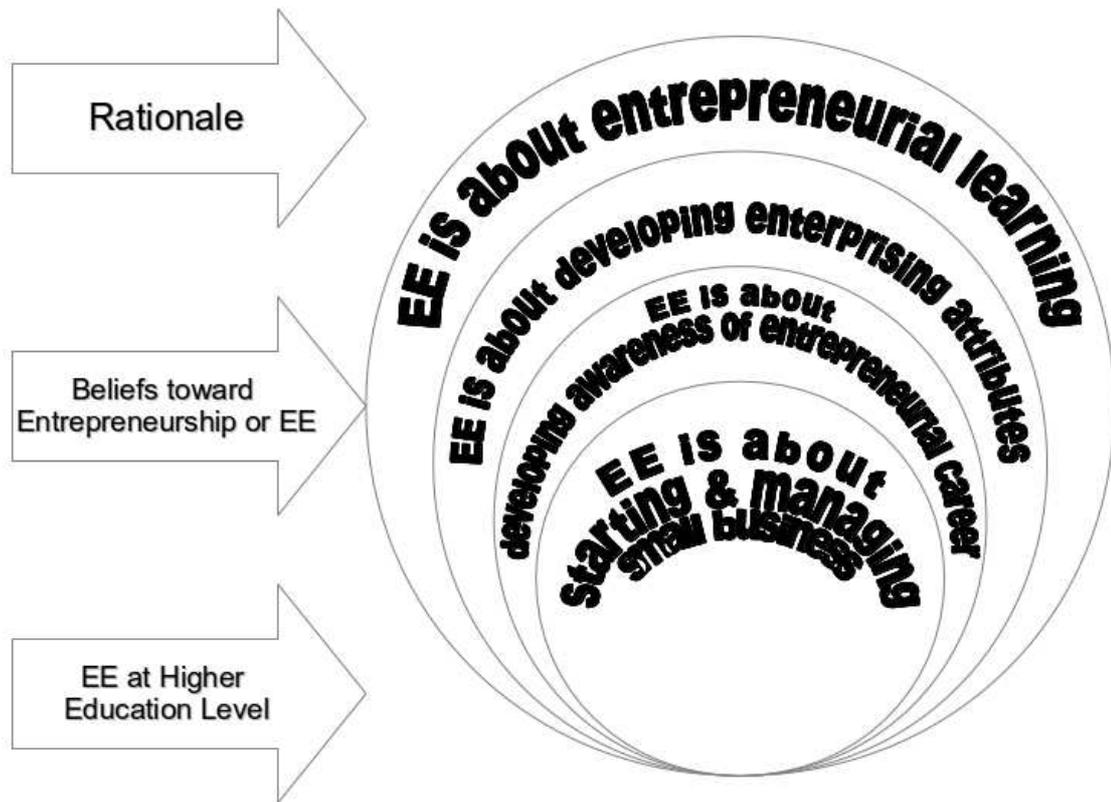
“It is aimed at providing real learning, as focusing simply on theory is not enough. It will nurture entrepreneurs. This programme leads to action learning and practising theory. Eventually it will produce

entrepreneurs. We can start to run small businesses from now. Through this programme we are able to learn to serve customers, how to deal with complaints, and how to manage finance and people. It benefits me in how to recognise business opportunities. Indeed, I feel more confident because not only can I understand theory but also how to put it into practice.” (S7a)

4.3.2. Summary of students' perceptions categories

These categories should be considered as the students' collective mind, as they were constituted from all of the data from the interview transcripts. All categories represent an inclusive hierarchy, from "Entrepreneurship education is about starting and managing a business" to "Entrepreneurship education is about entrepreneurial learning". Based on the themes of expanding awareness, it is obvious that the last category is the most comprehensive way to comprehend EE, as it covers all the previous categories of description. Figure 4.01 indicates the hierarchical structure of the categories of description. The discussion section will indicate whether or not these categories support the previous research in the area of EE and how these categories make a difference to the EE body of knowledge.

Figure 4.01. Students' perceptions of entrepreneurship education



Source: Author (2013).

4.4. Variations in faculty members' perceptions of entrepreneurship education

4.4.1. Categories of description

The analysis of the interview transcripts found the set of categories that describes the variations in the faculty members' understanding of the concept of EE:

- 1) EE is about developing a positive attitude towards being an entrepreneur or starting a business,
- 2) EE is about developing enterprising attributes,

3) EE is a matter of learning.

As suggested before, all the categories are internally related and indicate the 'collective mind' of the faculty members on which simultaneity, variation and discernment were based. Using the empirical data within the transcripts, the details of each category will be discussed. The meaning, as well as the logical and empirical structure of the categories, was constituted by stating the themes of expanding awareness. Accordingly, the aspects of critical variation and the structural relationship between the categories can be highlighted. The three distinct categories which describe the variations in the faculty members' understanding of the EE concept are related in an inclusive hierarchy, increasing in completeness.

Coincidentally, the dimensions of variation which emerged in the sample of students apply to the faculty members' sample as well. They are:

- 1) The rationale of the importance of EE in higher education,
- 2) The faculty members' and students' beliefs about entrepreneurship or EE,
- 3) The focus of EE at the higher educational level.

In Table 4.02 the perceptions of EE, along with the dimensions of variation which link and distinguish one category from another, are presented. The logical evidence for the inclusive hierarchy is outlined.

Table 4.02. Outcome space of faculty members' perceptions of entrepreneurship education

Category of Description	Dimension of Variation		
	Rationale	Beliefs about Entrepreneurship or EE	EE at the Higher Education Level
EE is about developing a positive attitude towards being an entrepreneur or starting a business	<ul style="list-style-type: none"> Employee status receives much more respect than entrepreneur status in Indonesian culture 	<ul style="list-style-type: none"> Entrepreneurship can be characterised as: independence and welfare 	<ul style="list-style-type: none"> Motivation to start one's own business: proud to be an entrepreneur and exposure to business opportunities
EE is about developing enterprising attributes	<ul style="list-style-type: none"> The lack of enterprising attributes in graduates is the main problem of HEIs 	<ul style="list-style-type: none"> Entrepreneurship is value creation for the welfare of society 	<ul style="list-style-type: none"> Personal development
EE is a matter of learning: enterprising or entrepreneurial learning	<ul style="list-style-type: none"> The lack of action-oriented education is a fact 	<ul style="list-style-type: none"> Entrepreneurship must be high growth in order to make a significant impact on the whole of society. EE is a discipline or science. Entrepreneurship is about the mindset to be successful. 	<ul style="list-style-type: none"> Providing entrepreneurial learning in order to manage high-growth companies. Providing enterprising learning in order to be the best person.

Source: Author (2013).

- 1) EE is about developing a positive attitude towards being an entrepreneur and starting a business

Within this category, EE was conceived as a programme to develop a positive attitude towards being an entrepreneur and starting a business. It has been acknowledged by faculty members that being an employee, mainly in a state or established company, is the main career aspiration for most Indonesian people, including higher education students and graduates. At the same time, there is not enough encouragement to be an entrepreneur or to start one's own business. Faculty members find it

imperative to equip students with an entrepreneurial spirit in order to prevent them from simply thinking about looking for a job after graduation. Therefore, EE should play a strategic role in providing students with the advantages of being an entrepreneur. Faculty members believe that an entrepreneurship career gives the double benefit of freedom and money. In addition, it should convince students that abundant business opportunities are available around them. The following quotations will indicate how EE is understood by faculty members:

“Nowadays in Indonesia being an employee or politician are highly valued careers.” (L1d)

“Most students aspire to get jobs in Jakarta (the Indonesian capital city). Entrepreneurship courses open minds to the fact that it's no dishonour to be an entrepreneur. Graduates will not rely on big companies to provide jobs for them.” (L2a)

“Entrepreneurship education is aimed at nurturing the mentality to be an entrepreneur. It prepares students to be creative when they spot business opportunities. As a result, they will not be interested in careers as public/state employees any more. They will have the willpower to run their own business.” (L5b)

“Having one's own business is a certain way to be rich. Indeed, while other subjects prepare students to be employees, it is the only one course that encourages and convinces students to be the boss.” (L6a)

2) EE is about developing enterprising attributes

Within this category, the reason behind the strategic role of EE is that higher education has not yet succeeded in equipping students with enterprising attributes such as self-confidence, creativity and persistence. These attributes, however, are considered to be a prerequisite to be employed or to be an entrepreneur. While the previous category highlighted the benefits of being an entrepreneur or having one's own

business from the individual perspective, this category considers entrepreneurship from a wider perspective, that of society. It is believed by faculty members that innovation and value creation are sources of wealth. Entrepreneurship, however, should not be understood as a narrow idea of simply doing business. Therefore, EE should focus on personal development rather than encouraging students to run their own business. The following quotations will indicate how EE is understood by faculty members:

“Higher educational institutions (HEIs) haven’t yet accomplished the task of making their graduates excellent, either as employees or as entrepreneurs.” (L2d)

“If you learn entrepreneurship, it is not only about running a business, but it is about how to be creative and innovative in problem solving, mainly in the construction area.” (L2a)

“In my opinion, graduates don't have to run their own business, but innovation is enough. Because being innovative, they will enjoy themselves wherever they are. Innovation requires people to be risk-takers. Education based on being entrepreneurial, not being an entrepreneur, suits higher education level. The higher the innovation, the wealthier the country.” (L4a)

“I have seen graduate students lacking in self-confidence, although I am sure that they can be. Entrepreneurship education should therefore focus on personal development.” (L5e)

3) EE is a matter of learning

Whilst the two previous categories highlighted the rationale behind the important role of EE from the cultural and output perspectives, this category discerns the deficiency within traditional education as the point of departure. Within this category of EE, there are two variations in how EE should be understood as a matter of learning. One group of faculty members believed that EE is a discipline or science which is oriented

towards action and profit. Entrepreneurship, however, should be conceived as running a high growth company in order to make a significant impact on society. Entrepreneurial learning, by which enterprising attributes, skills and behaviours are learned and practised in market context, should be the main focus of EE. Another group of faculty members believed that it is an enterprising learning that enables students to utilise all their intelligent components, including IQ (Intelligence Quotient), EQ (Emotional Quotient) and SQ (Spiritual Quotient), in order to prepare them to be successful in whatever career they pursue. It is enterprising learning that characterises EE. This means that EE is characterised by enterprising or entrepreneurial learning, offering a new perspective for the Indonesian education system, mainly at the higher education level. Learning as a point of departure requires a comprehensive and new understanding of input, process and output and their interrelationship. Entrepreneurial learning, however, is a more complex concept. The following quotations will indicate how EE is understood by faculty members:

“Humans possess IQ (Intelligence Quotient), EQ (Emotional Quotient) and SQ (Spiritual Quotient). Unluckily, education simply capitalises on theory or cognitive skills. It must be realised that just relying on theory or knowledge is not enough to create great wealth. Entrepreneurship education should incorporate the three basic capabilities in order to nurture students to become ‘integrated people.’” (L1a)

“Being entrepreneurial should be assumed as a thinking pattern. In such a way, it needs experience, analysis making, and taking part in projects. As a result, one’s mindset and life goals will change.” (L3e)

“Entrepreneurship education is a discipline. It can be distinguished from other disciplines as it emphasises action rather than mere concepts. It needs to be practised in the real world, the marketplace. It requires creativity, innovativeness and risk assessment. It needs planning, as it is not gambling. Joint-venture

and taking insurance are necessary. (L3c)

“In the beginning I understood entrepreneurship as starting a business. After I came back from the US I realised that entrepreneurship must be high-growth in order to have a significant impact on society. As being entrepreneurial is a mindset, it requires student engagement in projects in order to acquire experience and to make analysis. Eventually, it will change one’s mindset and life goal.” (L3e)

“Entrepreneurship education is aimed at nurturing the mindset to be an entrepreneur. Soft skills, entrepreneurial characteristics and hard skills must be embedded in entrepreneurship education. Formal and informal approaches should be utilised.” (L3b)

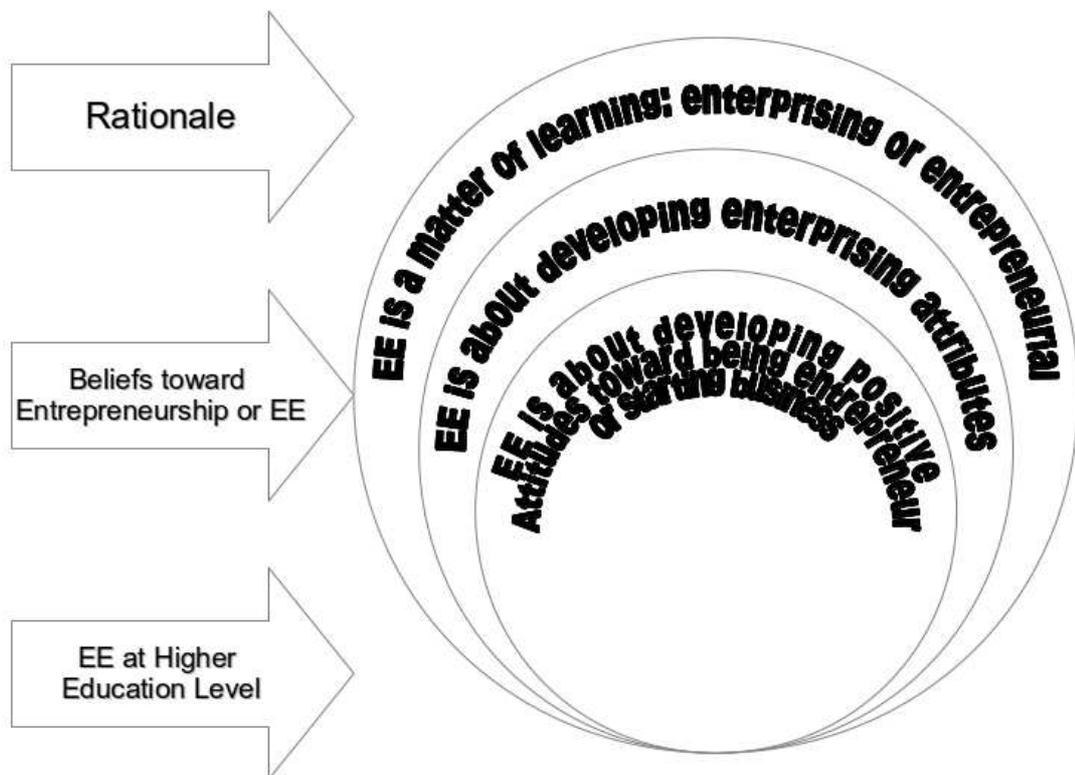
“Because of the important role of this course, I suggest it be a compulsory subject at this university. It could be positioning strategy. Entrepreneurship education is required in order for students to be successful as it enables them not simply to deal with theory. It is necessary for students to learn in the real world in order to have their own target and problem solving ability.” (L2e)

4.4.2. Summary of faculty members' perceptions categories

These categories should be considered as faculty members' collective mind as they were constituted from all the data from the interview transcripts. All the categories represent an inclusive hierarchy from "Entrepreneurship education is about developing a positive attitude towards being an entrepreneur or starting a business" to "Entrepreneurship education is a matter of learning". Based on the themes of expanding awareness, it is obvious that the final category is the most comprehensive way to understand EE, as it covers all the previous categories of description. It should be noted that based on phenomenographic assumptions, the first and the second categories are not misconceptions of EE. Figure 4.02 shows the hierarchical structure of the categories of description. The discussion section

will indicate whether these categories do or do not support the previous research in the area of EE and how these categories make a difference to the EE body of knowledge. In addition, since senior management's views of EE were collected, it would be interesting to analyse the perceptions of EE from the perspectives of these stakeholders. It is, however, imperative to compare and contrast between faculty members' perceptions of EE and those of students. It is hoped that a more complete understanding of EE in the Indonesian context will emerge.

Figure 4.02. Faculty members' perceptions of entrepreneurship education



Source: Author (2013).

4.5. Comparison between students' and faculty members' perceptions of entrepreneurship education

Given the number of categories found, the sample of students indicated more variations in the qualitatively different ways of EE being experienced. Students were able to discern how EE would benefit those who intend to start a business or are already running their own small business. It was the rationale *why* EE is important that was interesting. It has been perceived that students have an entrepreneurial spirit but lack knowledge in starting and managing a small business. This means that there is a market segment of EE that faculty members failed to recognise.

It is not surprising that the sample of faculty members was able to discern EE as a science and a discipline. This understanding implies faculty members' superior knowledge in relation to EE. Both students and faculty members, however, share perceptions of EE in the remaining three categories. This also reveals that they share the dimensions of variation on which the outcome space was constituted. The rationale, beliefs about entrepreneurship and/or EE, and focus of EE served the logical and empirical structure of categories in both student and faculty member samples. The categories "Entrepreneurship education is about entrepreneurial learning" and "Entrepreneurship education is a matter of learning" can be considered as the most complete understanding of EE, as they embody the motivation, skills and environment needed to foster great graduate entrepreneurs. An ideal type of entrepreneur is someone who is able to utilise IQ, EQ and SQ to run high-growth companies. Having such characteristics should also mean that they can apply their entrepreneurial attributes and skills in any area of working life. Accordingly, this will benefit society as a whole.

4.6. Discussion of students' and faculty members' perceptions: Challenging senior management's views and previous studies

In this section, all the categories and their logical evidence for the inclusive hierarchy will be discussed. However, it is necessary to incorporate senior

management's perspectives of Entrepreneurship Educational and debates in the field of EE.

1) EE is about starting and managing a small business

EE focused on starting and managing small business should be considered as entrepreneurship training, not EE (GEM, 2010). This understanding of EE can be categorised as a traditional EE paradigm (Kirby, 2007), a more specific concept of EE (EC, 2002), and the lowest level of EE (Fayole and Klandt, 2006). There remains, however, debate among scholars and academia whether EE should be considered as starting and managing a small business or whether it should embrace a wider concept. Furthermore, it has been suggested that one should move away from this narrow conception of EE. Senior management interviewed appeared to hold different beliefs about EE being starting and managing a business. Those from big and established universities were most likely to reject this conception of EE. The following excerpts show this rejection:

“Entrepreneurship education is not aimed at training students to be able to sell.” (SM6)

“Entrepreneurship education shouldn't simply be about selling activity.” (SM2)

“Entrepreneurship education as venture creation isn't necessary, because when students engage in business, money and prestige, it will lead to the termination of study. It mustn't happen because their parents' ambition was to send them to this university to be a scholar. Students are scholar candidates. Therefore, they should not be fascinated by business activity during study. They must choose between study and business.” (SM4)

On the other hand, a rector who leads a new university with the vision of creating world class entrepreneurs insisted that involving students in business activities is the best way to teach entrepreneurship. He said:

“We believe that business is the easiest means to teach

entrepreneurship. For the first stage, selling food and drink will be easily done. It should be started in the easiest way.” (SM3)

The resistance of academia, including senior management, toward a business oriented perception of EE has been acknowledged by some scholars (Clergeau and Schieb-Bienfait, 2007; Hills and Morris, 1998; Surlemont, 2007). Therefore, instead of just focusing on teaching students to start their own business, Gibb (2006) proposes a modern paradigm in EE which focuses on developing entrepreneurial behaviours and an entrepreneurial culture. Some reasons have been provided for replacing the traditional focus of EE on new venture management and the business plan:

- a) Since it is not based on an understanding of how entrepreneurs live and learn, it fails to equip students with the capabilities to face the complexity and uncertainty caused by globalisation (Gibb, 2002, 2006, 2007);
- b) There is a need to develop graduates who can be innovative and take responsibility for their future, not just in a business or even a market economy context (Kirby, 2007).
- c) The quality of the EE offering will depend on its focus on incorporating all aspects of the entrepreneurial experience, from start-up to growth and maturity (Kickul and Fayolle, 2007).

The importance of the business plan emphasised by students in this study seems to concur with Marion and Senicourt (2003, cited in Carrier, 2007, p.144), who argue that:

“In preparing their business plan, students can learn to anticipate, develop the contacts they need to realise their project, identify their own weakness, understand the interdependency of their decisions and learn about information sources.”(Marion and Senicourt, 2003, cited in Carrier, 2007, p.144)

This means that elimination of the business plan as a teaching tool can be considered as an unwise suggestion (Carrier, 2007). Nevertheless, it would be necessary to complement it with more unique and unconventional forms of teaching, especially in relation to equipping students with opportunity

identification skills. Carrier offers some interesting ways to help students to learn to identify potential business ideas:

- 1) asking students to examine entrepreneurial case studies or to interview entrepreneurs in order to discover the sources of their business ideas and the cognitive process that led to their insights, by repeating the exercise frequently, students would eventually be able to discern patterns and acquire these patterns for themselves.
- 2) asking students to keep a diary, writing down one business idea everyday. At the end of the month they can be asked to pick out the best three, thus learning how to evaluate their own ideas.

This category of students' perception of EE, however, concurs with Fayolle and Klandt (2006), who argue that it is an unnecessary idea to neglect the concept of EE whose focus is on new venture creation. Furthermore, this finding supports some previous studies in relation to the importance of EE in equipping students with the knowledge and skills to start and manage a small business:

- 1) It has been argued that since it is assumed that entrepreneurial motivations and behaviour have been acquired in the life period preceding entry into higher education, then university education in entrepreneurship needs to (i) detect students with a high degree of entrepreneurial awareness and potential and (ii) give training which reveals these characteristics, consolidates them and completes them through the acquisition of technical skills which reinforce the chances of successful creation and subsequently the successful development of a business (Ducheneaut, 2001, p.137).
- 2) It has also been argued that in order to assist the entrepreneur/self-employee to succeed in business, HEIs should take responsibility in imparting technical, entrepreneurial and/or managerial knowledge and skills (Mitra and Manimala, 2008).
- 3) Henry and Titterington (2001) argue that asking students in EE to develop a business plan and proceed to the start-up stage can act as an automatic filtering mechanism which retains only the most

enthusiastic and committed candidates.

- 4) Hills (1998) and Hills and Morris (1998) argue that less attention had been paid to the importance of accurate selection and segmentation of participants in entrepreneurship programmes in North America. This study supports Ghosh and Block (1993-1994) and Wagner *et al.* (2008), who argue that a stage of the entrepreneurial process can be used as a way to determine the target market of EE.
- 5) Lee *et al.* (2005) argue that launching ventures without relevant knowledge is reckless, even when there is a strong desire for venture creation, while Krueger and Carsrud (1993) contend that the acquisition of management tools can influence the perceived self-efficacy/control for entrepreneurial behaviour.

From the social economy perspective, the emergence of groups of students who are interested in running a small business or being self-employed should not be overlooked. Society will benefit as they help to lower the rate of graduate unemployment. They still can be categorised as entrepreneurs as they embrace risk and uncertainty (Cantillon and Knight's entrepreneur), engage in the market process (Kirzner's entrepreneur), and bring factors of production together and organise business firms (the business builder/Say's entrepreneur). Singh (1990) highlights the fact that the unemployment problem is the main reason for governments to support EE. It has been indicated that the problem of graduate unemployment is not simply a matter of deficiency in employability skills. Matlay (2011) states that:

“By the time 'generation Y' enrolled in higher education institutions (HEIs), large employers were in decline and a rapidly growing cohort of new graduates was forced to choose between three main options: Unemployment, employment in smaller businesses or an entrepreneurial career.” (Matlay, 2011, p.167).

Unfortunately, according to Watts (1981), there has been far too little encouragement of young people to think of self-employment or starting a business or co-operative as a career option. Moreover, David Grayson, in a case study on Project North East (Watts, 1984), revealed that although

35% were interested in self-employment, few had any idea of where to go for help, and only 15% had ever been given self-employment as a career option at school or anywhere else.

Despite the fact that this category can be categorised as a narrow conception or incomplete understanding of EE, no one, in the phenomenographic assumption, can ignore this from the EE discussion or offering. This category is not a misconception of EE, although it fails to discern a new focus on other elements of EE as a response to the complexity of the world. Fayolle and Klandt (2006) argue that:

“From our point of view, the modern paradigm is not an alternative to the past and ought not to be seen as a substitute, but it is much more an extension of the traditional paradigm. As the complexity of the world increases, the complexity of the Entrepreneurship Education model has to increase too, through the inclusion of new variables and new levels of conception.” (Fayolle and Klandt, 2006, p.3)

Nonetheless, this category still has to be considered as a narrow understanding of EE, as it is training provided for students with pre-existing characteristics and attitudes. This group of students should be treated as one of the segments of EE. However, it would be unwise if EE at the university level is only addressed to serve them as Kent (1990) argued that it would restrict the potential supply of entrepreneurs to the economy. Indeed, it is also important to consider the following statement from Hindle (2007):

“For an entrepreneurship education program to be truly worthy of a university setting, it needs some intellectual challenges that take it beyond mere training and give it claim to being education.” (Hindle, 2007, p.111)

- 2) EE is about developing awareness of entrepreneurial careers and developing a positive attitude towards being an entrepreneur and starting a business

This category can be considered to contribute to the current debate on EE, especially in relation to the impact of education upon an individual's choice to seek employment or to create a new venture (Dickson, Solomon and Weaver, 2008). While general education has been found to have an

ambiguous relationship with entrepreneurial selection, specific education has been evidenced to have a positive correlation (Dickson, Solomon and Weaver, 2008). In research involving 64 graduates, Matlay (2008) found that EE has a positive impact upon entrepreneurial outcomes related to career aspirations. Raposso *et al.* (2008) also evidenced that EE is the most significant factor to influence the tendency to business creation.

This category seems to align with the notion of the theory of planned behaviour, in that career selection in entrepreneurship is a function of belief. Shapero and Sokol (1982) argue that desirability and feasibility of entrepreneurial behaviour can be formed by education and teaching factors. Students and faculty members in this study appear to suggest that culture and environment especially in higher education have a strong influence on students' confidence to choose entrepreneurial career. This means that their ideas align with Institutional Economic Theory. This theory, according to Veciana, Aponte and urbano (2005), is very useful in a holistic way, as it serves to analyse the contextual factors as determinants of entrepreneurship.

As Indonesia is a typical developing country, schools and universities do less to internalise values to become entrepreneurs (Whyte and Braun, 1965). A statement from a senior manager who runs a well-known large Indonesian university represents the negative attitude towards entrepreneurship and self-employment:

“Students are scholar candidates, so I warn against filling them with entrepreneurial spirit during study. I believe that being a state employee instead of being self-employed will make parents happy.” (SM4)

This is also prevalent in other countries such as Sweden (Johannisson, Halvarson and Lovstal, 2001), France (Carayanis, Evans, and Hanson, 2003; Boissin, Chollet, and Emin, 2007) and Argentina (Postigo, *et al.*, 2006), where lack of new venture creation and negative attitude towards entrepreneurs are evident. Some scholars, however, believe that there is the possibility to achieve a cultural change through the education system

(Carayanis, Evans, and Hanson, 2003; Singh, 1990; Whyte and Braun, 1965). It also is suggested that universities, via courses and teaching methods, provide role models and motivation (Postigo, *et al.*, 2006).

Therefore, according to Boissin, Chollet, and Emin (2007), a number of questions must be asked about what the content of effective entrepreneurship courses should be. Developing an entrepreneurial spirit can be an answer. According to Verzat and Bachelet (2006), university years are decisive in promoting an entrepreneurial spirit, which can be done through building up entrepreneurial professional projections and entrepreneurial abilities (Verzat and Bachelet, 2006;195). Students and faculty members in this study also seemed to agree with Birch (2004), who argued that it is necessary in EE to convince its audiences about high recognition and economic return as rewards for being entrepreneurs. It is vital for role models to be available for students. Whyte and Braun (1965, p.53) suggest that a nation's heroes need to be found and socialised:

“The case of the heroes reveals that, in many developing countries, far from being regarded as heroes, industrial leaders are not even considered worthy of much respect. How is the growing generation to be attracted to positions of industrial leadership if the culture constantly emphasises the superior values of other occupation? It does no good to tell children they should aim to become entrepreneurs and work hard toward a long-range goal, if they find no models for such ambitions and values in their classroom experience. We urge that educators be encouraged to re-examine the country's history to find men who might serve as models for the kinds of achievements and ambitions that need to be fostered.” (Whyte and Braun, 1965, p.53)

Entrepreneurial spirit, according to Carayanis, Evans and Emin (2003), must be imparted before entering university or begin at the very latest during Junior High School (starting at 13 years old).

Its focus on the spiritual dimension ('know why' and 'know when') of the programme content, along with the use of entrepreneurs' testimony as its pedagogy (Fayolle, 2008, p.200) are strong reasons for this category to be criticised.

Fiet (2000) argues that despite listening to great entrepreneurs narrating

how they had developed their ventures in an enjoyable, motivational, and very entertaining way, it will not help students to start a business. In addition, Neck and Greene (2011) argue that an approach which asks the student to simply observe, describe and measure fails to enable students see a reflection of themselves.

This category of description, however, is supported by Boissin, Chollet and Emin (2007), who found that the impact of attitude in the explanation of intention was nearly double the impact of perceived self- efficacy. This means that although an EE focused on the 'how' dimension is a good way to stimulate entrepreneurial intention, Boissin, Chollet, and Emin (2007) warn not to neglect the attitudinal dimension. On the other hand, it should be noted that this category is not a truly complete conception of EE, since it ignores the important role of enterprising attributes as an intervening variable. For instance, Krueger and Carsrud (1993) state that:

“... teaching people about the realities of entrepreneurship may increase their entrepreneurial self-efficacy, but simultaneously decrease the perceived desirability of starting a business.”
(Krueger and Carsrud, 1993, p.327)

In addition, Ajzen (1987) argues that the influence of normative belief is less relevant for people who have a strong internal locus of control. Furthermore, EE activities that are concerned with awareness-raising tend to simply:

“... plant[ing] the notion, hope that after a period of incubation (probably in employment) it may flower into life (set up enterprises).” (Watts, 1984, p.3)

3) EE is about developing enterprising attributes

Students and faculty members in this category assigned the importance of enterprising attributes as a response to employers' dissatisfaction with graduate performance. This means that the issue of employability should be addressed in EE. Since having academic qualifications is insufficient to guarantee student employment (Yorke, 2004), EE is expected to equip students with the capabilities to succeed in the workplace, including enterprise skills (Rae, 2007; Sewell and Pool, 2010). According to Gibb

(2006), the policy rationale for engaging in EE initiative has changed since the re-emergence of entrepreneurship on the economy policy agenda in the 1980s. The important roles of employment creation through self-employment and small firm growth were the main reasons for promoting EE in the 1980s. The next decade, as a direct result of globalisation, through which social and economic uncertainty and complexity have been the norm, the education system was assigned responsibility to provide enterprising workforce (Davies, 2002, cited in Gibb, 2006). This means that the development of personal capacities must be emphasised as opposed to business knowledge per se (Gibb, 2002; 2007). By doing this, according to Gibb, the significance of "creating a wider stakeholder enterprise culture" and "a generally supportive institutional environment" for entrepreneurship and EE can be recognised (Gibb, 2007, p.85).

Faculty members in this category who suggested that EE should not be about doing business per se appeared to concur with almost all senior management beliefs.

“Entrepreneurship must be understood as a mindset ... having the mentality to be an entrepreneur. For instance, entrepreneurship invariably deals with self-confidence, communication skills, negotiation, leadership and networking. These characteristics should be taught in entrepreneurship education. When students graduate, they should possess these mindsets.” (SM4)

This category is most likely to avoid academics' resistance towards EE. It therefore seems to support Surlemont (2007), who indicates that favouring enterprise offers some advantages, rather than the idea that entrepreneurship means encouraging commercial attitudes in young people. More specifically, Surlemont (2007) argues that:

“Developing broad enterprising attributes provides a solid basis for entrepreneurship. The reverse is not necessarily true.”
(Surlemont, 2007, p.259)

Overall, this category seems to be in line with Gibb (2002, 2006, 2007), who proposes an alternate model of entrepreneurship and EE. An

argument is provided by Gibb to support this model:

“The model recognises that the pursuit of entrepreneurial behaviours may be of value in a wide range of contexts, not purely business. It is relevant both to the organisation and to the individual as worker, consumer and family/community member.”
(Gibb, 2007, p.84)

Nevertheless, Johannisson, Halvarson and Lovstal (2001) argue that the trait approach of EE, which attempts to change students' personality, will challenge the educational system less. Entrepreneurship, according to Johannisson, Halvarson and Lovstal should be understood as how venturing is pursued. This argument seems to concur with the idea of teaching entrepreneurship as a method (Neck and Greene, 2011). In doing this, according to Neck and Greene, educators can help students to "understand, develop and practice the skills and techniques needed to undertake productive entrepreneurship" (Neck and Greene, 2011, p.61).

In addition, despite the fact that faculty members in this category agree with Birdthistle (2010), who argues that personality aspects, including internal locus of control, are necessary for starting and managing a successful business in the recent environment. Sewell and Pool (2010) argue that for being entrepreneurial enterprise skills do not suffice, it requires the capability to launch creative ideas and willingness to take risks in implementing them. An additional argument comes from Black *et al.* (2003), who indicate disagreement over the idea of EE nurturing enterprising attributes:

“The focus now moves away from the idea of socialising students (i.e. equipping them with generic, transferable skills) to become adaptable and flexible to meet the needs of the employment market towards promoting entrepreneurial ways of thinking and acting as a specialist set of skills which are required to pursue a specific career option (entrepreneurship).” (Black *et al.*, 2003, p.5)

Given the discussion above, it can be concluded that despite this category being broader than the two previous ones, it is not yet complete, as nurturing graduate entrepreneurs is not only a matter of having enterprising attributes, but also a matter of culture. Discussion about this issue has already been conducted. This category also neglects the fact that there is a

market segment of EE which needs specific skills in relation to starting and managing a small business. Neither does it seem to align with the definition of entrepreneurship teaching at the level of tertiary education proposed by the European Commission (EC, 2002):

“At the level of tertiary education, entrepreneurship teaching will provide the students with specific training on how to start and run a business, including the capacity to draft a real business plan and the skills associated with methods of identifying and assessing business opportunities. Also, it will encourage and support embryonic business ideas (for instance by providing special loans, business facilities, mentor-ship, etc)- so that well-researched projects can be put into practice and finally reach the market.“
(EC, 2002, p.15)

4) EE is a matter of learning

Since the three previous categories have not yet been completed in order to understand the EE phenomenon, it is therefore necessary to prove that this category is the most complete understanding of EE through a discussion of its themes of expanding awareness. Regarding what emphasis should be given to EE, it has been indicated in previous discussions that starting and managing a small business, developing awareness about careers in entrepreneurship, and developing enterprising attributes are insufficient. Students and faculty members in this category shared a notion that enabling students to experience entrepreneurial learning in order to be entrepreneurial is a critical issue. This concern needs to revisit the debate over how the best entrepreneurship and EE can be approached. Being entrepreneurial, as examined before, demands more than having enterprising attributes (Sewell and Pool, 2010). Moreover, research into the personality characteristics of entrepreneurs has concluded that no set of personality traits differentiates entrepreneurs from managers (Gartner, 1988). This seems to concur with the dialogic approach, which insists that it is difficult to separate what entrepreneurs do from what they are (Howorth, Tempest and Coupland, 2005).

Accordingly, a new focus on learning rather than content is needed (Carrier, 2007). In other words, it is necessary for HEIs to be concerned with how learning processes are created (Hjorth and Johannisson, 2001). It

also calls for a change in the mode and context of learning towards more entrepreneurial ones. This is in line with Gibb (1993), who insists:

“... Only programmes delivered in an enterprising fashion may truly be labelled entrepreneurship programmes.” (Gibb, 1993, p.29)

The idea of an entrepreneurial or enterprising university has been suggested by many scholars to be a strategic response to provide this kind of learning (Blenker *et al.*, 2008; Formica, 2002; Gibb, 2002; Ropke, 1998; William, 2003).

Students and faculty members in this category believe that due to its orientation toward doing rather than simply thinking, EE is expected to lead to the emergence of educational reform in Indonesia. This belief appears to concur with Singh (1990) and Raihani (2007), who highlight the deficiencies in the education systems in developing countries, including Indonesia.

There is disagreement between students in this category and Gibb (2007). The students believe that entrepreneurial learning will help them to be entrepreneurs in the context of business, whereas Gibb (2007) argues that enterprising learning leads to "the development of entrepreneurial behaviours, attributes and skills which are relevant to individuals as workers, consumers and family/community members" (Gibb, 2007, p.84). This controversy is intense, since faculty members in this category insisted that entrepreneurship must be conceived as a high-growth company in order to make a significant impact on society. Gibb (2006, 2007) categorises what faculty members understand as a conventional business-led model of entrepreneurship, while proposing an alternative model: The societal model of entrepreneurship. Gibb (2007) considers the former model to:

“... sit uneasily with traditional academic convention. It leads to evaluation of the role of academe in commercial terms and to place a premium upon relevance and utility in research rather than the traditional process of discovery for its own sake.” (Gibb, 2007, p.86)

This claim can no longer be right, as it has been evidenced that the

advantages of the adoption of entrepreneurial learning during study at university which enables students to experience real business situations will be twofold: Fulfilling government standards of education and the emergence of great student entrepreneurs as well. A statement from one of senior managers interviewed indicates this double impact:

“Mr. Ciputra (a well-known Indonesian entrepreneur) had the ambition to found a university. Since he isn't an academician, a university characterised by entrepreneurship is the right choice. It can be claimed that we are able to meet government academic standards in relation to knowledge. Indeed, we are so confident that as a small and new university we have shown superior performance, especially the emergence of a conducive atmosphere for academic work and entrepreneurship as well. For example: There is a Business School student whose business has earned sales of 300 million rupiah (around £20,000).” (SM3)

This testimony can be proven through Formica's statement that entrepreneurial universities are:

“... innovative educational institutions that allow people to acquire the skills they need to recognise and pursue business opportunities.” (Formica, 2002, p.172)

In addition, according to Formica, an entrepreneurial university provides intellectual infrastructures that "lead to the formation of new ventures which do not remain small businesses for long" (Formica, 2002, p.174).

Faculty members in this category also insisted that entrepreneurship is a science. This belief strengthens the argument that entrepreneurship can be taught and that entrepreneurs are made. Hindle (2007) suggests that entrepreneurship as a profession is similar to other professions such as doctors and lawyers. This means that teaching entrepreneurship theory is as important as entrepreneurship practice. Therefore there is no reason to contrast liberal with vocational values in building an entrepreneurship curriculum (Myrah and Currie, 2006; Whitehead, 1967, in Hindle, 2007).

Given the discussion above, it can be concluded that EE as a learning

process is the most comprehensive understanding of EE, as it covers the three previous categories. This category seems to align with Birdthistle's understanding of EE:

“Enterprise education is about helping young people make things happen, being creative and finding opportunities for themselves. It develops young peoples’ entrepreneurial skills, attributes and an awareness of how their community, including business and industry, works. Undertaking enterprise education encourages the development of skills and attributes that employers are looking for, such as teamwork, commitment and flexibility. It provides an insight into the potential of becoming self-employed.” (Birdthistle, 2010, pp.228-229)

More fundamentally, it contributes to educational reform, mainly in Indonesia. EE, according to From (2006), is "a manifestation of something that traditional education in a sense has already left behind" (From, 2006, p.10). It is experiential education, not traditional education, in which knowledge and understanding are created through the transformation of experience into a realistic environment which will produce graduates who are better equipped to deal with the world (Crosby, 1995, cited in Robinson and Malach, 2007). It is a reminder that studying should aim to grasp the object of learning, and for life, rather than simply taking tests and exams (Bowden and Marton, 1998). This is in line with Kyro (2000), who states that it is necessary to question what EE can bring to education as a whole.

4.7. Chapter summary

The categories describing the variations in the perceptions of EE presented here provide a detailed explanation of how EE is understood by students and faculty members. This was achieved through the analysis of interviews, which aimed to explore students’ and faculty members’ conceptions of EE in the Indonesian higher education context. In addition, senior management views and the recent discussion in relation to variations in the rationale, belief and focus of EE were provided. It has been shown that the category "Entrepreneurship education is about entrepreneurial learning" and "Entrepreneurship education is a matter of

learning" are the highest and more desirable conceptions as they subsume the other categories.

The implication of this result is obvious, in that it will establish EE as a lever to promote educational reform in Indonesia. This means that adopting EE at the higher education level will lead to changes in the ways of learning. In addition, content is no longer confined to specific discipline-knowledge; instead, personal development must be emphasised. Furthermore, the education system needs to be friendlier to non-traditional career aspirations, including self-employment. This means that providing national heroes who are pursuing careers in entrepreneurship is necessary.

It is also interesting to note that entrepreneurial learning will lead to the emergence of graduate entrepreneurs, as entrepreneurship is understood as high-growth and a science. The implication of this understanding will be significant.

Entrepreneurship as a science will challenge the old paradigm that entrepreneurs are not made, whilst the belief that entrepreneurship is high-growth will enhance the credibility of higher education as a provider of EE, in which high quality entrepreneurs become apparent.

Senior management and faculty members do not seem to be in agreement on whether running a business is the best means of teaching and learning about entrepreneurship. One group tends to believe that entrepreneurship should be considered as an attribute which needs to be imparted in order to succeed in any working life, rather than confined to the business context. This means that students are encouraged to get involved in the students' union, or any other student clubs or associations, doing community work in poor areas during holiday or gap years (William, 2003, p.10). These activities, according to William, will counter the criticism that students become less enterprising as a result of their studies. The other group, on the other hand, believes that business is the best way to learn and understand entrepreneurship, while insisting that learning entrepreneurship encompasses personal development as well. It would be necessary, however, to accommodate this different position in order to enhance the acceptance of EE across Indonesian higher education. Whilst entrepreneurial universities will be more likely to accept the idea of entrepreneurial learning, moving away from the sense of business for EE through an idea of enterprising

learning will suit traditional universities.

CHAPTER 5. ASPIRATIONS OF ENTREPRENEURSHIP EDUCATION: PHENOMENOGRAPHIC FINDINGS, ANALYSIS AND DISCUSSION

5.1. Introduction

This chapter is the second of three in which I present and discuss the findings from the analysis of the phenomenographic interviews which were conducted for this study in order to answer the following research questions:

- 1) What are the qualitatively different ways in which students and faculty members aspire to EE?
- 2) What are the similarities and differences in students' and faculty members' aspirations?
- 3) Is there any support from senior management for students' and faculty members' aspirations?

As discussed in the previous chapter, although one of the main aims of the interviews was to investigate students' and faculty members' perceptions of EE, a second aim was to use the interview data to examine the variations in the students' and faculty members' aspirations in regards to EE. In the previous discussion about perceptions, it was agreed that EE as a matter of learning, either enterprising or entrepreneurial, is the highest understanding of EE. There remain questions in relation to what and how learning is understood in order to help students to attain their career aspirations. Students' and faculty members' views were collected in order to provide a complete understanding of EE aspirations. Using phenomenographic assumptions, the research findings will be presented, analysed and discussed, along with senior management's views and the recent debates in EE.

Throughout the interviews, faculty members and students were asked to discuss the relationship between career ambition after graduation and entrepreneurship learning/teaching, and how EE has been considered to have helped them to fulfil their career aspirations. The process of analysis was the same as that described in

detail in Chapter 4, section 4.2.

5.2. Variations in students' aspirations for entrepreneurship education

5.2.1. Categories of description

Analysis of the interview transcripts found the set of categories that describes the variations in the students' understanding of the relationship between EE and career aspiration:

- 1) EE should prepare students to be enterprising graduates.
- 2) EE should prepare students to be graduate entrepreneurs.

It is suggested that all categories are internally related and indicate the 'collective mind' of the students, as they are based on simultaneity, variation and discernment.

The details of each category will be described below using the empirical data within the transcripts. The meaning and the logical and empirical structure of the categories were constituted. Themes of expanding awareness that were present in the data were located in order to distinguish the aspects of critical variation and underscore the structural relationship of the categories. It should be noted that the two distinct categories which describe the variations in the students' understanding of the relationship between EE and career aspirations are related in an inclusive hierarchy, increasing in completeness.

Within the conceptions (categories of description) themselves, a number of factors or aspects of variation, demonstrating themselves as phenomenographic "dimensions of variation" and listed below, could be considered to link and distinguish one category from another.

Key dimensions of variation are:

- 1) Student Profile
- 2) Position of EE in the curriculum and entrepreneurial culture

3) Value of EE

In Table 5.01 the aspirations of EE, along with the dimensions of variation which link and distinguish one category from another, are presented. The table outlines the logical evidence for the inclusive hierarchy.

Table 5.01. Outcome Space of Students' Aspirations from Entrepreneurship Education

Category of Description	Dimension of Variation		
	Student Profile	Position of EE In The Curriculum And Entrepreneurial Culture	Value of EE
EE should prepare students to be enterprising graduates	External locus of control	<ul style="list-style-type: none"> • Providing entrepreneurship courses and entrepreneurship programmes supported by government but not integrated into the university curriculum. • Unavailability of a conducive environment for practising business during study 	<ul style="list-style-type: none"> • Entrepreneurship as an alternative career • Entrepreneurial spirit • Employability skills
EE should prepare students to be graduate entrepreneurs	Internal locus of control, visionary	<ul style="list-style-type: none"> • EE as integrated curriculum • Availability of a conducive environment for practising business during study 	<ul style="list-style-type: none"> • Reflexive learning • Entrepreneurial competences • Personal development • Employability skills • Positioning strategy

Source: Author (2013).

1) EE should prepare students to be enterprising graduates

Within this category, EE has been expected to help students to have enterprising attributes. On the one hand, students in this category indicated their interest to run their own business sometime in the future. On the other hand, they are still influenced by normative beliefs about being full time entrepreneurs. They intend to combine the advantages of being employees in prestigious companies and having their own business. The former was considered to conform to social norms about careers, while the latter was

believed to warrant a long period of prosperity. In fact, this model is very common in Indonesian culture. The following excerpts indicate how students stated the reasons for initially being employees, while keeping the entrepreneurial spirit alive and executing it later in their lives, or being an employee as a main career while running a complementary business:

“My parents have raised me as an employee, so I prefer to be an employee in the automotive or aerospace industry despite my grandfather being an entrepreneur. When I am in my 40s or 50s I would like to have my own business as well. It will be the right time to start a business as networking and resources will be ready and established. I realise that a pension, even as a CEO, is not much. So it is important for me to have side income from my business.”
(S4a)

“I want to get a job in a bank but I want to have my own business too. What motivates me is that I want to succeed from the financial aspect and make my parents happy with my career in a bank.”
(S7c)

Students in this category can be categorised as persons who have an external locus of control. Parents are the main influence in students' career decision making. Parents also play a significant role when the choice of university is made. Since being an employee in established companies or prestigious sectors is the parents' career aspiration for their children, they will decide the best university to realise this, although they are aware that it might not align with the children's personality. However, it is not uncommon in Indonesian culture to comply with whatever parents order. The two following excerpts will indicate the strong influence of parents on students' decision making, including career and university:

“To be honest, it wasn't my choice to study at this university. It was my parent's request. Indeed, it doesn't suit me because, actually, I am a hyperactive person. I wanted to study at the Institute of Art. When I was at secondary school, I saw about it on TV. Actually, I am interested in business too. I do handicraft and entered

business with my brother in digital-designed mug. Unfortunately, my father discourages me from doing business during study. He is worried it will prevent me from getting good marks.” (S7e)

Students in this category acknowledged that providing entrepreneurship courses is not sufficient to prepare students to face challenges after graduation if they simply teach them how to write business plans. However, entrepreneurship courses were still considered to benefit them as they invite entrepreneurs to tell dramatic stories related to their journeys as entrepreneurs. The availability of this type of role model has been evidenced to lead to an increase in entrepreneurial spirit. The government has fortunately unveiled an entrepreneurship programme as a complement to entrepreneurship courses. Some students responded to this programme positively. They stated that it gives them the opportunity to experience experiential learning, including teamwork, business skills, creativity and opportunity recognition. The students believed that it would prepare them to face challenges in the workplace. Nonetheless, this government stimulant has not really been considered to be able to encourage students to start their own business immediately. Many factors can be mentioned, including parents, resources and courage. Indeed, since this programme is not integrated into the university curriculum, students find it difficult to cope with the conflict of interest between doing business and the demands of study. The university makes it impossible for students to deal with entrepreneurial projects or to run their own business without the fear that it will lead to getting low marks. Modes of study and university policy tend to inhibit students in pursuing business experiences during study. The following excerpts will indicate how students experience their entrepreneurial learning and the difficulties in continuing entrepreneurial projects during study:

“From entrepreneurship education I've got knowledge and insight about alternative careers in my field, architecture. I realised it after I attended an entrepreneurship course.” (S2d)

“I felt so motivated when my lecturer presented the entrepreneurs’

success stories. I was very keen, like them. Their spirit made me more confident and reduced my worries. I am aware of business risks.” (S5d)

“This entrepreneurship programme is really useful as I am acquiring knowledge about how to run a business, deal with many types of people in teamwork, and marketing skills. Of course, it relates to the skills needed in the work-place, including how to maintain relationships and business strategy.” (S7e)

“I have to stop this entrepreneurial project at the moment as I have to deal with my final assignments. I don't want to make my parents disappointed. This entrepreneurial project is not as important as finishing my studies.” (S6e)

2) EE should prepare students to be graduate entrepreneurs

Within this category, EE is expected to help students to realise careers as entrepreneurs or business leaders. Students consider these careers as a life path. Therefore, they devote all their efforts to attaining them. Having their own business is a means of expressing students' love about something. In addition, through business, students believe that they will be able to make a difference to society and personal wealth. The following excerpt will indicate how students perceive the economic, social and personal value of venture creation:

“After graduation, I am going to run my own magazine business, seriously. Otherwise, this idea will be out of date. Why? Because I love it. Actually I am typically perfect, pursuing freedom for my ideas. Indeed, it will create jobs for people who love to work in interior design. I aspire to found an Indonesian interior design magazine. I am sure if it will bring in a lot of income. I want to use all my capabilities, not simply do a job.” (S3c)

There are certain characteristics of students in this category. Having an internal locus of control and being visionary are the most two salient

characteristics. They know what they want for their future career and how to accomplish it. They are informed decision makers about career and place of study. They must ensure that the university chosen meets the criteria to enable them to pursue their career in entrepreneurship. It is common among Indonesian people to choose a university because of its 'state' status and because it is established, but this is not the case for the students in this category. Alignment with their entrepreneurial aspirations is necessary. The following excerpts will indicate the image of the student who has an internal locus of control when dealing with university choice and career aspiration:

“Actually, I was accepted to be a medicine student at Universitas Indonesia (one of the best universities in Indonesia, especially for medicine), but I thought that it wouldn't align with my aspiration to be a leader in a Fortune 500 company. Accordingly, I chose Universitas Ciputra (a new Indonesian university which claims to be an entrepreneurial one).” (S3a)

“After graduation, I plan to go to Beijing to study language for 6 to 12 months. I believe that language excellence, including English and Mandarin, is required to be a world-class entrepreneur. At the same time my online business will keep running.” (S3b)

Students in this category found that it was the university environment and its curriculum that contributed to their entrepreneurial learning. They insisted that it is important to combine theory and practice.

Entrepreneurship should be at the university core and should encourage students to transfer knowledge into marketable products. Universities should enable the entrepreneurship spirit to permeate every aspect of university learning, from the beginning to the end of study. There should be flexibility, including rules on attendance, modes of assessment, and industry choice for apprenticeship. Moreover, it is important to encourage students to meet as many as inspiring people as possible, inside and outside the university. Since the acceptance of a career as an entrepreneur should be the norm, it is necessary to provide peers and faculty members

as role models in relation to business achievement and business coaching. The following excerpts will indicate what students find as critical aspects in the university context in order to maximise entrepreneurial learning:

“Since the 1st semester students have become involved with entrepreneurship. In other universities, this starts in the 3rd semester. Indeed, I don't like theory. Fortunately, in this university, theory always relates to entrepreneurial projects. I am a member of an entrepreneurship association too.” (S3b)

“What has most impressed me is that I've got a nice mentor. I can see him any time I need support and advice. I've got great mates who are able to motivate me and be sparring partners, with great businesses. Indeed, having great close friends is so inspiring and precious. Here we talk about business everywhere, even in the canteen. When I visited other universities, it was so boring, as the students talked about unimportant things. In the classroom I also saw the students without enthusiasm and the need for achievement. It is also interesting when I compare the main topics of discussion between students in this university and others. While we focus on the 'marketing aspect' of the product, they focus on the technical aspect.” (S3a)

“There are pure subjects and applied subjects. The latter relate to the marketing aspect of knowledge. It means that a good knowledge should produce a marketable product. When talking about apprenticeship, this university offers flexibility to choose the place and there are many alternatives in order to suit students' interests. In other universities, there is no choice.” (S3c)

When arriving at the discussion about the value of EE while studying at university, students in this category believed that it really prepares them to be graduate entrepreneurs. The first thing that they stated as the value of EE is reflexive learning. This kind of learning forces them to make a high commitment and cope with time management. Accordingly, students found

that EE also benefits personal development, employability skills and entrepreneurial competences. Eventually they believed that EE has prepared them to face challenges after graduation and enhanced self-efficacy to start their own business or simply be self-employed. It is also interesting that the excellence of EE can be considered as cutting edge for a university in the competition to obtain students. In other words, it has been evidenced that EE not only benefits students but also the university itself as part of its positioning strategy. Given the student and university profiles along with the perceptions of the value of EE, it can be concluded that the ability of EE to prepare students to be graduate entrepreneurs is a higher aspiration than simply preparing them to be enterprising graduates.

“I feel like a mature person, as if I am working at a company. At UC, mainly the Business School, we have to study and engage in projects as well. I always do it as if they are real jobs. Accordingly I always deal with them seriously. I do believe that entrepreneurship education will lead my job or business in the right direction. Our business is not simply 'me too'. We think creatively. I am very sure it is impossible not to have a job after graduation. What impressed me most is that a business must suit our passion. I struggled with my project before but never gave up to find my passion from this business.” (S3e)

“I chose this university because of its tag line: Creating world class entrepreneurs. Since I was in secondary school I have wanted to be here. I don't like simply learning about theory. I never go home early because I am always working on my project till night. I am very sure if I am serious, learn and learn I will be successful. I went to another country for a business competition. As a result I was often absent from lectures. But it's no problem as all exams are open book. I am still getting good marks. People may not be aware that the excellence of this university's students is their ability in selling. They sell themselves. We formed a competent group. I sell unique bags and I had to find out mates who have a capability in marketing, financial and design. It is a rule that a

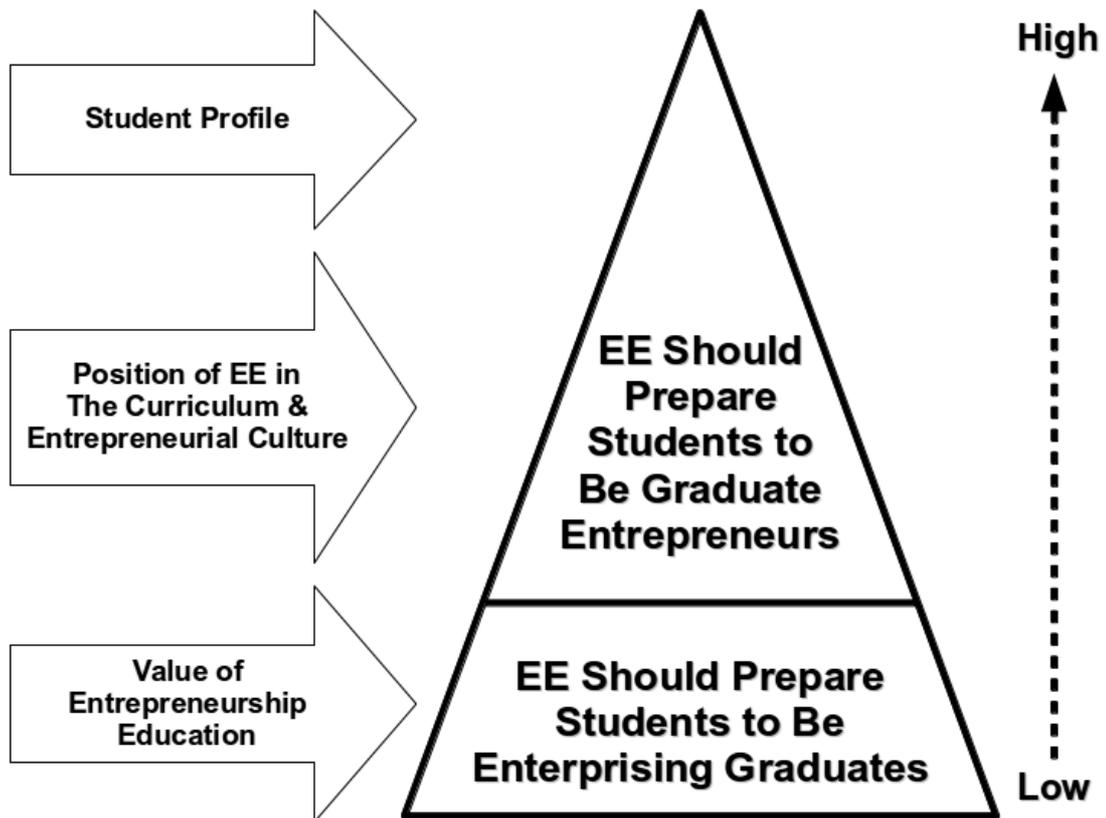
competent person should choose competent partners too. I knew about this from project one.” (S3b)

“We are superior in communication skills. When dealing with bids, we are able to beat other universities. Although they are superior in technology aspects, we are able to assure clients. It is what clients look for when making business partnerships.” (S3a)

5.2.2. Summary of students' aspirations categories

These categories should be considered as the students' collective mind as they were constituted from all the data from the interview transcripts. Both categories represent an inclusive hierarchy from "Entrepreneurship education should prepare students to be enterprising graduates" to "Entrepreneurship education should prepare students to be graduate entrepreneurs". Based on the themes of expanding awareness it is obvious that the second category is a higher aspiration of entrepreneurship education than the first one, as it requires a higher profile both of students and institutions in order to attain the ultimate goal of entrepreneurship education: Being not only enterprising but also being entrepreneurs. Figure 5.01 shows the hierarchical structure of the categories of description. In the discussion section it will be indicated whether or no these categories support the previous research in the area of EE and how these categories make a difference to the EE body of knowledge. In addition, since senior management's aspirations for EE were collected, it would be interesting to analyse these aspirations from the perspectives of the stakeholders in EE. However, it is imperative to compare and contrast between faculty members' aspirations for EE and those of the students. It is hoped that a more complete understanding of aspirations for EE in the Indonesian context will emerge.

Figure 5.01. Students' aspirations of entrepreneurship education



Source: Author (2013).

5.3. Variations in faculty members' aspirations for entrepreneurship education

5.3.1. Categories of description

The analysis of the interview transcripts found the set of categories that describes the variations in the faculty members' aspirations for EE:

- 1) EE should prepare students to run high-growth companies

- 2) EE should prepare students to have employability skills

As suggested before, all categories are internally related and indicate the 'collective mind' of the faculty members on which simultaneity, variation and discernment were based. Using the empirical data within the transcripts, the details of each category will be discussed. The meaning and the logical and empirical structure of the categories were constituted by stating the themes of expanding awareness. Accordingly, the aspects of critical variation and the structural relationship between the categories can be highlighted. The two distinct categories which describe the variations in the faculty members' understanding of aspirations for EE are related in an inclusive hierarchy, increasing in completeness.

Interestingly, the dimensions of variation which emerged in the sample of students cannot be applied to the faculty member sample. The following themes indicate how EE should help students to attain future success:

- 1) Perceptions of entrepreneurship, EE, and the role of HEIs
- 2) Focus of Entrepreneurial Learning
- 3) Standard of Students/Alumni Success

In Table 5.02 the aspirations of EE, along with the dimensions of variation which link and distinguish one category from another, are presented. It outlines the logical evidence for the inclusive hierarchy.

Table 5.02. Outcome Space of Faculty Members' Aspirations for Entrepreneurship Education

Categories of Description	Dimension of Variation		
	Perceptions of Entrepreneurship, Entrepreneurship Education, and the Role of HEI	Focus of Learning	Standard of Students/Alumni Success
EE should prepare students to have employability skills	<ul style="list-style-type: none"> • Entrepreneurship is not doing business • EE is aimed at developing innovative behaviour • HEIs should contribute to students' success in any area of working life 	Embedding hard and soft skills in relation to the field of study	Having entrepreneurial attributes, employed by established companies
EE should prepare students to run high-growth companies	<ul style="list-style-type: none"> • Entrepreneurship as a solution for national economic problems • EE is aimed at developing more and higher quality entrepreneurs • HEIs should contribute to the creation of high quality entrepreneurs who can run high-growth companies 	Business experiences; embedding the hard and soft skills needed to run business	Business start-up, entrepreneurial capacity, size of business

Source: Author (2013).

1) EE should prepare students to have employability skills

Within this category, EE is expected to help students to realise a career in any kind of working life. Faculty members in this category believed that this outcome is most suitable for EE in tertiary education. Entrepreneurship was understood as attributes including ability in problem solving, having one's own target and being an innovative person. It was suggested that the term 'enterprise' be used rather than 'entrepreneurship', since the latter was understood as business activities, mainly selling products. Therefore, instead of simply creating business people, they suggested imparting innovativeness as the main focus of EE. Innovative or enterprising graduates are necessary, since they will be a source of competitive advantage for organisations and the nation. Having enterprising attributes

leads to students' success in the future. The following excerpts will indicate what faculty members considered to be the relationship between entrepreneurship and the EE paradigm and its strategic outcome:

“I distinguish between enterprise and entrepreneurship. As enterprise is about attributes, innovation will be crucial, whereas entrepreneurship is about selling things. Entrepreneurship education shouldn't train students to be businessmen, but innovative people, since innovation is a source of company advantage. Graduate entrepreneurs are not necessary, but being innovative is sufficient. Innovative persons will suit any area of working life.” (L4a)

In order to accomplish the ideal objective of EE, faculty members in this category insisted that understanding EE as a continuous process is necessary. Therefore, it must be integrated into the curriculum. It must be noted that the model of learning should not be confined to business-oriented activities. Imparting hard and soft skills must be related to general academic activities. During engagement in an entrepreneurial project, the emergence of creativity was considered to be more important than simply its profitability. The following excerpts indicate what faculty members considered to be the main focus in entrepreneurial learning:

“I drew up a scheme for EE. In my framework, entrepreneurship education must be continuous. At the undergraduate level, it must be co-curricular. In the first year, hard and soft skills must have already been embedded. If they haven't yet been, for instance the self-confidence attribute, IT can be used, through which students must search journals, prepare a journal article and present it. Therefore in the first year, the output is writing a scientific journal article and presenting it. In the second year, there should be an apprenticeship to create the mindset to be a researcher. In the third year, studies will be aimed at creating an applicative researcher. The fourth year will focus on community development (social or business enterprise).” (L4a)

“In the entrepreneurship course, students held an event which involved sponsorship and sharing money. The event was very successful as it made a profit. But the most important message is instead of money or profit, we should sell ideas. At the end of the semester there is project exhibition.” (L2e)

Based on the reasons previously stated, faculty members in this category will be proud if their alumni are employed in established companies or institutions. It is evident that enterprising attributes will be determinants of graduate success as they are what employers look for. It will be expected that students are able to show these attributes during engagement in entrepreneurial projects.

“I was a mentor for a student creativity programme. My students who won this programme are working in big companies. I am very sure that they attained their prestigious positions because they have excellent competencies and characters.” (L4a)

“What I consider as an important impact of entrepreneurship education is the emergence of self confidence, mainly in problem solving. I found many great students who learnt leadership and computer skills from the entrepreneurial projects. During the event, students are required to be able to use all their abilities.” (L2e)

2) EE should prepare students to run high-growth companies

Within this category, EE is expected to help students to realise careers as entrepreneurs who are able to run high-growth companies. This aspiration of EE seems to be based on the belief that Indonesia needs many more entrepreneurs. Indonesian higher education should be able to produce high quality entrepreneurs in order to contribute to job creation. An emphasis on the capability to run high growth companies is considered to be value added by education. What faculties believed as the contribution of the number of high quality entrepreneurs appears to align with the economic paradigm of entrepreneurship. The following excerpts will indicate what faculty members considered to be the relationship between

entrepreneurship and the EE paradigm and its strategic outcome:

“Entrepreneurship is considered as a solution for national economic problems so it is necessary to create more entrepreneurs who will create jobs, at least not looking for job after graduation. Accordingly, the founder of this university decided to employ an entrepreneurial paradigm.” (L3b)

“I aspire for my students to be able to run high growth companies in the information area. It is necessary in order to distinguish educated from uneducated entrepreneurs. The latter usually engage in simple selling activities in which soft skills are sufficient.” (L3e)

“From the beginning, universities and entrepreneurship education aim to develop students to be graduate entrepreneurs who run a business start-up during their studies. Eventually, after graduation they will be able to run their own business.” (L3c)

It has been acknowledged that a university's vision will guide what students should acquire during and after studying at the university and being involved in EE. Faculty members in this category stated that entrepreneurial learning should be aimed at creating opportunities for students to deal with business experiences. Involvement in running business must be compulsory and integrated into the university's curriculum. In addition, it is necessary for faculty members to encourage students to enlarge their business size. As a result, this model of entrepreneurial learning will lead to the emergence of graduate entrepreneurs. It should be noted that their quality might vary, depending on students' overall quotients. It is interesting when their counterparts in other universities are proud if alumni are employees in well-known companies or institutions, faculty members in this category have different criteria to gauge educational success. Since entrepreneurship has been at the university's core, then the number of start-up businesses and size of business will be a source of faculty members' pride. Faculty members in

this category believed that this success will be accomplished if the entrepreneurial capacity has been embedded during entrepreneurial learning. This kind of capacity should encompass the hard and soft skills needed to start and manage a successful business.

“What is expected to be the impact of entrepreneurship education is that hard and soft skills will be embedded during study. The quality level, however, will depend on IQ, EQ and SQ.” (L3b)

“Final assignments, mainly in the Business School, are based on their business project. In the 5th semester students must start their business and continue with it until the 7th semester. Having one's own business is the main target for Business school students. I always encourage them to pay their own tuition. Therefore they must be able to earn at least two million per month but I push them to get ten million per month.” (L3c)

“In the Business School, all graduates have their own business and are able to hire employees.” (L3c)

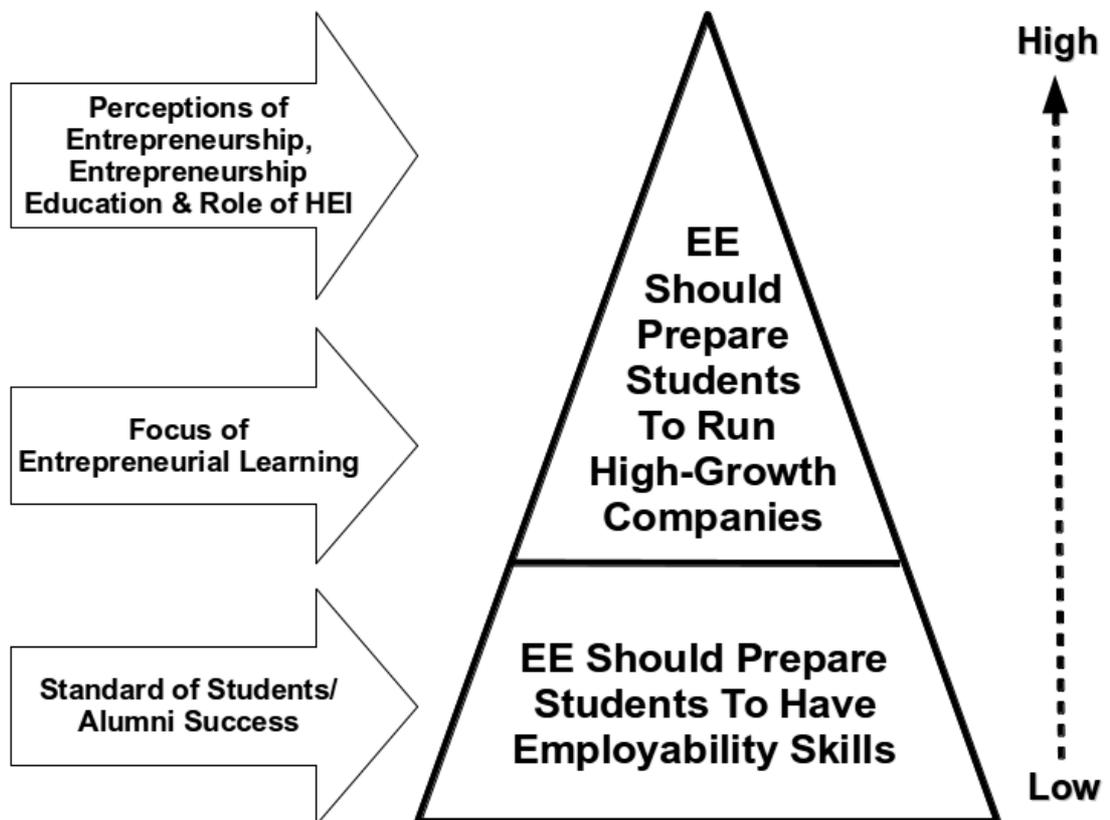
“Success of entrepreneurship education should be measured by longitudinal research. However, evidence exists, including business start-up (mostly from the Business School) and entrepreneurial capacity. I am sure that the curriculum is successful in equipping students to face the challenges after graduation.” (L3b)

5.3.2. Summary of faculty members' aspirations categories

These categories should be considered as faculty members' collective mind as they were constituted from all the data from the interview transcripts. Both categories represent an inclusive hierarchy from "Entrepreneurship education should prepare students to have employability skills" to "Entrepreneurship education should prepare students to run high-growth companies". Based on the themes of expanding awareness it is obvious that the second category is a higher

aspiration of EE than the first one, as what is considered as the impact of EE in the second category subsume the first one. In addition, the first category considered the highest and most significant impact of the emergence of high quality graduate entrepreneurs, on society and the country. Figure 5.02 shows the hierarchical structure of the categories of description. The discussion section will indicate whether or not these categories support the previous research in the area of EE and how these categories make a difference to the EE body of knowledge. In addition, since the senior management's aspirations for EE were collected, it would be interesting to analyse these aspirations from the perspectives of these stakeholders in EE. However, it is imperative to compare and contrast the faculty members' aspirations for EE and those of the students. It is hoped that a more

Figure 5.02. Faculty members' aspirations of entrepreneurship education



Source: Author (2013).

complete understanding of the aspirations for EE in the Indonesian context will

emerge.

5.3.3. Comparison of students and faculty members aspirations of entrepreneurship education

As stated previously, the sample of student stated that EE should prepare them to be enterprising graduates or graduate entrepreneurs. The latter has been considered as the higher aspiration. From the sample of faculty members, it was found that EE should enable students to have employability skills or to run high-growth companies. It seems that the latter is also the higher aspiration. It is interesting that the category "Entrepreneurship education should prepare students to be enterprising graduates" seems to be comparable with "Entrepreneurship education should enable students to have employability skills". In these categories, both students and faculty members agreed on the value of being employed by established companies. Nonetheless, students acknowledged that they still had the intention to run their own business until they were ready to do so. Students argued that the unavailability of a conducive environment where starting and running a business is a norm is a possible factor for delaying set-up.

The second category in both samples also seems to be comparable. When students' motivation, along with their profile and type of entrepreneurial learning, are taken into account, faculty members' aspiration – preparing students to run high-growth companies – is more likely to achieve. It can be argued that students who aspire to be entrepreneurs will find it impossible to be satisfied as small business owners for long. Therefore, it can be concluded that although there is some difference between students and faculty members in relation to "themes of expanding awareness", it can be suggested that agreement does exist. Preparing students to be high quality entrepreneurs should be considered as a higher aspiration of EE than simply equipping them with employability skills or training them to be enterprising graduates. It would be useful to discuss this finding more deeply in relation to recent debates in the EE area.

5.4. Discussion of students' and faculty members' aspirations: Challenging senior management's views and previous studies

In this section all the categories found, along with logical evidence for the inclusive hierarchy, will be discussed. Senior management's perspective of EE needs to be included and debate in the field of EE also needs to be revisited. As stated previously, based on analysis of the similarities and differences between students' and faculty members' aspirations, instead of discussing each category it would be useful to discuss a combination of the two.

5.4.1. Entrepreneurship education should prepare students to have employability skills or to be enterprising graduates

From the combination of categories which were stated by students and faculty members, there are some important debates which need to be addressed:

1) Are enterprising graduates necessary? Why?

An enterprising person can be described as "pioneering, adventurous, daring, go ahead, progressive, opportunist or ambitious" (Roget, 1982 cited in Gibb, 1993, p.14). Whilst the Oxford dictionary defines enterprise as "an undertaking" especially a bold or difficult one, or simply "courage" when it is applied to the personal quality (Trippier, 1984). An enterprising person, therefore, can be considered as a person who has the spirit of enterprise, including the willingness to take initiative and risk, to be creative, and to learn to be independent (Tripper, 1984; Rabbior, 1990). The emergence of enterprising people is crucial for every nation, as there have been significant changes in relation to technology and types of employment. Gibb (2002, 2006, 2007) argues that enterprising attributes and skills behaviours are needed by all people, as workers, consumers and family/community members are facing complexity and uncertainty caused by globalisation. Although it has been widely accepted that these qualities are required in any kind of work or career, it has also been argued that the current educational system has resulted in the disappearance of this spirit (Rabbior, 1990). In the context of higher education, according to a

Confederation of British Industry report (CBI/UUK, 2009, cited in Culkin and Malik, 2011), it is necessary for graduates to have employability skills which encompass the attributes to succeed in the workplace as a complement to strong academic and technical knowledge.

Recently the importance of providing students with the opportunity to accumulate transferable skills that can be practised in any organisation context has also been suggested by Solesvik *et al.*, (2013). Rather than simply giving students a handful of transferable skills Yorke (2004), however, argues that employability skills should lead to building capable students. This type of student, borrowing the idea of capability from Stephenson (1998), will be confident in demonstrating their ability in relation to: (1) taking effective and appropriate action (2) explaining what they are seeking to achieve (3) living and working effectively with others, and (4) continuing to learn from their experiences, both as individuals and in association with others, in a diverse and changing society (Stephenson, 1998, p.2 cited in Yorke, 2004, p.12). Knight and Yorke (2002) define graduate employability as:

“... being the possession of the understanding, skills and personal attributes necessary to perform adequately in a graduate level job.”
(Knight and Yorke, 2002, p.261).

This will therefore lead to the second question:

- 2) What factors can contribute to higher education's ability to deliver employment-ready graduates?

Referring to the highest category of EE perception discussed in Chapter Four, it is through entrepreneurial learning that enterprising attributes will be developed. In the Indonesian educational system, however, deficiency in learning is apparent, including a heavy emphasis on cognitive attainment and separating knowledge from its application or the real world (Raihani, 2007). EE, according to From (2006), can be considered as “a manifestation of something that traditional education in a sense has already left behind” (From, 2006, p.10). Gibb (2002) suggests that EE challenges the ontological and epistemological stance of existing

education. From an ontological perspective, entrepreneurial learning requires “an approach to a holistic human being (emotions, values and interest are considered) and a move away from the human being viewed as an objective rational thinking decision-maker” (Kyro, 2000, cited in Gibb, 2002, p.252). From an epistemological stance, EE should focus on the following aspects of learning:

- a) The social, contextual and cultural aspects of learning should be considered
- b) The organisation of knowledge should be examined
- c) The source of learning and the creation of the capacity to learn how to learn in different ways and from different sources should be scrutinised
- d) The reinforcement of enterprising behaviour through pedagogy should be emphasised
- e) The knowledge base should be broadened and integrated
- f) The feelings and motivation in learning should be recognised (Gibb, 2002, p.253).

Given the ontological and epistemological stance already suggested, entrepreneurial learning should be characterised by:

- a) action, or learning by doing, which should take place through grappling not with puzzles, but with real work; such an approach carries a significant risk of penalty or failure.
- b) an experiential and reflective process "where the personal experience of the entrepreneur is transformed into knowledge, which in turn can be used to guide the choice of new experience" (Politis, 2008, p.53).

Although a start-up business, which represents a learning by doing method, has been acknowledged to be the best way to facilitate entrepreneurial learning (Gibson, Scott and Harkin, 2009; Johannisson Halvarson and Lovstal, 2001; Neck and Greene, 2011; Vincett and Farlow, 2008), some scholars argue that it provides more challenges and

resistance inside a university (Gibb, 2007; Hegarty and Jones, 2008; Jones, 2010). They propose alternative ways, which are not directly linked to business creation. Gibb (2007) insists that a non-business creation model offers advantages since it focuses on "the development of personal capacities rather than business knowledge per se, the imaginative use of knowledge and integration of knowledge across disciplines and the notion of relevance and integration rather than pure discovery and teaching" (Gibb, 2007, p.87).

Gibb's notion has been supported by Knight and Yorke (2002), who propose a Skills Plus project based on the USEM model which is aimed at embedding employability. Since "employability can be embedded in any academic subject in higher education without compromising core academic freedom" (Knight and Yorke, 2002, p.261), then preparing students to have employability skills or being enterprising graduates is a more preferred aspiration of EE.

However, it leads to the next question:

3) Is being an enterprising graduate enough? Why?

This notion, often called the societal value of EE (Jones, 2010), has gained favour as it has been evidenced that only a minority will become graduate entrepreneurs and after a considerable time lag of up to ten years after exiting the university environment (Hannon, 2005). This means that the vast majority of graduates will work within an existing organisation. In addition, Jones (2010) argues that a programme where its graduates are directed to start a business immediately after graduation is not achievable for the vast majority since it demands a high resource profile (social, human, and financial capital). Indeed, all these rationales should not overlook another huge problem, unemployment. With regard to this issue, Watts (1984) warns that:

“... It could smuggle in the notion that if only young people were enterprising enough, there would be no unemployment.” (Watts, 1984, p.5)

Accordingly, Watts (1984) suggests an interesting idea:

“Putting it crudely, taking more steps to encourage young people to think about creating their own work could lead to the notion that those who do not do so are feckless, and that their levels of benefit should be reduced” (Watts, 1984, p.5)

Therefore it can be concluded that simply preparing students with enterprising attributes is insufficient and ineffective. Hartshorn (2001, p.221) argues that there is a critique of the broad dimension of EE as "all things to all people, useful to no-one". Furthermore, Watts (1984) insists that:

“... it could simply feed the fallacious notion that youth unemployment is due not to economic forces and the political responses to those forces, but to the inadequacies of young people.” (Watts, 1984, p.5)

A new focus to EE has emerged. Students should be equipped with "entrepreneurial ways of thinking and acting as a specialist set of skills" in order to be ready to embark on entrepreneurship career rather than preparing them to "become adaptable and flexible" to satisfy the needs of labour market with "generic and transferable skills" (Black, Curbin and Warburton, 2003, p.5).

In the UK in the early 2000s the National Council for Graduate Entrepreneurship was launched to enhance the number and sustainability of graduate start-ups. This initiative was significantly different to the old agenda launched in 1987 (an Enterprise in Higher Education initiative) which aimed at ensuring all graduates were equipped with the capabilities demanded by employers as they enter the labour market (Nabi, Holden and Walmsley, 2010). This means that the promotion of entrepreneurship focused specifically on venture creation has been evolving. It has also been suggested by Wissema (2009) that starting one's own enterprise, selling it after a number of years and then joining a corporation can be a better route to the top of a corporation. For the corporation, according to Wissema (2009), it is much more attractive to hire former entrepreneurs than studious MBA students, who may be good analysts but not necessarily good business leaders; the former entrepreneurs have proven themselves in the market and know the ins and outs of entrepreneurship.

5.4.2. Entrepreneurship education should prepare students to be entrepreneurs who are able to run high-growth companies

From this combination of categories, there are some important debates which need to be addressed:

1) Is preparing students to be graduate entrepreneurs necessary? Why?

Since the 1980s the world's economy has been characterised by a dramatic change toward an "entrepreneurial" economy (Kasarda, 1992; Grilo and Turik, 2005), in which knowledge and ideas have replaced the traditional inputs of natural resources, labour and capital as source of economic growth. At the customer level, there is need for more customised and knowledge products than those of the past (Formica, 2002). It has been believed that only educated entrepreneurs who are used to dealing with technology and marketing can meet this requirement. Indeed, it has been acknowledged that entrepreneurs always have a way for being found in society (Baumol and Storm, 2010). Nonetheless, graduate entrepreneurs will have superiority over uneducated or lower educated ones, since the former are more likely to be innovative and productive entrepreneurs (Baumol and Storm, 2010), to establish "opportunity" as opposed to "necessity" business (London Business School, 2004). The emergence of this kind of ideal entrepreneur who is able to recognise the best way of pursuing their career will benefit both themselves and society.

At a rough count, the world needs 1 million start-ups every year in order to offset the jobs lost in mature companies. In the Indonesian case, during the period 2003 to 2008, the statistics show that entrepreneurs accounted for only 0.18% of the total population (Sembiring, Sandjaja and Antonio, 2011). For a country with a population of over 250 million people, this is a dismal figure. Experts believe that at least 2% of a country's population should be engaged in creating innovative, high-growth ventures (Ciputra, 2009). Two million entrepreneurs is needed in order to reduce unemployment.

However, there is sceptical attitude toward the emergence of high quality entrepreneurs from higher education. The critique from Cross (cited in

Scott, Rosa and Klandt, 1998) is an example. He argues that it is the business environment, mainly in innovative industry sectors, not universities, which can motivate potential entrepreneurs with the experience and business knowledge to start new businesses. More specifically, Johannisson (1991) argues that because of the limitations in both time and scope it is impossible for business schools to teach their students to be entrepreneurs. What Cross and Johannisson claim has been supported by Birch (cited in Aronsson, 2004), who states that business schools teach students the opposite of entrepreneurship. It is surprising that one of the Indonesian universities has succeeded in creating great graduate entrepreneurs. Accordingly, this fact can question what the scholars believed about a university's or business school's capability to create entrepreneurs. A statement from one of the interviewed senior management tried to dispel the doubt:

“Mr. Ciputra (a well-known Indonesian entrepreneur) had the ambition to found a university. Since he wasn't an academician, a university characterised by entrepreneurship was the right choice. It can be claimed that we are able to meet government academic standards in relation to knowledge. Indeed, we are so confident that as a small and new university we have shown superior performance especially in the emergence of a conducive atmosphere for academic work as well as entrepreneurship. For example, there is a Business School student whose business has had sales of 300 million rupiah.” (SM3).

Ciputra (the founder of Universitas Ciputra) has a dream that by 2015 four million entrepreneurs can be created. This number would represent at least 2% of Indonesia's population and lead to better economic sustainability (Sembiring, Sandjaja and Antonio, 2011). This aspiration seems to align with the logic of EE suggested by McMulan and Long (1987). EE should correspond more to the aims of economic development, including company creation and job creation, the kind of company and jobs, the company's ability to achieve growth and to compete internationally, and the company's contribution to the local economy (McMulan and Long, 1987, p.266).

This therefore leads to the second question:

- 2) What factors can contribute to higher education being a source of high quality entrepreneurs?

It has been suggested that being and producing great graduate entrepreneurs are high aspirations and can only be achieved if students and faculty members have the collective dream or vision about the critical need for any society to generate more entrepreneurial behaviour and more people who create and share the wealth (Filion and Dolabela, 2007). With regard to EE, the question arises of what ambition will be reached from the educational process (Jones, 2010). Eventually, the answer will determine the course content and pedagogics in order to meet such an ambition (Johannisson, *et al.*, 2001).

An entrepreneur is "someone who imagines, develops and realises visions" (Filion and Dolabela, 2007, p.15), so it is unsurprising if establishing a new business is considered as a very natural desire for all entrepreneurs. Embedding enterprise skills is not sufficient for students whose aspiration is to be an entrepreneur. These extra skills, according to Sewell and Pool (2010), should encompass:

"... the ability to generate creative ideas, take risks in implementing them and be motivated to get them off the ground."
(Sewell and Pool, 2010, p.91)

This seems to be in agreement with Filion and Dolabela (2007), who characterise entrepreneurs as:

"... individuals who are able to dream and able to organise themselves to make their dreams come true." (Filion and Dolabela, 2007, p.16)

Implementing entrepreneurial projects, according to Filion and Dolabela (2007), is a means for entrepreneurs to transform their dreams into reality.

EE, therefore, should be understood by both students and faculty members as serving the attainment of students' aspirations to be entrepreneurs.

Accordingly, during course where entrepreneurship skills must be practised in entrepreneurial projects, students will "fully commit to their own, real ideas and can actually be not just pretending to be entrepreneurs" (Vincett

and Parlow, 2008, p.277). The rule is that learning will take place if students are actively involved in the process (Johannisson *et al.*, 2001). This means that the overall learning experience during involvement in EE will encompass reflective practices (Neck and Greene, 2011). All the students in this study who aspired to be entrepreneurs seem to indicate all the characteristics of this entrepreneurial learning.

It has been acknowledged that students and faculty members, are primary stakeholders in EE (Birdthistle *et al.*, 2007; Jack and Anderson, 1999; Matlay, 2009). Hindle (2007) underscores the essential role of the key people in making EE effective by stating:

“... as Socrates demonstrated, critical imagination resides in people, not buildings or curricula or organisation charts or even books. So, the conclusion of my speculations returns to the key people: teachers and their students and how they might perform together.” (Hindle, 2007, pp.122-123)

Therefore, faculty members must be passionate teachers. Indeed, in this study, faculty members who aspire for their students to be great entrepreneurs have proved what the authors stated above. However, faculty members, according to Hartshorn (2002), are agents of the university itself. Therefore, faculty members' vision of EE may reflect the type of institution where they are working. Given the senior management's, students' and faculty members' statements previously mentioned, the relationship between the university's, faculty members' and students' vision seems to be clear. If a university declares that its vision is to create world-class entrepreneurs and commit to accomplishing the vision through credible course content and methods, it will then invite potential students who have a similar ambition and internal locus of control to join with.

It has been evidenced that students who have an internal locus of control and aspire to be great entrepreneurs will choose a university whose curriculum and environment are conducive and will support them in accomplishing their aspiration. This finding aligns with what Testa (2011) found in her research, that certain characteristics of the target market are required by EE programme where the founder is an entrepreneur. She insists that:

“... we cannot turn a student with no entrepreneurial attitude into an opportunity-seeker, risk taker and money-making genius.”
(Testa, 2010, p.245)

In this study, it seems that the aspiration to be an entrepreneur can flourish if the desirability and feasibility of entrepreneurship as a career path is provided by the university's environment. Universities, as part of the social system, should place high value on new ventures creation, along with innovation, risk taking and independence values in order to encourage students to choose an entrepreneurial career (Shapero and Sokol, 2002). Furthermore, Birch (in Aronsson, 2004) suggests that a university's environment must celebrate student/graduate entrepreneurs and their success. Accordingly, it will enhance the talent pool of entrepreneurs from higher education. The fact that all students and alumni of UC Business School in Indonesia run their own business and aspire to be world class entrepreneurs seems to challenge a statement from Scott, Rosa and Klandt (1998), which underestimates the capability of the university environment to be a source of high quality entrepreneurs. It also challenges a statement from a senior manager, who argued that it is difficult for business schools to produce entrepreneurs unless the students are Chinese:

“It's difficult for me to believe that Business Schools will be able to produce business entrepreneurs. The phenomenon in Universitas Ciputra, where the majority of Business School students are business entrepreneurs, is an exception. They are Chinese, whose families fully encourage them to do so.” (SM5)

It has been evidenced that classmates and mentors are powerful influences on students' perceptions of desirability and feasibility (Shapero and Sokol, 2002). In this study some students stated that great classmates and mentors in business will play roles of convincing, assuring, and instructing for being great entrepreneurs. One student also acknowledged that these roles will be needed especially when no parents' support is available. For Rae and Carswell (2001), entrepreneurial learning is a matter of relationships. This means that the availability of peers and

mentors who are great business people enables a continuing process of students learning not only on their own, but also from others' experience (Rae and Carswell, 2001). All academic staff, including the rector, admired their students' achievements in different ways from other universities where the entrepreneurship culture is weak. People at entrepreneurial universities, will be pleased to mention the size of business and the number of outlets or employees hired to be the students' credit. In contrast, at established universities, high involvement and achievement in business during study is considered as a significant threat. The following quotation from an associate rector will indicate this concern:

“Don't let students be fully engaged with entrepreneurship activity, or they will not finish their studies on time or get low marks. The university accreditation will be in danger. It is not impossible for this type of student to drop out when they love their business more than their studies. It is a disaster for this university, as parents send their children to this university in order to be scholars.” (SM4)

5.5. Chapter summary

These categories describe the aspirations of EE from students' and faculty members' points of view. The sample of students could be categorised as equally ambitious as faculty members. They seem to be in agreement that preparing students to be graduate entrepreneurs who are able to run high-growth companies is a higher aspiration than simply preparing them to be enterprising or have employability skills. This aligns with Johannisson (1991), who insists that the education systems should have the ambition to prepare students to "become not only more enterprising", but also business people. It is the third generation university (3GU) which adds entrepreneurs to the list of students to be educated (Wissema, 2009). Although there is a little disagreement regarding the themes of expanding the awareness of students and faculty members, the two outcome spaces allow for a richer understanding of the aspirations of EE according to the sample of students and faculty members. Therefore, it can be summarised that

seven senior managers in this study can be categorised into two groups, based on their views of EE aspirations: One group consists of senior managers who support the notion that EE should prepare students to have enterprising attributes, while the other group consists of senior managers who believe that EE should prepare students to be graduate entrepreneurs.

The implication of this result is obvious, as if there is alignment between students' profile, faculty members' vision, organisation and the expected value of EE, then it is most likely that great entrepreneurs will emerge from higher education.

Preparing students to be graduate entrepreneurs who can run high-growth companies requires potential students to show talent and a high motivation to be entrepreneurs. Indeed, this type of student tends to have an internal locus of control. Pull factors seems to be the trigger for starting their own business. Arguably, a screening test to ensure that these requirements are met is necessary.

An entrepreneurial university has advantages over its counterparts who have teaching and research as their vision. Since the integration of EE into the university curriculum and a conducive environment for practising business during study is allowed, an entrepreneurial university will be able to attract potential students with similar ambitions in entrepreneurship. In this case, it is the combination of high quality input and high institutional commitment that can produce high quality graduate entrepreneurs. It is not only in how EE is organised, but also how its impact is measured, that an entrepreneurial university can distinguish itself from traditional universities. While traditional universities focus on employability as an indicator of EE success, entrepreneurial universities attach the importance of business start-up and size of business in order to prepare students to run high-growth companies later.

At least EE can create enterprising graduates, which society also expects to be an indicator of higher education performance. It has been widely accepted that there is strong demand for entrepreneurial universities around the globe. Having the aspiration to educate students to be enterprising, however, can be considered as a catalyst for organisational change towards being more entrepreneurial.

CHAPTER 6. EXPECTATIONS OF ENTREPRENEURSHIP EDUCATION: PHENOMENOGRAPHIC FINDINGS, ANALYSIS AND DISCUSSION

6.1. Introduction

This chapter is the third of three, which presents and discusses the findings from the analysis of the phenomenographic interviews, which were conducted for this study in order to answer the following research questions:

- 1) What are the qualitatively different ways in which students and faculty members expect to EE?
- 2) What are the similarities and differences of students' and faculty members' expectations of EE?
- 3) Is there any support from senior managements towards students' and faculty members' expectations of EE?

In the discussion relating to aspirations, it has been established that entrepreneurial learning should prepare students in terms of accomplishing their career ambition as an entrepreneurial employee or great entrepreneurs. There remain questions in relation to what and how all aspects (including students, faculty members and institutions) will be considered in order to achieve those aspirations effectively. Students' and faculty members' views were collected in order to provide a complete understanding. Using phenomenographic assumptions, the research findings will be presented, analysed, and discussed along with senior managements' views, as well as the recent debates in EE.

Throughout the interviews, faculty members and students were asked to discuss interrelationship between determinant factors, which will affect success of EE. The process of analysis was the same as that described in detail in Chapter Four, Section 4.2.

6.2. *The variations of students' expectations of entrepreneurship education*

6.2.1. Categories of description

The analysis of the interview transcripts established a set of categories that describes the variations in students' understanding towards the relationship between determinant factors of entrepreneurial learning, including students, faculty members, and institutions, to enhance the possibility of EE being fruitful:

- 1) EE and undifferentiated strategy for target market;
- 2) EE and differentiated strategy for target market.

It is suggested that all categories are internally related and indicate the 'collective mind' of the students as they are based on simultaneity, variation, and discernment.

The detail of each category will be described below with the use of empirical data within the transcripts. The meaning, as well as the logical and empirical structure of the categories, was constituted. Themes of expanding awareness, which were present in the data, were located in order to distinguish the aspects of critical variation and underscore the structural relationship of the categories. It should be noted that the two distinct categories describing variations in students' understanding towards the relationship between determinant factors of the effectiveness of EE are related in an inclusive hierarchy, increasing in completeness.

Within the conceptions (categories of description) themselves, a number of factors or aspects of variation, demonstrating themselves as phenomenographic 'dimensions of variation' and listed below, could be considered to link between and distinguish one category from another.

The key dimensions of variation are as follows:

- 1) Target market;
- 2) Relationship between content, role of theory, and spiritual values;
- 3) Relationship between method, role of student, and role of faculty member.

In Table 6.01, the expectations of EE, along with the dimensions of variation that link and distinguish one category from another, are presented. The logical evidence for the inclusive hierarchy is outlined.

Table 6.01: Outcome space of students' expectations of entrepreneurship education

Categories of description	Dimension of variation		
	Target market	Content, role of theory, and spiritual values	Method, role of students, and role of faculty members
EE and Undifferentiated Strategy for Target Market	All students	Entrepreneurial spirit and opportunity recognition	Entertaining, surface learner and entertainer
EE and Differentiated Strategy for Target Market	Students who are potential entrepreneurs	Business skills, personal development and reflection	Mentoring, deep learner and mentor

Source: Author (2013).

1) EE and undifferentiated strategy for target market

Within this category, it has been suggested that all students should be exposed to EE. It has been assumed that the basic value of EE, including EE as knowledge, entrepreneurial spirit, and creativity, are necessary for everyone notwithstanding discipline and career aspiration. It was also suggested that spiritual values, mainly Islam, should be emphasised in order to awaken students in regard to the important role of entrepreneurship and the entrepreneur. Indeed, in Islam, a career as an entrepreneur and entrepreneurial activity are encouraged and appreciated. Moreover, in the Noble Qur'an, God commands the building of a good relationship, which can be a basic knowledge and motivation for business venturing. It has been widely acknowledged that building a positive attitude toward entrepreneurship is a first important step; therefore, entrepreneurship success story seminars or lecturers hope to make students aware of entrepreneurship as an alternative career. A fact of high graduate unemployment can be another indicator as for why students

should not heavily rely on employment. Entrepreneurship theory or general theory remains useful as it was noted to lead to opportunity recognition. In this category, learning methods in entrepreneurship courses should be considered entertaining and inspiring. Whilst developing positive attitude towards entrepreneurship and entrepreneurship course is its main goal. Faculty members will be expected to occupy a central position in terms of attaining EE performance. Faculty members' ability in communication – rather than in running a business– will be more favourable; however, students still have to deal with entrepreneurial projects. Nonetheless, this is commonly viewed as play – not work. Accordingly, a positive attitude towards entrepreneurship will be considered as the possible impact of learning. The following excerpts indicate what and how students expect EE to be like:

“It is for all because it is so important. Despite students don't want to be entrepreneur at least they know what entrepreneurship really is.” (S1a)

“It is important for all students being exposed with entrepreneurship course. There are three possible results: Totally uninterested, very interested, and interested but not having courage to start.” (S3a)

“It will better for all students as they certainly need selling skills and profit. All disciplines need entrepreneurship because they should consider how to raise money.” (S3b)

“It would be worth holding entrepreneurship seminars and invite successful entrepreneurs in order to give students new insights. In my opinion, the success of business will depend on the availability of capital, access/network, and skills. But it should bear in mind [that] people seem not to have all things. Islam teaches us about networking in order to fulfil the gap. Therefore, religion provides invaluable guidance to encourage people to have entrepreneurial spirit. It would be good reminder as I believe everyone knows

about it. During attending an entrepreneurship course, asking students to think about themselves what they like, abilities, inabilities, however, is necessary. I am a Muslim – I always remember what Prophet Muhammad said: Muslim is leader. I apprehend this as a command to create jobs for many people. When I am graduated I don't want to look for a job. Although I realise that it is not easy to start a business.” (S1b)

“Apart from the availability of practice, good theories are still needed since they help students to find out business opportunities. They are really inspiring. Students will be aware of environment surround them not being kept in a limited area of their discipline. It is important to know about what is entrepreneurship, what business relating to our discipline, how to prepare a business plan. We have business trip in order to weaken our creativity. It was really very fascinating.” (S2c)

“My lecturers, Mr Doni and Mrs Isma, they are so nice. I am always impressed by their way of talking, their character and their chosen-topics. They were able to deliver entrepreneurship course in the simple way so we could accept it easy. During presentation, Mrs Isma provides many kinds of pictures in order to motivate us. We were also given a motivating individual assignment. In class we had to present and bring our products. It was so exciting and fun because teacher asked us to give a try for each product. After that we had to sell our products. I love entrepreneurship subject rather than the numeracy one. Teacher also brought us to visit a businessman who produced meatball tofu. He shared with us about his entrepreneurial journey and business strategy.” (S7e)

“A faculty member in an entrepreneurship course should be a great motivator, communicator. It isn't necessary for faculty members to have their own business, but how students looked about them with interest is required. I like my lecturer because he always share his experience. Indeed it motivated us.” (S5c)

2) EE and differentiated strategy for target market

Students in this category of description believed that the effectiveness of EE will be attained as students are willing to devote extra effort during entrepreneurship learning. Therefore, EE will be suitable for students who enjoy and who wish to be great business entrepreneurs. This is an interesting finding as university has been suggested as being aware of special students or groups of student in need of more challenges in their entrepreneurial learning. Even at university where entrepreneurship is its core, it still has to consider differences of learning needs amongst their students. Treating them as a niche or applying a one-to-one marketing strategy may prove useful.

The role of theory has been highlighted by students in this category as guidance throughout the course of doing business or helping them to carry out reflexive learning. Students expect the content of EE to encompass both skills required in running a business and social values of entrepreneurship. The latter aspect is essential when striving to eliminate negative impression towards entrepreneurs as merely 'homo economicus'. Since student involvement is triggered by ambition and love, the challenging method in entrepreneurship learning is warranted. This does not mean that theory will be worthless. Indeed, educated entrepreneurs are reflective practitioners; his/her conduct of business is guided by both intuition and profound scholarly knowledge.

It should be acknowledged that having students with excellent commitment is far from enough. Students in this category stated that the effectiveness of EE requires very strong involvement of faculty members and institutions. Students expect faculty members to be able to play multiple roles and have multi-expertise.

The following quotations indicate what and how students expect in regard to EE effectiveness:

"EE should be optional because students prefer learning either in-class or out-class. Running a business is like a journey started from zero. My friends chose the entrepreneurship course since it

had been considered an easy subject; they are bored by exact or numerical subjects like accountancy. I have a different reason as I am motivated by my curiosity of business. Of course, only students who have business will really show enthusiasm.” (S5d)

“It would be better if IBM (International Business Management) students are freed from entrepreneurship class to deal with their big project. It will make students focus on one project. IBM has an advantage as students must sell ideas and get funds from investors whilst other faculty must learn how to make a product first. I think movement in entrepreneurship class is slow.” (S3b)

“Don't simply practise, but theory must be provided. It is not simple to tell students ‘do your business’ without guidance from theory. It is not something useless. I will tell you my experience when I dealt with marketing campaign for my bed-cover store. I promoted it as exclusive product and low price. From STP (Segmentation, Targeting and Positioning) Theory, I realised that this strategy made customers confused. In addition, it is important not to let students think simply about money and profit when they are doing business. A mindset that entrepreneurship is broad in scope is needed. I realise that people consider students at this university to be concerned only with money, so it is important to have a course that will open students' minds and make a difference to their country.” (S3e)

“I don't like business motivators who always say, ‘just do it’. It is a foolish action. Risk must be calculated. It is true we should not take theory for granted, but don't overlook theory. I will tell you my experience when I attended a supply chain management class. It was taught by a faculty member who is a practitioner. From his explanation, I realised that I made a mistake in my business because of ignoring supply chain management theory. I wouldn't ever know why increasing sales is not followed by increasing profit if I hadn't learned about that theory.” (S3a)

“In my opinion, faculty members must have business and wide personal networks. Faculty members in this arena are able to act as a friend, but on other occasions may act like a boss. They teach us how to deal with people. It must be considered normal when customers yell insults at us. All projects have met my expectations. I feel like I am in a reality show because we don't know what is going to happen next. I am sure if we dig up continuously, seriously, search actively, I am very sure I will make it. Nonetheless, there is the need of some improvement –mainly in entrepreneurship class. At the third semester we must sell food and drink. I think it passes the time but is not worth anything. In contrast, in IBM we have projects that are characterised as high-profit projects.” (S3b)

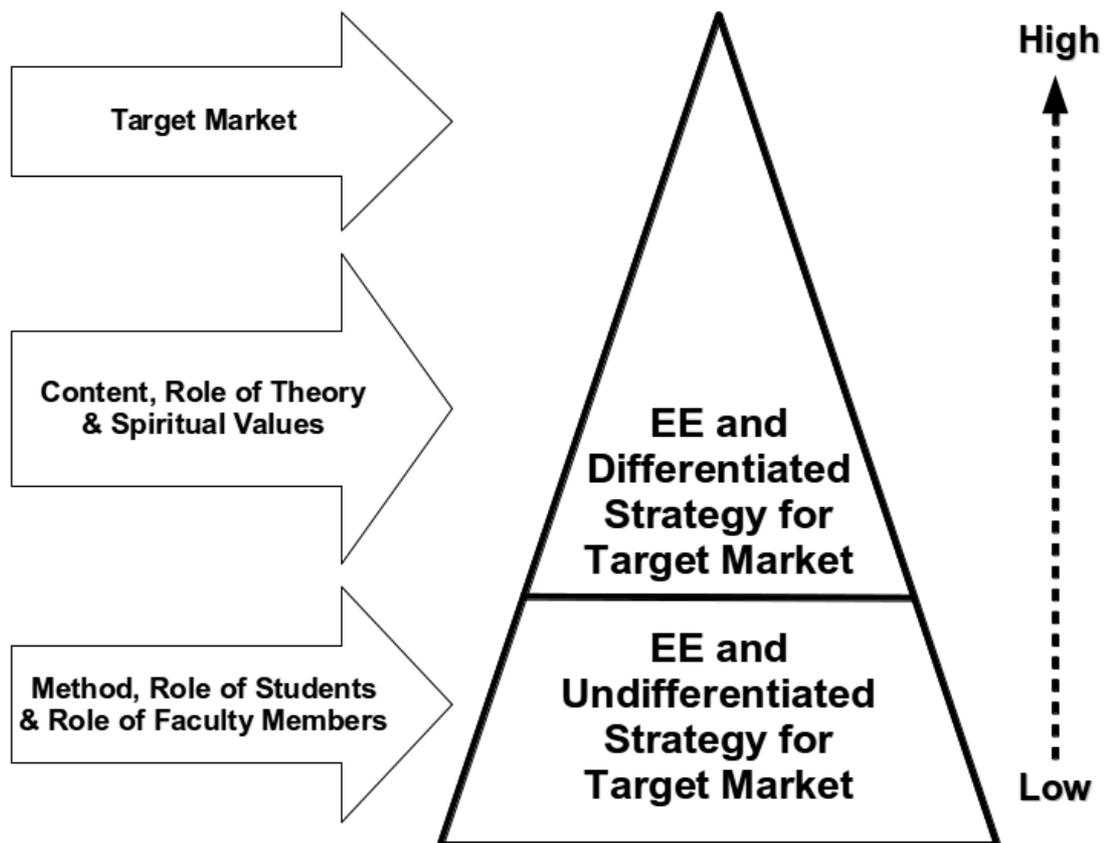
“I realise that they (faculty members) may not have enough time. As a result, we always experience difficulties in contacting them every time we have a problem. It isn't easy for them to afford to spend extra hours with us. This workshop needs faculty members who understand technical aspects. Faculty members should also have business experience and excellent network. Luckily, Mrs Yunia has a link to other universities; Mr Sutrisna has a link to industry. Mr Krisdiyanto deals with the psychology aspect (how to cheer us up when we almost give up).” (S1e)

6.2.2. Summary of students' expectations

These categories should be considered as students' collective mind as they were constituted from all of the data from the interview transcripts. Both categories represent an inclusive hierarchy from 'EE and undifferentiated strategy for target market' to 'EE and differentiated strategy for target market'. Based on the themes of expanding awareness, it is obvious that the second category indicates higher expectations of EE than the first as it requires higher education to realise that different market segments for EE exist. From a market-driven perspective, it is

necessary to acknowledge them and fulfil their specific learning needs, including content, method and faculty members' specifications. This means that the second category will demand a high level of institutional and/or faculty members' commitment. Figure 6.01 indicates the hierarchical structure of categories of description. In the discussion, it will be indicated whether or not these categories support the previous research in the area of EE, as well as how these categories make a difference to the EE body of knowledge. In addition, since senior managements' expectations of EE were collected, it would be interesting to analyse expectations from the perspectives of these stakeholders of EE. However, it is imperative to compare and contrast faculty members' expectations of EE and

Figure 6.01. Students' expectations of entrepreneurship education



Source: Author (2013).

those of students. It is hoped that a more complete understanding of expectations towards EE in an Indonesian context will emerge.

6.3. *The variations of faculty members; expectations of entrepreneurship education*

6.3.1. Categories of description

The analysis of the interview transcripts has established a set of categories that describes the variations in faculty members' understanding towards the relationship between determinant factors of entrepreneurial learning, including students, faculty members, and institutions ability to enhance the possibility of EE being fruitful:

- 1) EE and bottom-up strategy;
- 2) EE and top-down strategy.

It has been suggested that all categories are internally related and indicate the 'collective mind' of faculty members as being based on simultaneity, variation, and discernment.

The detail of each category will be described below with the use of empirical data within the transcripts. The meaning, as well as the logical and empirical structure of the categories, was constituted. Themes of expanding awareness that were present in the data were identified so as to distinguish the aspects of critical variation and underscore the structural relationship of the categories. It should be noted that the two distinct categories describing the variations in faculty members' understanding towards the relationship between determinant factors of the effectiveness of EE are related in an inclusive hierarchy, increasing in completeness.

Within the conceptions (categories of description) themselves, a number of factors or aspects of variation, demonstrating themselves as phenomenographic 'dimensions of variation' and listed below, may be considered to link to and distinguish one category from another.

The key dimensions of variation are acknowledged as follows:

- 1) Type of university
- 2) Key Success Factors
- 3) Values
- 4) Homogeneity of method.

As can be seen in Table 6.02 the expectations of EE, along with the dimensions of variation that link to and distinguish one category from another, are presented. It outlines the logical evidence for the inclusive hierarchy.

Table 6.02: Outcome space of faculty members' expectations of entrepreneurship education

Categories of description	Dimension of variation			
	Type of university	Key success factors	Values	Homogeneity of method
EE & Bottom-up Strategy	Established Non-entrepreneurial university	Faculty members' commitment	Religion values of faculty members	Most likely diverse
EE & Top-down Strategy	New and Entrepreneurial university	Institutional commitment	Founder Values	Most likely similar (project-based)

Source: Author (2013).

- 1) EE and bottom-up strategy

Within this category, it has been acknowledged that there is a situation where a high institutional commitment of EE is minimum or even altogether vacant. In general it takes place in universities where scholarly knowledge, rather than entrepreneurship, is the mission. It has been voiced that, despite EE being adopted, universities' involvement is minimum – or rather a lip service. As a result, faculty members' experience many kinds of dilemma in relation to students, colleagues, and resource allocation. Nonetheless, this does not mean

that it is impossible to reach the effectiveness of EE. Faculty members in this category hold that the emergence of faculty members with strong commitment of EE is essential. Their creative endeavours – which are guided by a loving emotion of entrepreneurship – will enable EE to both exist and grow, even if they had to finance students' entrepreneurship projects with their own funds. Since there was a lack of university direction and support, faculty members' initiatives differed considerably. Belief, experience, and knowledge in relation to EE and university circumstances seem to underpin the choices of content and method. For example, an informal approach has been suggested as a solution for the difficulty of EE being integrated into the curriculum. Since teaching and learning is also a process of values transmitting, spiritual values held by faculty members will also inspire during involvement in teaching entrepreneurship.

The following quotations indicate what and how faculty members expect in regard to ensuring EE is effective:

“It has been suggested that other universities (non-entrepreneurial university) start EE from the lowest level of university structure. When the evidence of positive impact of EE is available, this will lead to university support eventually.” (L3c)

“In this university, entrepreneurship is not a mission. It puts profound scholarly knowledge first rather than entrepreneurship.” (L2b)

“No-one cares about graduate entrepreneurship. I held a two-day entrepreneurship training for new students, exposing students to the concept of life and the right goal. I really take care of entrepreneurship because of my loving emotion toward students and entrepreneurship.” (L4d)

“EE should accommodate IQ, EQ, and SQ, otherwise

entrepreneurs will be directed towards pursuing maximum profit with minimum effort. As a result, there will be immoral practices during doing business. I always teach my students about empathy, being generous, and obeying God. I make investments –not only through knowledge but also through heart and faith, such as by giving charity, and asking that people pray for us. There is another example of the power of SQ in deciding what business will be chosen. If you believed in yours, your capability and passion, you will then be prevented for doing me-too business. This self-reflection will follow with exploring business ideas and the knowledge needed to exploit it. The rule is centred on how to satisfy consumer needs effectively (good product with good price and good access). To start a business, there is no need to wait until you have enough capital or a great business idea. By discerning everything surrounding, you will realised that there is an abundance of opportunities.” (L1a)

“Faculty members shouldn't scare students, saying that it's a sin to keep stock due to speculation. It is only an application of supply-demand law. Business is business.” (L2c)

“What I do during teaching entrepreneurship is ask students to find out the most possible business, then give them capital from my own money. They will get a high mark if they able to get the highest profit from their business.” (L1b)

“It is impossible to teach entrepreneurship simply through a lecture in classroom. The informal approach is the best way for this university, where its students face a heavy curriculum. In my opinion, students prefer an informal approach. I suggest that EE embrace a less formal way, mainly through light discussion when they want to join with Student Creativity Programme.” (L7c)

2) EE and top-down strategy

Faculty members in this category of description believed that the

effectiveness of EE requires strong institutional commitment. Entrepreneurial universities have been considered necessary for a long time as EE is a matter of vision and culture. Whilst faculty members at non-entrepreneurial universities expressed dissatisfaction regarding university support and obtaining full understanding from students, colleagues and senior management, entrepreneurial universities have been conceived to provide full commitment. Therefore, university leaders or founders play a significant role in transmitting entrepreneurial values into all institutional members. Embedding EE within the curriculum is the main commitment followed by a strategy needed to support it. Accordingly, it is expected that faculty members' work in the university is carried out with entrepreneurial vision, which will pose no difficulty in terms of teaching entrepreneurship. Resources, including networks with external stakeholders, can be directed in order to fully commit in terms of delivering effective entrepreneurship learning and teaching. The following quotations indicate what and how faculty members expect in order for EE to be effective:

“Attaining the effectiveness of EE is simple. All university members must focus on vision and mission. Then a strategy is designed to accomplish them. Accordingly, EE will be able managed easily. Indeed, consistency is needed.” (L4b)

“It's totally institutional support. If it is an occasional event, I am sure it will be unsuccessful since it is a matter of culture, and so institutional support is a must.” (L3d)

“Institutional policy is necessary. It will affect curriculum, faculty members' selection and resource allocation. In the library, the availability of inspirational books is required; in fact, we have much more books in relation to entrepreneurship.” (L3a)

“The university founder decided to adopt an entrepreneurial paradigm. As a result, all must be committed. Other universities

offer EE in one semester in cognitive level. Unfortunately, there is no follow-up programme. In contrast, EE at this university is totally different as it comprises twenty credits and more than just a cognitive learning. Essentially, a triangulation model is employed, which is not only lecture but also invite practitioners and entrepreneurs. Indeed, this university was established advantageously in that as part of a company group. Consequently there are abundant supports in order for entrepreneurship learning being effective including observation facilities, intern ship, inviting managers.” (L3b)

“When this faculty was established, I thought that it must be different. Given my experience when working in a company and running my own business, I finally decided to employ project-based learning. Entrepreneurial university must adopt it.” (L3c)

“Project-based method is the best way to teach entrepreneurship as it is able to provide a real atmosphere of business. There is difference between the US and Indonesia –a case study may be suitable for EE in the US as replicative businesses exist.” (L3a)

Whilst there are plenty of dilemmas, constraints and dissatisfaction mentioned by faculty members working and teaching entrepreneurship at universities, where commitment towards entrepreneurship is weak, the following excerpts indicate what faculty members in non-entrepreneurial universities are concerned about:

“I have had a protest when my students got warning due to doing business in an entrepreneurship community service programme. They needed to make a profit from the business. It was extremely shocking. I came to be a counsellor, then I was showing them business opportunities. But the university has discouraged this activity as students will make profit. I am very disappointed. The university hasn’t fully understood entrepreneurship.” (L2c)

“EE should be embedded in the university’s curriculum.

Unfortunately, students are involved with entrepreneurial activities without support and guidance. In addition, there should be partnership with external stakeholders. Until now, we haven't had a blueprint for this strategy. We also face constraints in regard to capital support and class arrangement. The university should provide a business incubator in order to help students to launch their innovative products otherwise they will have small captive market. What really I want to suggest is that EE must be arranged by system not by accident.” (L4a)

“It is difficult to gauge the effectiveness of EE as students face many constraints, including time, experience, capital and network. It would be necessary for university providing business incubator to facilitate start-up business. It will prevent students from experiencing traumatic business failure.” (L4e)

“Entrepreneurship course cannot be taught only in class. We need to go outside but curriculum in this university is not able to accommodate this unconventional method of learning. Of course we need supporting fund to hold outing activities. I am so disappointed as it is impossible to adopt an innovative approach of learning.” (L5b)

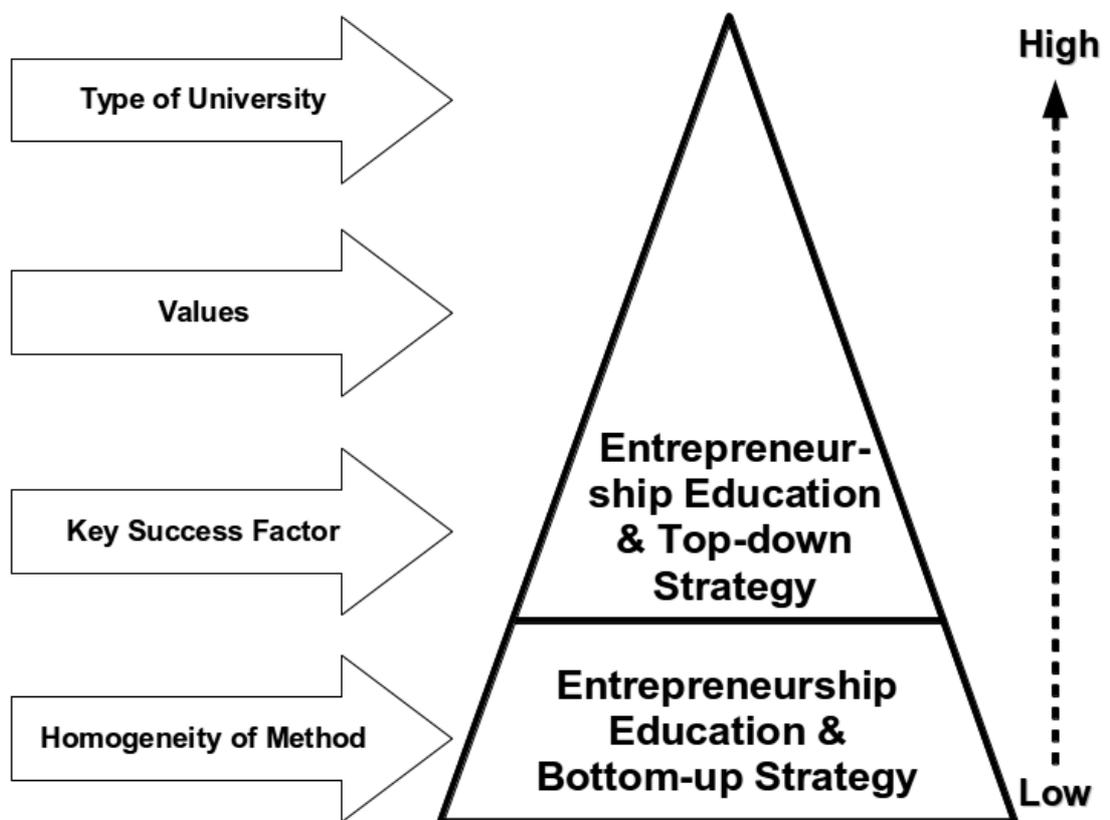
“I often hear students complaining during teaching entrepreneurship. They think that entrepreneurship course isn't suitable for them engineering students. As consequently, it is difficult to acquire their commitment.” (L5e)

6.3.2. Summary of Faculty members' expectations

These categories should be considered as faculty members' collective mind as they were constituted from all of the data from the interview transcripts. Both categories represent an inclusive hierarchy from "EE and bottom-up strategy" to

"EE and top-down strategy". Based on the themes of expanding awareness it is obvious that the second category has higher expectations of EE than the first one as it enables EE to be more embedded, sustainable, and more effective. The bottom-up strategy should be considered a transition process to embed EE fully into the university's curriculum. Figure 6.02 indicates the hierarchical structure of categories of description. These faculty members' expectations seem to reflect a supply-side perspective of EE. In order to provide more comprehensive understanding, an attempt to compare and contrast between the supply-side and demand-side perspectives is needed. The following section will seek to address this issue. Furthermore, it is considered necessary to include a deep discussion in relation to the expectations of EE from the senior management perspective and the recent debate in EE.

Figure 6.02. Faculty members' expectations of entrepreneurship education



Source: Author (2013).

6.4. Comparing and contrasting students' and faculty members' expectations of entrepreneurship education

As stated previously, the sample of students expect EE programmes to be able to recognise the variability of learning needs amongst them. The second category has been considered as the higher one as it requires more commitment amongst internal stakeholders in order to serve the higher levels of the entrepreneurial learning needs of nascent entrepreneurs. At the initial stage, however, undifferentiated-strategy remains important as an attempt to socialise entrepreneurship across the wide-campus and to establish serious learners who aspire to be entrepreneur graduates. Whilst the first category may be provided simply through a course in entrepreneurship, the second one demands a special and continuous programme. Whilst from the sample of faculty members, it was found that, in order to be effective, the university should embrace the top-down strategy where EE will be fully embedded within university curriculum. It is obvious that universities need to adopt an enterprising paradigm. For an established university (where its vision is directed toward teaching and research) it has been suggested that the bottom-up strategy be employed as it is considered the best strategy in the transition stage. Nonetheless, it needs to be taken into account that this strategy is not ideal as it depends on the emergence of faculty members who have a strong commitment towards entrepreneurship and students. The bottom-up strategy, however, has been considered to suffer a number of limitations regarding homogeneity of approach and sustainability. It seems that students and faculty members consider the effectiveness of EE through different perspectives. Students insist that a paradigm that is only market-driven means success in EE will be accomplished, whilst faculty members highlight the importance of being an entrepreneurial university.

It is interesting, however, to recognise that both samples recognise the importance of spiritual values in the enhancement of desirability and feasibility of business creation and being entrepreneur. Islamic values can be considered a perfect complement to rational reason for starting one's own business, such as the high rate of graduate unemployment and the economic value of running a business. Furthermore, through Islamic values, the feasibility of venture creation can be

made more visible amongst students. Moreover, it has been suggested that it is necessary to link spiritual values and entrepreneurial success. It can also be concluded that transmitting spiritual values during teaching and learning entrepreneurship is an issue that students and faculty members share in order to enhance the effectiveness of EE.

6.5. Discussion of students' and faculty members' expectations: Challenge the senior managements' views and previous studies

In this section, all categories found along with logical evidence for the inclusive hierarchy will be discussed through which senior managements' perspective of EE need to be included. Moreover, there will be a discussion in the field of entrepreneurship. As stated previously, based on analysis of similarities and difference, instead of discussing each category, it would be useful to discuss the combination of the two.

1) Segmenting the market is required in order to warrant the effectiveness of EE

Generally, it has been acknowledged that understanding what a market needs is a determinant of product/company performance. This marketing approach can be applied to EE as well. There is much evidence to support this argument. According to Vesper (2004), there are various categories of customer in entrepreneurship classes, which call for further examination regarding what the category is, which should be recruited to which classes, and how those classes should be tailored to them. Therefore, an attempt to understand and distinguish between EE learners is necessary as combining different groups in the same EE programmes is a risk. The large gap regarding students' basic knowledge and expectation may lead to dissatisfaction amongst all groups of students (Schwartz and Malach-Pines, 2009). The failure to recognise the differences of students' needs can be significant as it will "lead to the teaching of corporate competences, a lack of detailed consideration of how entrepreneurs learn, and a lack of knowledge of how to influence the students learning style" (Gibb, 2002,

p.240). In a practical way, goals, content, and pedagogy will depend on the kind of audience the university wishes to target. Therefore, the first question is:

a) How to identify target entrepreneurship learners?

Although all students are potential entrepreneurs (Postigo, 2006), the university can never be a mass-marketer (Hindle, 2007). Block and Stumpf (1992) state that the definition of the audience for EE depends on the underlying assumption of EE and the definition of entrepreneurship used. On the demand side, Hindle (2007), however, insists that:

“... only students who subscribe to the principle of vocational transcendence should study entrepreneurship at university.” (Hindle, 2007, p.116)

A university must consider the distinctive competencies and needs of the particular students it wishes to attract. McMullan and Long (1987) argue that there is a need for a selection strategy, which should consider not only conventional measures –such as grades and scores on admission tests– but also other factors, namely indications of previous success. Whilst a founder of an entrepreneurship school in Testa (2010) argues that business experience is not necessary but rather a certain amount of entrepreneurial spirit is:

“... very motivated, open-mindedness and sitting in the middle of Gaussian distribution.” (Testa, 2010, p.246)

It might be possible to carry out this screening test in a university where its founder's vision is training students to be entrepreneurs. In other words, a screening test in relation to entrepreneurial attributes is impossible for a university where an entrepreneurship-related course is introduced as part of the requirements for fulfilling general education. Three bases for segmentation, as suggested by Ghosh and Block (1993–1994) are career objective, stage of entrepreneurial process, and the existing knowledge and skills of the individual (Hills, 2004, p.288). The intention to start a business, according to Malach-Pines (2009), can also be a means of differentiating the target audience. It would be fruitful to provide an introductory course suitable for all students, and

advanced courses for those with more entrepreneurial orientation (Malach-Pines, 2009, p.229). This notion seems to align with that of Klandt and Volkmann (2006), who argue that the main purpose of academic EE is to sensitise students with regard to entrepreneurial thinking and acting, whilst a further step offers the possibility of imparting EE to actual or potential entrepreneurs. On the other hand, Gibb (2002) argues that there are needs outside of a new venture or small business context, including corporate and social entrepreneurship, which might call for its own programme. In this study, it has been evidenced that students' career objectives appear to be a significant factor in terms of understanding what students expect from EE; therefore, it will be strongly valuable to examine the higher expectations and needs of students who view themselves as entrepreneurs. This aligns with the study findings of Kraaijenbrink, Bos and Groen (2010), who found that the perception and desires of entrepreneurial students differ from those of non-entrepreneurial students: The former will call for an action-oriented approach since they apprehend entrepreneurship as the concrete enactment of new ventures (Johannisson, Landstrom and Rosenberg, 1998). It has been evidenced that entrepreneurship programmes around the world – including those of America and Europe– have paid less attention to segmentation analysis in an attempt to understand the variation of learner needs (Gibb, 2002; Hills and Morris, 1998).

b) What should be included in content?

There are some questions relating to the content, namely (a) what theories build on; (b) how the substance of what is taught is formulated –whether entrepreneurship is conceptualised as art or science; and (c) what kind of behaviour should be taught (Blenker *et al.*, 2008, pp.55-57). Enterprising behaviours, rather than small business management or entrepreneurship, should be focused on since the former enables a greater impact on society –not only limited in terms of "creating science park and incubator milieus in order to create university spin-offs" (Blenker *et al.*, 2008, p.61). Vesper (2004), on the other hand, proposes

one simple way of classifying knowledge useful to the entrepreneur, including business-general knowledge, venture-general knowledge, opportunity-specific knowledge, and venture-specific knowledge. Fisher, Graham and Compeau (2008) suggests that combining business-specific content with interpersonal/personal content is the best way of serving both learners who aspire to be entrepreneurs or employees in entrepreneurial companies (Fisher, Graham and Compeau, 2008). Students in this study suggest not overlooking the important role of theory and spiritual/social values in an entrepreneurial learning. In order to accommodate this concern, Hindle (2007) suggests including entrepreneurship history and social entrepreneurship so as to create an exciting 'plus zone', and thus make EE something special for students (Hindle, 2007, p.121). Further support has been given by Kent and Anderson (2003), who have been criticised for the absence of social capital in the curriculum of most business programmes.

- c) What approaches should be chosen to deliver an entrepreneurship programme?

With regard to approaches in teaching entrepreneurship, there are two choices: Asking students to simply understand, know and talk, or asking them to use, apply and act (Neck and Greene, 2011). Whilst Neck and Greene (2011) argue that the second method can be applied for all students-regardless of their experience level-students in this study suggest that the second one will be suitable for the market segment who aspire to be an entrepreneur. Henry and Titterington (2001) seem to support what students state since they argue that an entrepreneurship programme allowing learners to deal with a start-up business can be considered an automatic filtering mechanism. This means that the programme will suit the most enthusiastic and committed students. The superiority of new venture-based learning over other experiential learning, including work-based learning, has been insisted on by Gibson, Scott and Harkin (2009), who argue that this method provides:

“... entrepreneurial learning and mentoring for those

concurrently starting up a new venture, and there will be active engagement between the student, tutors, and mentors so as to ensure optimal entrepreneurial strategising and implementation of the business plan for the new venture.” (Gibson, Scott and Harkin, 2009, p.15)

By starting a new venture, students will deal with risks, and discover and exploit opportunities. Moreover, students must indicate a high need for achievement and capability to bring about a creative destruction. Accordingly, it is assumed that entrepreneurs who run high-growth companies can be created through this method. Although Gibson, Scott and Harkin (2009) criticise what is being practised at the Babson College (US) as a disposable programme, part of the programme which allows students to "experience social responsibility and philanthropy through the donation of their time and business profits to charitable organisations" (Neck and Greene, 2011, p.63), are recognised as aligning with students' expectation in this study. There is plenty of support for not making students pretend to be entrepreneurs but encourage them to execute real business ideas by which the entrepreneurial life is experienced directly, as it will increase the level of students' self-confidence and thus develop empathy for the entrepreneur (Johannisson, 2002; Neck and Greene, 2011; Vincett and Farlow, 2008). Neck and Greene (2011, p.63) advise starting business as part of course work, and indicate the argumentations in order to make sense of this type of entrepreneurship learning:

“Students experience the ups and downs of entrepreneurship, and learn about the sweat equity associated with a start-up. They gain knowledge of the importance of leadership yet struggle with finding and developing their own style. They practice entrepreneurship and, through experience, learn about the power of human agency; yet, the effective management and utilisation of human resources is more an art than a science. Students feel defeat after making poor decisions and experience elation over small wins.” (Neck and Greene, 2011, p.63)

The above supports what Anderson and Jack (2008) suggest in terms of the different roles involved in entrepreneurship. They argue that, in order to be entrepreneurial, individuals are required to be professionals,

technicians, artisans and artists. This also seems to be aligned with the notion of the entrepreneurial competences, which must be enhanced through EE, including "Know-Why, Know-How, Know-Who, Know-When and Know-What" (Johannisson, 1991, p.71). Such competences and roles are critical for students who are serious about being entrepreneurs after graduation, and who consider university as the right place to receive education about being entrepreneurs and having the capability as reflective practitioners (Jack and Anderson, 1999).

2) Enterprising institutions are required in order to warrant the effectiveness of EE

Debate has been evolving surrounding this topic, which encompasses philosophical and political debate, as well as operational and strategic questions (Pittaway and Hannon, 2008). Whilst the philosophical and political debate focusses on whether or not EE should be a part of a modern university and whether the university itself should be more entrepreneurial (Pittaway and Hannon, 2008, p.202), an operational and strategic question seeks to discuss the potential organisational structures, processes, and means for supporting EE (Pittaway and Hannon, 2008, p.203). It has been evidenced that context plays a significant role in EE as changes in university context will influence "approaches towards both what students should learn and how they should learn it" (Blenker *et al.*, 2008, p.54). In turn, this will lead to the questions considered below.

a) Why is important to be an entrepreneurial university?

There are many contradictory arguments regarding a university's capability to be the right place for EE. According to McMullan and Long (1987), the local university is the most appropriate place to house EE. There are some reasons believed to legitimise this view. Universities have been excellent formats for the creation and dissemination of new knowledge on a wide variety of subjects. In addition, university is the best place for EE as "access to a spectrum of knowledge-based resources to support the development of the technologically sophisticated enterprises that are crucial to compete in the international marketplace" can be provided by universities (McMullan and Long,

1987, p.272). University's capability and experience to attract the right kinds of educators – both academics and practitioners – to encourage research that is important for the entrepreneurship field, and to educate future academics in entrepreneurship, is other evidence that indicates the superiority of university as a provider of EE.

Various objections have however been raised towards this claim. According to Kiesner (1990), for instance, there are disadvantages associated with college and university programmes from small business owners' points of view. The owners hold the belief that educators do not have useful knowledge and experience in the real world of running a small firm, or even an appreciation of the entrepreneur as a viable subject for attention. Rather than developing implementation skills needed by entrepreneurs, imparting knowledge and information is the focus of a university's teaching (Mitra and Manimala, 2008). Other scholars such as Birch (Aronsson, 2004), Cross (Scott, Rosa and Klandt, 1998), and Johannisson (1991) are also pessimistic about the capability of higher education – especially business schools – in terms of teaching students to become entrepreneurs, unless some changes take place regarding educational methodology, vision and culture by which potential entrepreneurs acquire motivation, experience and business knowledge to start new businesses.

Faculty members in this study suggest that being an enterprising institution will enhance the possibility of EE fulfilling students' and faculty members' aspirations: Creating graduate entrepreneurs and/or enterprising graduates; in turn, this will lead to the questions considered below.

b) How will enterprising institutions facilitate an entrepreneurial learning?

Since enterprise, in addition to professional or intellectual competence and disciplined work habits, is essential for financial and social survival, William (2003) poses the idea of searching (EXPLORING IT?) it, or creating a learning environment in which students can absorb a capacity for enterprise; this is seen as an important new task for the higher-education curriculum. Therefore, the development of universities

as enterprising institutions will be essential as such organisations will have an eye for the main opportunity in furthering their aims – whether these are to ensure an excellent learning experience for their students, to widen participation, or to advance research or to ensure a comfortable lifestyle for their academic staff (William, 2003, p.10). More characteristics of an entrepreneurial university as an enterprising institution are as follows:

- 1) Adoption of a triple helix mindset where a dynamic interplay with its environment (industry–government) occurs;
- 2) developing alliances with other institutions in order to accommodate heterogeneous competences (eventually on a cross-faculty basis);
- 3) developing different forms of learning with respect to purpose and target groups;
- 4) accommodating practical knowledge with theoretical deflection and disciplinary development;
- 5) focusing on personal development and the development of the ability for self-organisation and self-learning (Blenker *et al.*, 2008, p.60).

Eventually, it will serve the aim through developing enterprising people who apply enterprising behaviour in other contexts besides the economic world and venture creation (Blenker *et al.*, 2008, p.57). Johannisson (1991), however, insists that educational systems, including university, should take the responsibility to teach individuals to become not only more enterprising but generally shaping them into businessmen and women as well. This expectation has been supported by Kickul and Fayolle (2007), who argue that there is a challenge associated with designing a curriculum with focus directed towards incorporating “all areas of the entrepreneurial experience from start-up to growth and maturity” (Kickul and Fayolle, 2007, p.1). In relation to the culture needed to enhance the supply of graduate entrepreneurs, an entrepreneurial university should provide the legitimacy and esteem to

those who pursue the entrepreneurial route (Birch, 2004; Formica, 2002; Shapero and Sokol, 2002). Furthermore, this enables great entrepreneurs to emerge from higher education since entrepreneurial universities, according to Formica (2002), as intellectual infrastructure, will encourage:

“... the formation of new ventures which do not remain small business for long.” (Formica, 2002, p.174)

From educators' perspectives, adopting an entrepreneurial paradigm for institution will prevent the occurrence of "political tensions, philosophical dilemmas and implementation struggles" (Myrah and Currie, 2006, p.242). The major political tension including institutional limitations and curriculum politics, student tensions and resource gaps (Myrah and Currie, 2006, p.242), along with philosophical dilemmas - regarding what is emphasised and available within their institutional context – can be minimised since there is a strong conceptual frame to underpin EE (Gibb, 2002). An entrepreneurial university is expected to arrange the organisational structures, processes and means in order to support the educational activities in achieving entrepreneurial ambitions for students, faculty members and the institution itself (Pittaway and Hannon, 2008). It seems to be relatively simple for an entrepreneurial university to fulfil all supply-side criteria required to ensure the viability and success of EE in relation to individual institution. The supply-side criteria should encompass educational impact, financial sustainability, academic credibility, human capital, structural embeddedness, infrastructure, alignment with institutional strategy, community engagement, and alignment with policy context (Pittaway and Hannon, 2008, p.202). UC in Indonesia appears to enjoy having almost all criteria. As a result, it needs only four years, in regard to its entrepreneurial paradigm, in order to achieve the Indonesian national standard of higher education and its ambition to produce graduates who are enterprising and entrepreneurial alike.

It should be acknowledged that the vast majority of Indonesian universities do not encompass these favourable circumstances; in fact,

there is a group of students who want to be involved in EE because of their ambition for being business entrepreneurs. Since these students apprehended entrepreneurship as a narrow outcome that offers activities to establish a business venture, Burkinsaw's 'focused strategy' is considered the best option (Hartshorn, 2002). Through this approach, EE can be offered by academic staff in certain locales (for example: A specific academic department, such as Business Studies) or outside the curriculum by, for example, the Careers Advisory Service (Hartshorn, 2002, p.156). This strategy has been practised by Indonesian faculty members who are committed to student entrepreneurship but who have nevertheless struggled to reach institutional support and commitment. The disadvantage of this approach is that students engaged in entrepreneurial activity may be seen as deviant, and thus entrepreneurship itself may be perceived and stigmatised as a deviant activity. Another alternative suggested by Edwards and Muir (2005, p.620) includes informal entrepreneurial learning including an enterprise awareness campaign, an enterprise club, workshops and counselling, and enterprise awards. Nonetheless, since entrepreneurship is not core, these activities will then be in a vulnerable position. Therefore, it is interesting to quote what Hannon (2005, p.107) states "... the growth in activity by HEIs merely represents a 'jumping on a new band-wagon' and that is unsustainable. Some HEIs are operating in blind faith, following what other leading institutions do through a desire or a need to be in alignment with new and changing central and regional government policy agendas." This quotation from a senior manager indicates this phenomenon within the context of Indonesian higher education:

"Why this institution offer a major in entrepreneurship because it was aimed to respond government policy: Encouraging graduates to create jobs. Luckily it aligns with our vision: Creating excellent workforces. In addition, we established 'Student Entrepreneurship Centre' in order to have access to government entrepreneurship programmes. I realised that it will be difficulty for entrepreneurship being

flourish if institution and student simply motivated by money when involve with entrepreneurship programme.” (SM7)

6.6. Chapter summary

These categories describe the various expectations of EE from students' and faculty members' points of view. The sample of students posited that embracing market-driven paradigm is a ticket for the effectiveness of EE, although faculty members insist there is no longer a question about the efficacy of being an entrepreneurial university for the accomplishing of the ambitious goal of EE. It is interesting to note that there is no contradiction amongst these views; otherwise they provide a complete understanding in order for EE to be able to bring about an effect. This proves that the effectiveness of EE will be accomplished if there is alignment between the supply-side and demand-side. Personal development, as the main content of EE, can be incorporated with an awareness programme through entrepreneurship history by which religious values can be an alternative at the expense of the university's founder values. It makes sense since most of the students who arrive at a traditional university indicate external locus control with parents as the main influencers of career aspiration.

Since EE initiatives rely heavily on government and industrial support, the emergence of faculty members with strong commitment and dedication towards entrepreneurship is necessary in traditional universities. On the other hand, at entrepreneurial universities where the pursuit of entrepreneurial vision is enduring, the involvement of government and business communities is still needed in order to enhance the effectiveness of EE. Offering social entrepreneurship at entrepreneurial universities is needed in order to ensure the balance between the pursuit of material wealth and social values.

Senior management who engage in this study can be placed into two categories: First, those who indicate weak commitment to support EE in their institutions; and second, through high confidence, which shows that the entrepreneurial spirit illuminates the entire institution in order to pursue the ambition being entrepreneurial university where great graduate entrepreneurs will emerge.

Bearing in mind that universities must change in order to satisfy the changing demands of their stakeholders on the one hand, on the other hand, it must be recognised that there is an anxiety surrounding the belief that the business model of EE will threaten the traditional academic convention; therefore, it is necessary to establish a strategy by which the process of transformation can be implemented smoothly. It can be suggested that the bottom-up strategy, coupled with an undifferentiated strategy, may be the best choice for a traditional university to go about its gradual development towards becoming an enterprising institution.

CHAPTER 7. CONCLUSION AND RECOMMENDATIONS

7.1. Introduction

As stated in Chapter 1, the outcome of this study will be a proposed model of EE for Indonesian HEIs. This research can be considered to be necessary as EE is still emerging in Indonesia. As a result, it is rare to find the Indonesian context discussed within the EE field of research.

The empirical model may contribute to improving acceptance of EE in Indonesian HEIs. As indicated in Chapter 4, there is resistance from senior management when discussion about entrepreneurship and EE is confined narrowly to business and its economic value. Effectiveness is another critical issue. It has also been discussed in Chapter 4 that the lack of empirical studies in relation to the key success factors of EE initiatives leads to prejudice from senior management that entrepreneurs are born not made.

It is therefore necessary in this study to develop empirical models which will act as guidance for Indonesian HEIs where EE initiatives have not yet started, or which are still looking for ways to enhance their effectiveness. Furthermore, the models might be useful for those who are about to found a new university and are considering EE as an alternative strategy for its market positioning.

7.2. Philosophical framework of entrepreneurship education: A phenomenographic approach

It has been indicated on page 162 that 'entrepreneurship education is a matter of learning' is the most desirable conception of EE. Senior management and faculty members, however, are not in agreement whether running a business is the best means of teaching and learning entrepreneurship. It would be necessary, therefore, to accommodate this difference point of view in order to enhance the acceptance of EE across Indonesian higher education.

Whilst regarding aspirations for EE which are indicated on page 193, students and

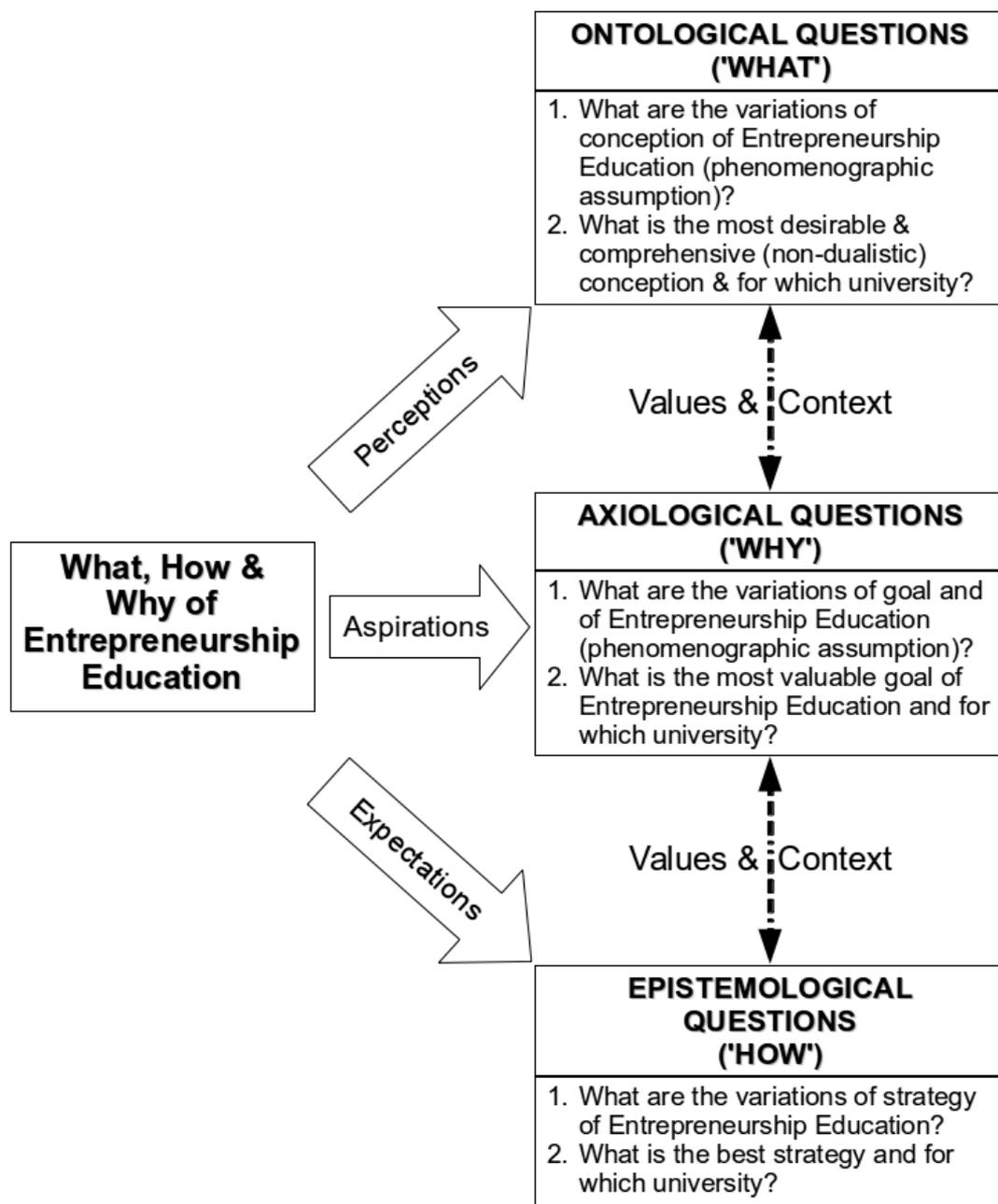
faculty members seem to be in agreement that preparing students to be graduate entrepreneurs who are able to run high-growth companies is a higher aspiration than simply preparing them to be enterprising or have employability skills. Coincidentally, seven senior managers in this study can be categorised into two groups based on their views of entrepreneurship education aspirations. One group of senior manager supported the idea that EE should produce graduate entrepreneurs, while the other group suggested that EE prepare students to have enterprising attributes. Given the dimension of variation shown on Table 5.01 and Table 5.02, it is obvious that the quality of students and institutional commitment will determine whether or not the higher aspiration can be achieved. An entrepreneurial university has advantages over a traditional university as the integration of EE into the university curriculum and a conducive environment for practising business during study are allowed. An entrepreneurial university most likely will attract potential students with similar ambition in entrepreneurship.

As stated on page 212, the second category from the sample of students namely 'EE and differentiated strategy for target market' has been considered as higher expectation than first category 'EE and undifferentiated strategy for target market'. It is because more commitment among internal stakeholders is required in order to serve the higher level of the entrepreneurial learning needs of potential entrepreneurs. Whilst from the sample of faculty members, the second category namely 'EE and top-down strategy' can be considered as higher expectation than first category 'EE and bottom-up strategy'.

It is essential to ensure that the connection between the phenomenographic findings discussed in the three previous chapters and the proposed models is logically acceptable. A framework by which the models are based need to be developed first. This framework aims to enable programme designers in EE to understand how the three philosophical elements of ontology, epistemology and axiology can be elaborated in order to lead to decisions in relation to the types of model of EE which can be developed in a responsible way. It can be indicated that the findings of this study based on a phenomenographic approach seem to be fully compatible with the idea of the basic philosophy of research. Ontology and perceptions in this study refer to what students and faculty members understand as EE (conceptions about EE). While epistemology and expectations concern

aspects relating to how students can go through EE effectively, axiology and aspirations focus on why EE is such an important phenomenon. In other words, the latter are concerned with the ambitions or goals of EE. The influence of the phenomenographic approach on this framework can be significant, as all dimensions are focused on the variations with which EE is approached. As

Figure 7.01. Philosophical model framework of entrepreneurship education: A phenomenographic approach



Source: Author (2013).

axiology is also interested in issues regarding values and context, ontological and epistemological questions should accommodate it. Figure 7.01 indicates the relationship between the perceptions, aspirations and expectations of EE.

This framework makes a special contribution to previous discussions about philosophy in EE, as it combines the three dimensions with a phenomenographic approach (Gibb, 2002; Hannon, 2006; Bechard and Gregoire, 2007; Kyro, 2007; Hjorth and Johannisson, 2007; Hindle, 2007; Fletcher, 2007; Fayolle and Gailly, 2008; Jones, 2010).

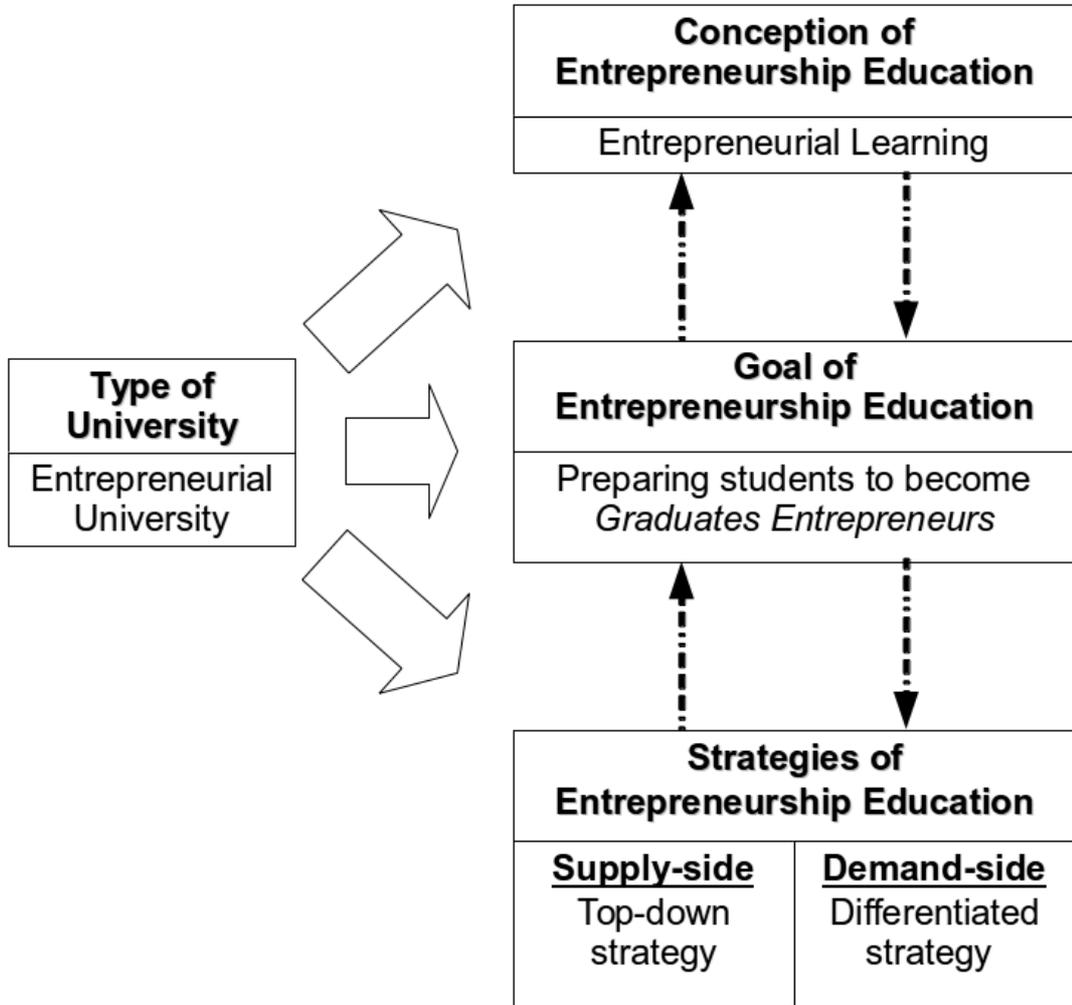
7.3. Entrepreneurship education model for Indonesian entrepreneurial universities

It has been argued that entrepreneurship is a solution for national economic and social problems and aims for the creation of graduate entrepreneurs who can run high-growth companies as a part of HEIs' responsibility. EE, therefore, will be focused on developing more and better quality entrepreneurs. It leads to a significant change by which university performance will be measured. An entrepreneurial university will celebrate success if students and graduates possess entrepreneurial competencies, which needs to be indicated by the emergence of high-growth start-up companies. This aspiration must be guided by the understanding of EE as entrepreneurial learning (Johannisson, 1991; Rae, 2004). This means that an enterprising mode of learning must be its main characteristic (Gibb, 1993). It should, however, be noted that in order to nurture graduate entrepreneurs' exposure to the business world, an industrial role model during study at university will be necessary (Whyte and Braun, 1965). Starting a small business or a venture-creation approach can be considered as a means by which enterprising attributes, along with entrepreneurial skills and mindsets, will be embedded (Neck and Greene, 2011). Nevertheless, students at an entrepreneurial university will be pushed to move their business forward in order to not remain small (Formica, 2002).

The vision of preparing students to become graduate entrepreneurs will be reached effectively if universities incorporate a supply-demand perspective

(Matlay, 2011). From the supply-side, it is possible for an entrepreneurial university to integrate EE into the curriculum as entrepreneurship is the foundation on which the university operates (Gibb, 2005). Accordingly, there is a need for a conducive environment and the availability of an infrastructure which enables students to engage in business during their studies (Volkman *et al.*, 2009). A top-down strategy is the key to such activities. The founder's and senior management's commitment to EE allows the university to acquire faculty members who have a similar passion for entrepreneurship and related education. In addition, there is less dependency on government support regarding EE provision. As a result, the sustainability of EE can be guaranteed (Hannon, 2005). From the demand-side, it is most likely that an entrepreneurial university will acquire students who have a positive attitude towards entrepreneurship (Testa, 2008). Differentiated strategy is an essential factor to reach this favourable condition (Kraaijenbrink *et al.*, 2010). The university should believe that there is a segment of the student market where entrepreneurship is considered as a promising career. At the outset, an entrepreneurial university will only target this kind of student. It makes sense therefore if the university sets its ambitions confidently to prepare students to become graduate entrepreneurs. Figure 7.02 shows the conception, goal and strategies that an entrepreneurial university can embrace for its EE initiatives.

Figure 7.02. Entrepreneurship education model for Indonesian entrepreneurial universities



Source: Author (2013).

7.4. Model of entrepreneurship education for traditional universities

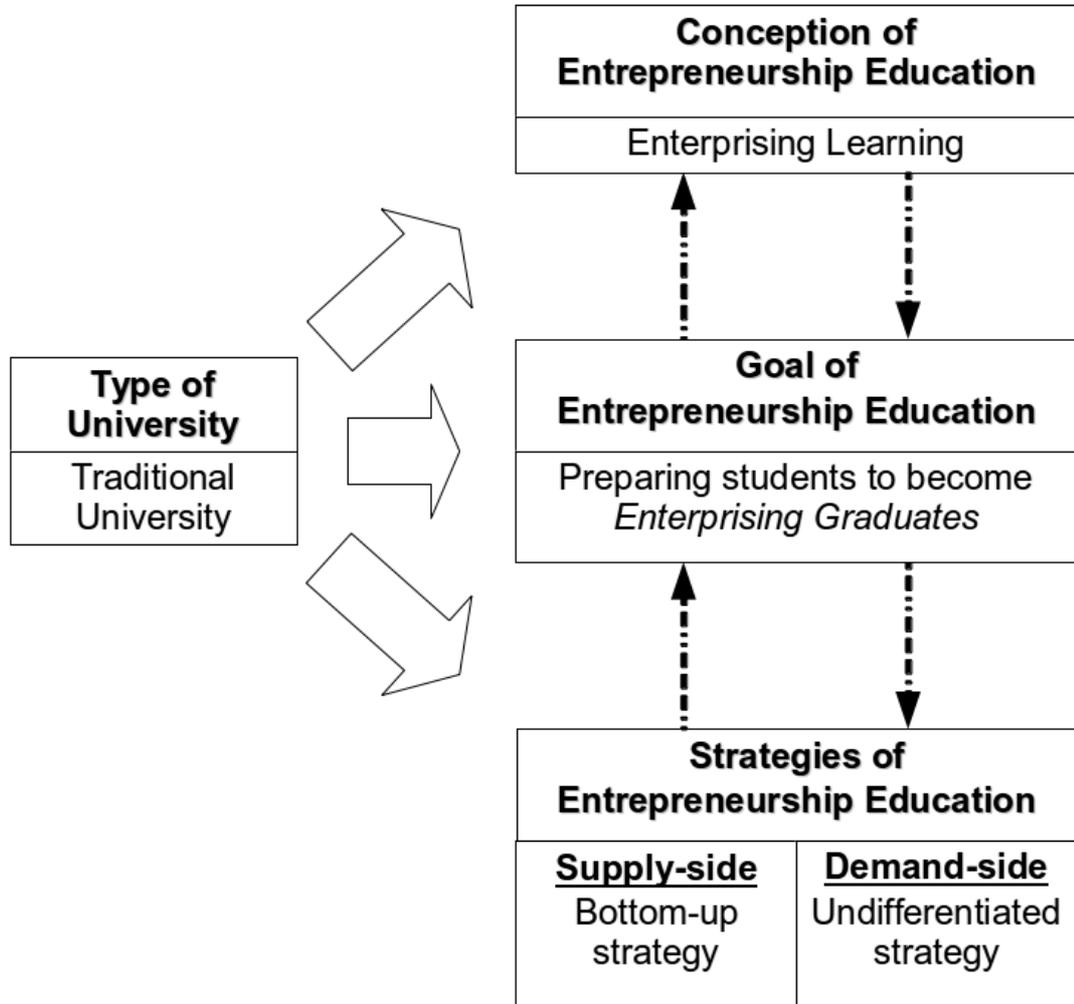
Traditional universities (first and second generation universities), according to Wissema (2009), may disagree with the concept of the entrepreneurial university on the basis that entrepreneurs must be added to the list of students to be educated, along with professionals and scientists. These universities insist on pursuing excellence simply in teaching and research in order to ensure that their graduates enter employment successfully. They consider entrepreneurship and EE

cautiously as they may undermine its traditional values, especially when it comes to the idea of allowing students to practise business during their studies.

EE will be accepted by traditional universities only if it offers added value for graduates in the workplace (Knight and Yorke, 2002; Yorke, 2004; Rae, 2007; Sewell and Pool, 2010). It is suggested therefore that EE will prepare students to become enterprising graduates. This aspiration is built on the belief that an enterprising mode of learning is necessary, as the conventional ones have inhibited innovative behaviour and other enterprising attitudes. A narrow understanding of entrepreneurship as a business-related matter is rarely acceptable in traditional universities, as it leads to an assessment of the role of university in commercial terms and focus on "the relevance and utility in research rather than upon the traditional process of discovery for its own sake" (Gibb, 2007, p.86). Therefore enabling students to be successful in any area of working life is the main purpose of HEIs. This means that extra-curricular activities and non-venture creation projects would be preferred as means to embed enterprising attributes and behaviours.

It makes sense to consider the preparation of students to become enterprising graduates as an achievable goal for traditional universities (Jones, 2010). A lack of institutional commitment to EE at the initial stages will hinder it from being integrated into the university curriculum. The emergence of faculty members passionate about entrepreneurship and EE, who represent the supply-side, can be considered as the main determinant of EE provision and its success. This bottom-up strategy seems to be the most appropriate choice to foster entrepreneurship in traditional universities. In addition, students, as representatives of the demand-side of EE, indicate that there is heterogeneity regarding career aspiration and their attitudes towards entrepreneurship. This makes sense, as traditional universities apply an undifferentiated strategy when attracting students. Instead of using an entrepreneurial attitude as a screening test, traditional universities still employ conventional criteria such as academic performance/scores for selection. It makes sense therefore if traditional universities set the goal of preparing students to become enterprising graduates. Figure 7.03 shows the conception, goal and strategies that traditional universities can embrace for their EE initiatives.

Figure 7.03. Entrepreneurship education model for Indonesian traditional universities



Source: Author (2013).

7.5. Entrepreneurship education model for Indonesian HEIs: A transitional approach

Regarding EE provision, Indonesian HEIs can be considered as two groups, based on students' and faculty members' varied perceptions, aspirations and expectations of EE. A detailed discussion of each group and its appropriate model has already been provided. It is important, however, to integrate the two previous models in order to make clear the relationship between them. Under the

phenomenographic assumption, there is acknowledgement that one conception can be more desirable than others. It should be noted, therefore, that a model of EE for entrepreneurial universities is more desirable than such a model for traditional universities, as the former encompasses more comprehensive perceptions and higher aspirations and expectations. Figure 7.04 shows the three elements of EE - perceptions, aspirations and expectations - which can be points of departure from which the development process from traditional universities to entrepreneurial ones can take place.

This means that entrepreneurial learning can be considered more comprehensive than enterprising learning, as the former not only embraces the enterprising mode of learning but also encourages students to apply their entrepreneurial competencies to the market. However, a more comprehensive understanding of how an entrepreneur learns and succeeds is needed. Students should have the opportunity to embrace all areas of the entrepreneurial experience, from start-up to growth and maturity (Kickul and Fayolle, 2007, p.1). It is a critical issue in order to increase the quality of the EE initiative (Kickul and Fayolle, 2007).

A similar way of thinking can be applied to the understanding of the relationship between preparing students to become graduate entrepreneurs and preparing them to become enterprising graduates. Indeed, it is not only students, but also institutions and society as a whole, who will acquire more benefits if a university aims to pursue the former aspiration. Since successful entrepreneurs require a certain quality of attitudes, attributes and behaviours, along with specific knowledge and skills in relation to business, then graduate entrepreneurs' performance should surpass that of enterprising graduates. An interesting statement from Wissema (2009) appears to support such an argument:

“For the corporation, it is much more attractive to hire former entrepreneurs who have proven themselves in the market and who know the ins and outs of entrepreneurship, rather than studious MBAs who may be good analysts but not necessarily good business leaders.” (Wissema, 2009, p.94)

There are some supporters for a higher aspiration of EE, for example preparing students to become graduate entrepreneurs, such as Johannisson (1991), Lee and Wong (2005) and Matlay (2005). In the Indonesian context, while there are abundant natural and cultural resources, unemployment and poverty remain

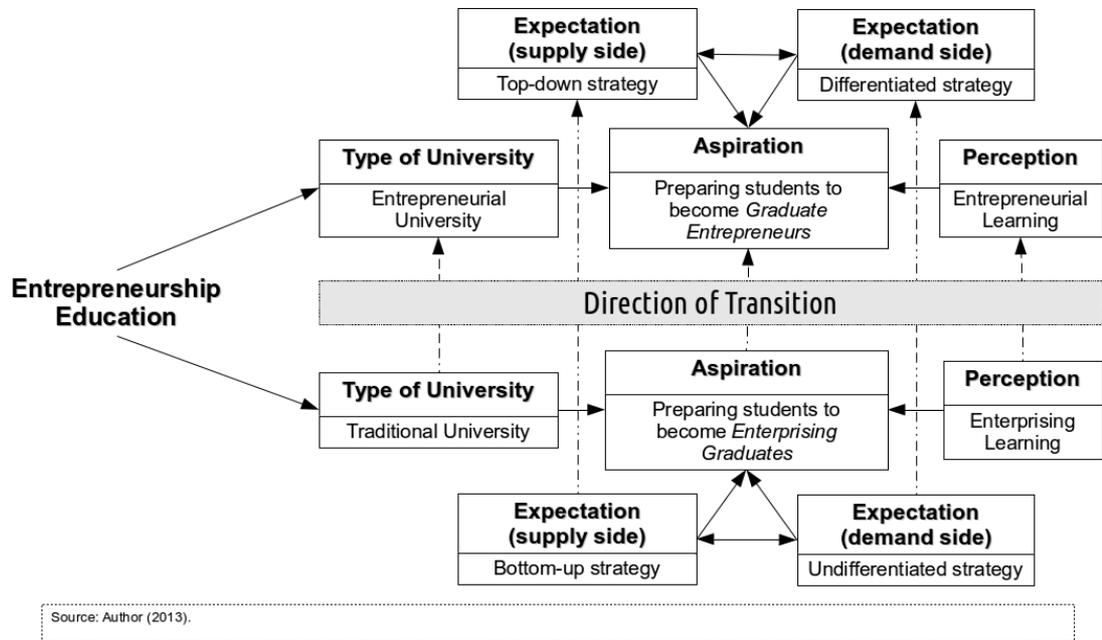
serious problems. Indonesia, therefore, with a population of 220 million, still needs 4.4 million new entrepreneurs (Ciputra, 2009). Eventually, there will be a more significant contribution from providers of graduate entrepreneurs for economic and social welfare.

The higher aspiration of EE also benefits the entrepreneurial university itself, as it will most likely outperform the traditional ones, mainly by attracting the brighter students (Weaver *et al.*, 2009; Wissema, 2009). In other words, this aspiration can offer universities, mainly the new ones, an excellent positioning strategy. This issue is critical amid the intense competition among universities, including Indonesian HEIs.

Being an entrepreneurial university with the ambition of preparing students to become graduate entrepreneurs also means that more resources and effort must be committed for this aspiration to be accomplished, from the supply and demand sides as well. In addition, there will be more challenges to be accepted and resolved.

Given the explanations provided above, it can be concluded that the traditional university should transform itself into an entrepreneurial one, together with all aspects of EE, including perceptions, aspirations and expectations. It has been acknowledged that universities must be entrepreneurial in order to survive and compete successfully on a national and global scale. EE can be considered as a means by which the transformation process can take place (Gibb, 2006).

Figure 7.04. Entrepreneurship education model for Indonesian higher education institutions (HEIs): A transitional approach



7.6. Contributions and recommendations

7.6.1. Contributions for the entrepreneurship education body of knowledge

7.6.1.1. Contributions for the conception of entrepreneurship education

The results of this study have revealed that there are four conceptions of EE. The conception that "entrepreneurship education is a matter of learning" can be considered as the most comprehensive way to understand it. This position confronts the view that the development of the enterprising person in the wider sense is the broader paradigm and most desirable conception of EE (Gibb, 2006; Blenker et al., 2008; Kirby, 2007). In addition, although a few student participants in this study claim that EE is about starting and managing a small business, this conception can be categorised as narrow or as an incomplete understanding of the term. However, from a phenomenographic assumption, it would be remiss to intentionally disregard this concept. It is not a misconception of EE, although it fails to discern the new focus on other elements of EE as a response to the complexity

of the world (Fayolle and Klandt, 2006).

7.6.1.2. Contributions for the goals of entrepreneurship education

It has also been shown by these research findings that HEIs should have the ambition to be a credible source of high quality entrepreneurs, who are most likely to deliver innovative and productive entrepreneurship. This position confronts the view that preparing students to have employability skills or enterprising attributes is more favourable than preparing students to become graduate entrepreneurs who are able to run high growth companies (Gibb, 2002; Hannon, 2005; Jones, 2010; Knight and Yorke, 2002). Indeed, it is indicated by the research findings that there is no support for teaching entrepreneurship as simply a fulfilment toward academic ambition (Fayolle, 2008).

7.6.1.3. Contribution for models of entrepreneurship education

Three models of EE have been proposed for Indonesian HEIs as a result of the research findings. The students' and faculty members' perceptions, aspirations and expectations of EE are the foundations on which the models have been developed. A phenomenographic approach was employed in order to discover students' and faculty members' perceptions, aspirations, and expectations of EE. "Categories of descriptions" and "outcome spaces" as a result of the phenomenographic analysis have provided guidance as to whether it is necessary to build both comprehensive and separate models for certain types of universities. The separate models have been developed in order to acknowledge that the context including traditional and entrepreneurial universities calls for a different approach to EE. In addition, specific language/concepts which contain specific values are applied to each model. These attempts aim to enhance their acceptance and effectiveness. A comprehensive model has been proposed for Indonesian HEIs in order to unite the separate models and understand the relationship between them. Therefore, the three models seek to offer a new perspective on how EE should be applied at a higher education level, specifically in a developing country such as Indonesia, as they have attempted to

accommodate the supply-demand side of EE. They challenge the existing models of EE, such as the Process Model (Hynes, 1996), the Market-driven Model (Hills, 2004) and the Teaching Model (Fayolle and Gailly, 2008).

7.6.2. Implications and recommendations for higher education institutions

7.6.2.1. Implications and recommendations for Indonesian traditional universities

It has been shown by these research findings that once the idea of an enterprising mode of learning is accepted and applied in traditional universities for their entrepreneurship programmes, it means that they will undergo a process of educational reform. The target market of the programme will encompass all students without exception, as its goal is to nurture enterprising graduates. Nonetheless, the institutions must be aware that there might be a segment of students who insist on starting their own business. Burkinsaw's "focused strategy" is the best choice (Hartshorn, 2002) to serve this type of student. In addition, awareness programmes of entrepreneurship remain an important agenda, as in Indonesian culture there is a lack of appreciation of entrepreneurs. As regards the faculty members who are passionate about entrepreneurship, institutions should consider them as agents of change towards entrepreneurial universities. Institutional commitment will be necessary to ensure the effectiveness of their role by the removal of any dilemmas faced during engagement in entrepreneurship programmes. Caring for these faculty members can be the starting point for service excellence which "is becoming important" in order to maintain an institution's competitive advantage (Khan and Matlay, 2009, p.777).

7.6.2.2. Implications for Indonesian entrepreneurial universities

An entrepreneurial university, despite its favourable position regarding EE, still faces challenges that it needs to be aware of. Given the students' views in this study, there are some issues which can be a source of dissatisfaction. It may be necessary to consider a further segmentation of students once they enter

university. In addition, business ethics and social entrepreneurship courses should be compulsory for all students in order to prevent them from simply focussing on profit. Having the aspiration to prepare students to become graduate entrepreneurs with a start-up business as the success criterion should not inhibit faculty members from being engaged in academic entrepreneurship in order to contribute to regional development. Improving regions for all those who live there should be the long-term strategy for Indonesian entrepreneurial universities (Weaver *et al.*, 2009; Laukkanen, 2000).

7.6.2.3. *Implications and recommendations for Indonesian new universities*

The model implies that there are two routes available for new universities in relation to EE. They may become established like traditional universities first, with the preparation of students to become enterprising graduates as their vision. It is possible, however, to go directly to being an entrepreneurial university, as there is the guarantee that all requirements, including human capital, financial capital and social capital, can be met in order to be aligned with the higher order of the perceptions, aspirations and expectations of EE. This strategy must apply both to the supply-side (institutions) and demand-side (students). Given CU's experience, it can be suggested to new universities which aim to pursue the path to becoming an entrepreneurial university from the outset, without a traditional university culture, that the role of the founder is absolutely critical. The founder's understanding about what it really involves to be an entrepreneurial university, not only for its own sake, but also for society and the country as a whole, will eventually affect the conception, goals and strategy of EE. It is also evidenced that the founder's long and rich experience of being an entrepreneur will lead to the university's survival and the efficacy of the EE initiative. An entrepreneurial university also enable students to acquire human, financial and social capital with little difficulty. Providing the opportunity for a placement for students during study would be necessary as it will "shorten gap between completion of degree and start-up" (Hussain, Scott and Hannon, 2008, p.589).

7.6.2.4. *Implications and recommendations for the Indonesian government*

Accepting learning as the most desirable and comprehensive conception of EE should bring about a curriculum reform in Indonesian higher education. Despite the fact that entrepreneurship has been included in the curriculum as a separate subject and/or specific programme for more than two decades, there is no clear evidence about its effectiveness. The subject of entrepreneurship has been considered indifferently compared to other conventional subjects, which have teaching rather than learning as their focus. Recently, the Indonesian government has launched a number of entrepreneurship programmes in order to stimulate entrepreneurship among undergraduate students. Nonetheless, understanding entrepreneurship as a process of learning, including an acceptance of failure, still needs to be socialised and encouraged among programme designers and those in charge at an institutional level. A curriculum reform could include the repositioning of entrepreneurship courses and other entrepreneurship programmes, along with the commitment needed to ensure their sustainability and effectiveness. This means that a new curriculum should be aligned with students' needs and not simply fit "the normative expectations of subject disciplines, professional and statutory bodies, and the expectations of external quality scrutiny" (Knight and Yorke, 2002, p.270). Students' career aspirations must be accommodated in the curriculum, including employability and starting businesses. It is also important to reconsider the essence of universities or higher education, as suggested by Whitehead (1957, p.48), in that education should impart both technical and intellectual vision. It is also necessary for the Indonesian Ministry of Education to be involved in promoting an entrepreneurial culture in order to make an entrepreneurial career acceptable in Indonesian society, including in the minds of parents. It has been shown in this research that a lack of parental support has hindered students in becoming engaged in entrepreneurial activity. It makes sense that entrepreneurial awareness should also target these stakeholders.

7.7. Some reflections regarding the use of a phenomenographic approach and lesson can be learned from the research process

Using a phenomenographic research method, this study identified and examined the different ways that a group of students and a group of faculty members in seven Indonesian HEIs characterise the phenomenon of EE. By uncovering the logical relations between various understandings has proven to contribute to a new understanding of EE field mainly in terms of what constitutes EE, its goals and the best way to promote its effectiveness.

There is no investigation, however, in relation to possible sources of variation in EE perceptions, aspirations and expectations. For instance, whether or not a certain person is really capable of experiencing EE or under what conditions she or he is capable of doing so is not part of the investigation under this study although it is highly reasonable to deal with such questions in conjunction with a phenomenographic study. The outcome space has, by the process of analysis, removed both the contexts in which students and faculty members' beliefs were investigated and uniqueness of each respondent.

In addition, there is another concern in relation to the use of snowball sampling and arranged interviews. The snowball samples were biased towards the inclusion of students or faculty members with inter-relationships and failed to capture respondents outside the network that the researcher has tapped into. Whilst for interviews formally arranged by university might lead to inclusion of students who only indicate superior performance in entrepreneurial projects. It was also possible that faculty members selected by the university to become respondents were only people who have similar views with the university in relation to EE policy. All these deficiencies prevented the maximum variations of understanding from being achieved.

7.8. Further research

The following issues need to be investigated in further research:

- 1) Case Study Methodology

In the recent literature, it has been acknowledged that the prevalence and nature of EE are influenced by the type of institution and the length of experience of EE. Therefore, a case study methodology could be considered to complement the findings from the phenomenographic approach.

- 2) Use of a non-experienced sample of students and faculty members.

This study investigated perceptions, aspirations and expectations from the perspective of experienced students and faculty members. It would, however, be valuable to carry out an investigation of those who are not teaching or learning entrepreneurship.

- 3) Use of a sample of higher education in other developing and/or developed countries.

Culture, including the education system, has been acknowledged to have an impact on what people understood as EE, along with aspirations and expectations. Therefore, further research which will accommodate differences in cultural aspects would be valuable.

- 4) Use of a sample of other higher education stakeholders.

In recent literature it has been acknowledged that parents, business communities and governments are external stakeholders of EE. Further research aimed at gaining insights from these stakeholders should be considered to contribute to the widening of the EE body of knowledge.

REFERENCES

- ACS, Z. J. and AUDRETSCH, D. B. (2003) *Handbook of Entrepreneurship Research: An Interdisciplinary Survey and Introduction*. London: Kluwer.
- ADCROFT, A., WILLIS, R. and DHALIWAL, S. (2004) Missing the Point? Management Education and Entrepreneurship. *Management Decision*. 42 (3/4). pp.521-530.
- AJZEN, I. (1991) The theory of planned behaviour. *Organisational Behaviour and Human Decision Processes*. 50. p.179-211.
- AKERLIND, G. S. (2005) Variation and commonality in phenomenographic research methods. *Higher Education Research and Development*. 24 (4). pp.321-334.
- ALBERTI, F. (1999) Entrepreneurship education: Scope theory. *JIBS Research Reports*. 6. pp. 64-84.
- ALBERTI, F., SCIASCIA, S. and POLI, A. (2004) *Entrepreneurship Education: Notes on an Ongoing Debate*. 14th Annual IntEnt Conference University of Napoli Federico II (Italy). 4-7 July 2004.
- ALLISON, J., NIXON, I., and SMITH, K. (2006) *Graduate Entrepreneurship: Process of Change*. Birmingham: National Council for Graduate Entrepreneurship. Research Report 003/2006.
- AMARAL, A. and MAGALHAES, A. (2002) The Emergent Role of External Stakeholders. In AMARAL, A., JONES, G.A. and KARSETH, B., (eds.). *Governing Higher Education: National Perspectives on Institutional governance*. New York: Springer.
- ANDERSON, A. R. and JACK, S. L. (2008) Role typologies for enterprising education: The professional artisan? *Journal of Small Business and Enterprise Development*. 15 (2). pp.259-273.
- APEC (ASIA-PACIFIC ECONOMIC COOPERATION) (2004) *Indonesia Experience on Entrepreneurship Development: On the perspective of regulation*. Small and Medium Enterprise Working Group, Canada, 2004/SMEWG/006. Available from http://209.85.229.132/search?q=cache:9_vtZADGmRkJ:www.apec.org/apec/documents_reports/small_medium_enterprises_working_group/2004.MedialibDownload.v1.html%3Furl%3D/etc/medialib/apec_media_library/downloads/workinggroups/smewg/mtg/2004/pdf.Par.0006.File.v1.1+%22Indonesia+entrepreneurship+education+and+training%22andcd=10andhl=enandct=clnkandgl=uk. (Accessed 20 March 2009).
- ARONSSON, M. (2004) Education matters-but does entrepreneurship education? An interview with David Birch. *Academy of Management Learning and Education*. 3 (3). pp.289-292.
- ASHWORTH, P. and LUCAS, U. (2000) Achieving empathy and engagement: A practical approach to the design, conduct and reporting of phenomenographic research. *Studies in Higher Education*. 25 (3). pp.295-308.

- ATHERTON, A. (2004) From perceptions and preconceptions to concept and practice. *International Journal of Entrepreneurship and Innovation*. 5 (2). pp.121-127.
- Atlantic Canadian Universities Entrepreneurship Consortium: Acadia Centre for Small Business and Entrepreneurship (2004). *Entrepreneurship in Atlantic Canadian University environments*. Wolfville, NS: Atlantic Canadian Universities Entrepreneurship Consortium: Acadia Centre for Small Business and Entrepreneurship: Acadia University.
- AUDRETSCH, D. B., *et al.* (2002) *Entrepreneurship: Determinants and Policy in a European-U.S. Comparison*. Boston: Kluwer Academic Publishers.
- BAUMOL, W. J. and STORM, R. J. (2010) Useful knowledge of entrepreneurship: implications of the history. In LANDES, D. S., MOKYR, J. and BAUMOL, W. J. (eds.) *The invention of enterprise: Entrepreneurship from ancient Mesopotamia to modern times*. Woodstock: Princeton University Press.
- BECHARD, J. P. and GREGOIRE, D. (2005) Entrepreneurship education research revisited: The case of higher education. *Academy of Management Learning and Education*. 4 (1). pp.22-43.
- BECHARD, J. P. and GREGOIRE, D. (2007) Archetypes of pedagogical innovation for entrepreneurship in higher education: Model and illustration. In FAYOLLE, A. (ed.) *Handbook of Research in Entrepreneurship Education*. Cheltenham: Edward Elgar Publishing.
- BECHARD, J. P. and TOULOUSE, J. M. (1998) Validation of a didactic model for the analysis of training objectives in entrepreneurship. *Journal of Business Venturing*. 13 (4). pp.317-332.
- BECKMAN, G. D. and CHERWITZ, R. A. (2009) Advancing the authentic: Intellectual entrepreneurship and the role of the business school in fine arts curriculum design. In WEST III, G. P., GATEWOOD, E. J. and SHAVER, K. G. *Handbook of University-wide Entrepreneurship Education*. Cheltenham: Edward Elgar.
- BEHRMAN, J. N. and LEVIN, R. I. (1984) Are business school doing their job? *Harvard Business Review*. January-February. pp.140-147.
- BERGLUND, H. (2007) Researching entrepreneurship as lived experience. In NEERGAARD, H. and ULHOI, J. P. (eds.). *Handbook of Qualitative Research Methods in Entrepreneurship*. Cheltenham: Edward Elgar Publishing.
- BIRCH, D. (1987) *Job Creation in America: How our Smallest Companies Put the Most People to Work*. New York: Free Press.
- BIRCH, D. L. (1981) Who creates jobs? *The Public Interest*. 65. Fall. pp.3-14.
- BIRDTHISTLE, N. (2010) A study of collegiate entrepreneurship in Ireland. *International Journal Entrepreneurship and Small business*. 9 (2). pp.227-242.
- BIRDTHISTLE, N., HYNES, B. and FLEMING P. (2007) Enterprise education programmes in secondary school in Ireland: A multi-stakeholder perspective. *Education and Training*. 49 (4). pp.265-276.
- BJERKE, B. (2007) *Understanding entrepreneurship*. Cheltenham: Edward Elgar.

- BLACK, L., CURBIN, B., and WARBURTON, T. (2003) *The contribution of 'world view' to pupils' attitudes on enterprise, entrepreneurship and entrepreneurial learning*. Manchester Metropolitan University Business School Working Paper Series.
- BLAIKI, N. (2000) *Designing Social Research*. Cambridge: Polity Press.
- BLENKER, P., *et al.* (2008) A framework for developing entrepreneurship education in a university context. *International Journal of Entrepreneurship and Small Business*. 5 (1). pp.45-63.
- BLOCK, Z. and STUMPF, S. (1992) Entrepreneurship education research: Experience and challenge. In SEXTON, D. L. and KASARDA, J. D. (eds.). *The State of the Art of Entrepreneurship*. Boston: PWS-KENT Publishing Company.
- BOISSIN, J. P., CHOLLET, B., and EMIN, S. (2007) Explaining the intention to start a business among French students: A closer look at professional beliefs. In FAYOLLE, A. (ed.) *Handbook of Research in Entrepreneurship Education volume 2: contextual perspectives*. Cheltenham: Edward Elgar Publishing.
- BOSMA, N. and HARDING, R. (2006) *Global Entrepreneurship Monitor*. London Business School.
- BOWDEN J. and MARTON, F. (1998) *The University of learning: Beyond Quality and Competence in Higher Education*. London: Kogan Page.
- BOWDEN, J. and MARTON, F. (1999) *The University of Learning*, London: Kogan Page.
- BOWDEN, J. *et al.* (1992) Displacement, velocity, and frames of reference: Phenomenographic studies of students' understanding and some implications for teaching and assessment. *American Journal of Physics*. 60 (3). pp.262-269.
- BOWEN, H. P., and DE CLERCQ, D. (2008) Institutional context and the allocation of entrepreneurial effort. *Journal of International Business Studies*. 39 (4). pp.768-768.
- BOYD, N. G., and VOZIKIS, G. S. (1994) The influence of self-efficacy on the development of entrepreneurial intentions and actions. *Entrepreneurship Theory and Practice*. 18 (9). pp.64-77.
- BRAND, M., WAKKEE, I., and VAN DER VEEN, M. (2007) Teaching entrepreneurship to non-business students: Insights from two Dutch universities. In Fayolle, A. (ed.) *Handbook of Research in Entrepreneurship Education Volume 2: Contextual Perspectives*. Cheltenham: Edward Elgar Publishing.
- BRIDGE, S. and HEGARTY, C. (2010) Rediscovering enterprise: developing appropriate university entrepreneurship education. *Education and Training*. 52 (8/9). pp.722-734.
- BRUCE, C. S. (1997) The relational approach: A model for information literacy. *The New Review of Information and Library Research*. 3. pp.1-22.
- BRUYAT, C. and JULIEN, P. A. (2000) Defining the field of research in entrepreneurship. *Journal of Business Venturing*. 16 (2). pp.165-80.
- BURN, R. B. (2000) *Introduction to Research Method*. 4th edition. London: SAGE.

- BURNETT, D. (2000) *Hunting Heffalumps: The Supply of Entrepreneurship and Economic Development*. (Online). Available from: www.technopreneurial.com (September) 1-3.
- BUSENITZ, L.W. *et al.* (2003) Entrepreneurship Research in Emergence: Past Trends and Future Directions. *Journal of Management*. 29 (3). pp.285–308.
- BUTLER, J. S. (2004) The science and practice of new business ventures: wealth creation and prosperity through entrepreneurship growth and renewal. In WELSCH, H. P. (ed.). *Entrepreneurship The Way Ahead*. London: Routledge.
- BYGRAVE, W. D. (1989) The entrepreneurship paradigm (II): Chaos and catastrophes among quantum jumps. *Entrepreneurship Theory and Practice*. 14 (2). pp.7-30.
- BYGRAVE, W. D. (2007) The entrepreneurship paradigm (I) revisited. In NEERGAARD, H. and ULHOI, J. P. (eds). *Handbook of Qualitative Research Methods in Entrepreneurship*. Cheltenham: Edward Elgar Publishing.
- BYGRAVE, W. D. and HOFER, C. W. (1991) Theorizing about entrepreneurship. *Entrepreneurship Theory and Practice*. 16. pp.13-22.
- CANDLER, G. and LYON, D. (2001) Issues of research design and construct measurement in entrepreneurship: The past decade. *Entrepreneurship Theory and Practice*. Summer. pp.101-113.
- CARAYANIS, E. G., EVANS, D., and HANSON, M. (2003) A cross-cultural learning strategy for entrepreneurship education: Outline of key concepts and lessons learned from a comparative study of entrepreneurship students in France and the US. *Technovation*. 23. pp.757-771.
- CARDOZA-CLAYSON, Z. *et al.* (2002) Unequal power – changing landscape: negotiation between evaluation stakeholders in Latino communities. *American Journal of Evaluation*. 23 (1). pp.33-44.
- CARLAND, J. C. and CARLAND, J. W. (2001) Entrepreneurship education: An integrated approach using an experiential learning paradigm. In BROCKHAUS, R. H. (ed.). *Entrepreneurship Education: A Global View*. Aldershot: Ashgate.
- CARREE, M. A. and THURIK, A. R. (2003) The impact of entrepreneurship on economic growth. In ACS, Z. J. and AUDRETSCH, D. B. (eds.). *Handbook of Entrepreneurship Research*. Boston: Kluwer Academic Publishers.
- CARRIER, C. (2007) Strategies for teaching entrepreneurship: What else beyond lectures, case studies and business plans? In FAYOLLE, A. (ed.). *Handbook of Research in Entrepreneurship Education*. Cheltenham: Edward Elgar Publishing.
- CASSON, M. (1990) *Entrepreneurship*. Aldershot: Edward Elgar.
- CAVE, F., EECLES, S. and RUNDLE, M. (2001) *Attitudes towards entrepreneurial failure: A learning experience or an indelible stigma*. Paper presented at Babson College-Kauffman Foundation Entrepreneurship research Conference, Jonnkoping, Sweden, 13-16 June.
- CHEN, P. and PARTINGTON, D. (2006) Three conceptual levels of construction project management Work. *International Journal of Project Management*. 24. p.412-421.

- CHIA, R. (1996) Teaching paradigm shifting in management education: University business schools and the entrepreneurial imagination. *Journal of Management Studies*. 33 (4). pp.409-428.
- CLERGEAU, C and SCHIEB-BIENFAIT, N. (2007) Operating an entrepreneurship center in a large and multidisciplinary university: Addressing the right issues. In FAYOLLE, A. (ed.). *Handbook of Research in Entrepreneurship Education: Contextual Perspectives*. Cheltenham, Edward Elgar Publishing.
- COLLIER-REED, B. I., INGERMAN, A., and BERGLUND, A. (2009) Reflections on trustworthiness in phenomenographic research: Recognising purpose, context and change in the process of research. *Education as Change*. 13 (2). pp.339-355.
- COLLINS, L., HANNON, P. D. and SMITH, A. (2004) Enacting entrepreneurial intent: The gaps between student needs and higher education capability. *Education and Training*. 46 (8/9). pp.454-463.
- CONE, J. (2008) Teaching entrepreneurship in colleges and universities: How (and why) a new academic field is being built. Kansas City: Ewing Marion Kauffman Foundation. Retrieved March 9, 2009, Available from <http://www.kauffman.org/items.cfm?itemID=716>. (Accessed 9 March 2009).
- COOPER, A. (2003) Entrepreneurship: The past, the present, the future. In ACS, Z. J. and AUDRETSCH, D. B. (eds.). *Handbook of Entrepreneurship Research: An Interdisciplinary Survey and Introduction*. Netherlands: Kluwer Academic Publishers.
- COOPER, A.C. (2006) The Development of the Field of Entrepreneurial Research. In LUNDSTROM, A. and S. HALVARSSON, S. *Entrepreneurship Research: Past Perspectives and Future Prospects*. *Frontiers of Entrepreneurship*. 2 (3). pp.148-154.
- COPE, J. (2005) Researching entrepreneurship through phenomenological inquiry. *International Small Business Journal*. 23 (2). pp.163-189.
- CORON, C. (2010) Entrepreneurs' education and training environment: A multicultural perspective. In FAYOLLE, A. (ed.). *Handbook of Research in Entrepreneurship Education, Volume 3, International Perspective*. Cheltenham: Edward Elgar Publishing.
- CRAYFORD, J., *et al.* (2012) Affirming entrepreneurial education: learning, employability and personal development. *Industrial and Commercial Training*. 44 (4). pp.187-193.
- CRESWELL, J. W. (1998) *Qualitative Inquiry and Research Design: Choosing Among Five Traditions*. London: SAGE.
- CROSBY, A. (1995) A critical look: The philosophical foundations of experiential education. In WARREN, K., SAKOFS, M. and HUNT, Jr., J. S. (eds.). *The Theory of Experiential Education*. Dubeque: Kendall/Hunt.
- CULKIN, N. and MALLICK, S. (2011) Producing work-ready graduates: The role of entrepreneurial university. *International Journal of Market Research*. 53 (3). pp.347-368.
- DANA, L. P. (1992) Entrepreneurial education in Europe. *Journal of education for business*. 68 (2). pp.74-78.

- DAQUILA, T. C. (2005) *The economies of South east Asia: Indonesia, Malaysia, Philippines, Singapore and Thailand*. New York: Noval Science Publishers, Inc.
- DAVIDSSON, P. (2004) *Researching entrepreneurship*. Heidelberg: Springer.
- DAVIDSSON, P. and WIKLUND, J. (2001) Levels of Analysis in Entrepreneurship Research, Current research practice and suggestions for the future. *Entrepreneurship Theory and Practice*. 25 (4). pp.81-100.
- DAVIES, H. (2002) *A review of enterprise and the economy in education*. Her Majesty's Stationery Office.
- DENZIN, N. K. and LINCOLN, Y. S. (1994) *Handbook of Qualitative Research*. Thousand Oaks, CA: SAGE.
- DENZIN, N. K. and LINCOLN, Y. S. (2003) The discipline and practice of qualitative research. In DENZIN, N. K. and LINCOLN, Y. S. (eds.), *The Landscape of Qualitative Research*, 2nd edition, London: SAGE.
- DICKSON, P. H., SOLOMON, G. T. and WEAVER, K. M. (2008) Entrepreneurial selection and success: Does education matter? *Journal of Small Business and Enterprise Development*. 15 (2). pp.239-257.
- DRNOVSEK, M. and ERIKSON, T. (2005) Competing models of entrepreneurial intentions. *Economic and Business Review*. 7 (1). pp.55-71.
- DUCCHENEAUT, B. (2001) Entrepreneurship and higher education from real-life context to pedagogical challenge. In BROCHAUS, R. H., HILLS, G. E. and WELSCH, H. P. (eds.), *Entrepreneurship Education: A Global View*. Aldershot: Asghate Publishing Ltd.
- DYER, W. G. (2000) Toward a theory of entrepreneurial careers. In WESTHEAD, P. and WRIGHT, M. (eds.), *Advances in Entrepreneurship*. Cheltenham: An Elgar Reference Collection.
- EASTERBY-SMITH, M., THORPE, R., and JACKSON, P. R. (2008) *Management Research*. 3th edition. London: SAGE.
- EDWARDS, L. J. and MUIR, E. J. (2005) Promoting entrepreneurship at the university of Glamorgan through formal and informal learning. *Journal of Small Business and Enterprise Development*. 12 (4). pp.613-626.
- ERIKSSON, P. and KOVALAINEN, A. (2008) *Qualitative Method in Business Research*. London: Sage.
- ERKKILA, K. (2000) *Entrepreneurship Education: Mapping the Debate in The United States, The United Kingdom, and Finland*. London: Routledge Falmer.
- EUROPEAN COMMISSION (2002) *Final Report of the Expert Group 'Best Procedure' Project on Education and Training for Entrepreneurship*. Brussels.
- EUROPEAN COMMISSION (2004) *Helping to create an entrepreneurial culture: A guide on good practices in promoting entrepreneurial attitudes and skills through education*. Enterprise Policy. Brussels.
- EUROPEAN COMMISSION (2012) *Effects and Impact of Entrepreneurship Programmes in Higher Education*. Brussels: Author.
- FAYOLLE, A. (2007) *Handbook of Research in Entrepreneurship Education: Contextual Perspective*. Cheltenham: Edward Elgar Publishing.

- FAYOLLE, A. (2008) Three types of learning processes in entrepreneurship education. *International Journal Business and Globalisation*. 2 (2). pp.198-207.
- FAYOLLE, A. (2010) *Handbook of Research in Entrepreneurship Education: International Perspective*. Cheltenham: Edward Elgar Publishing.
- FAYOLLE, A. and DEGEORGE, J. M. (2006) Attitudes, attentions and behaviour: New approaches to evaluating entrepreneurship education. In FAYOLLE, A. and KLANDT, H. (eds.). *International Entrepreneurship Education- Issues and Newness*. Cheltenham: Edward Elgar Publishing.
- FAYOLLE, A. and GAILLY, B. (2008) From craft to science: Teaching models and learning processes in entrepreneurship education. *Journal of European Industrial Training*. 32 (7). pp.569-593.
- FAYOLLE, A. and KLANDT, H. (2006) Issues and newness in the field of entrepreneurship education: New lenses for new practical and academic questions. In FAYOLLE, A. and KLANDT, H. (eds.). *International Entrepreneurship Education: Issues and Newness*. Cheltenham: Edward Elgar Publishing.
- FAYOLLE, A., KYRO, P., and ULIJN, J. (2005) *Entrepreneurship Research In Europe: Outcomes and Perspectives*. Cheltenham: Edward Elgar Publishing.
- FENDT, J. and BUREAU, S. (2010) Small business education in a grande nation: Antinomy, opportunity or both? A French Grande Ecole case study. In Fayolle, A. (ed.). *Handbook of Research in Entrepreneurship Education: International Perspective*. Cheltenham: Edward Elgar Publishing.
- FIET, J. O. (2000) The pedagogical side of entrepreneurship theory. *Journal of Business Venturing*. 16 (2). pp.101-117.
- FILION, L. J. (2002) Vision and Relations. In KRUEGER, N.F. *Entrepreneurship: Critical Perspectives on Business and Management*. London: Routledge.
- FILION, L. J. and DOLABELA, F. (2007) The making a revolution in Brazil: The introduction of entrepreneurial pedagogy in the early stages of education. In FAYOLLE, A. (ed.) *Handbook of Research in Entrepreneurship Education: Contextual perspectives*. Cheltenham: Edward Elgar Publishing.
- FISHER, S. L., GRAHAM, M. E., and COMPEAU, M. (2008) Starting from scratch: Understanding the learning outcomes of undergraduate entrepreneurship education. In HARRISON, R. T. and LEITCH, C. M. (eds.). *Entrepreneurial Learning: Conceptual Frameworks and Applications*. London: Routledge.
- FLETCHER, D. (2007) Social constructionist thinking: Some implications for entrepreneurship research and education. In FAYOLLE, A. (ed.). *Handbook of Research in Entrepreneurship Education*. Cheltenham: Edward Elgar Publishing.
- FORMICA, P. (2002) Entrepreneurial universities: The value of education in encouraging entrepreneurship. *Industry and Higher Education*. June. pp.167-175.
- FREEMAN, R. E. (1984) *Strategic management: a stakeholder approach*. Boston: Pitman Publishing.

- FROM, J. (2006) *A field of paradoxes? Some critical remarks on educational issues in entrepreneurship education*. The 14th Nordic Conference on Small Business Research. May 11-13.
- GALLOWAY, L., *et al.* (2005) Enterprise skills for the economy. *Education and Training*, 47 (1). pp.7-17.
- GARAVAN, T. N. and O'CINNEIDE, B. (1994) Entrepreneurship education and training programmes: A review and evaluation - part 1. *Journal of European Industrial Training*. 18 (8). pp.3-12.
- GARAVAN, T., *et al.* (2010) Entrepreneurship education in the Republic of Ireland: context, opportunities and challenges. In FAYOLLE, A. (ed.). *Handbook of Research in Entrepreneurship Education: International Perspective*. Cheltenham: Edward Elgar Publishing.
- GARTNER, W. B. (1985) A conceptual framework for describing the phenomenon of new creation. *Academy of Management Review*. 10 (4). pp.696-706.
- GARTNER, W. B. (1988) Who is an entrepreneur? Is the wrong question. *American Journal of Small Business*. 12. pp.11-32.
- GARTNER, W. B. (1990) What we are talking about when we are talking about entrepreneurship? *Journal of Business Venturing*. 5. pp.15-28.
- GARTNER, W. B. (1993) Words lead to deeds: towards an organisational emergence vocabulary. *Journal of Business Venturing*. 8. pp.231-39.
- GARTNER, W. B. (2001) Is there an elephant in entrepreneurship research? Blind assumptions in theory development. *Entrepreneurship Theory and practice*. 25 (4). pp. 27-39.
- GARTNER, W. B. and BIERLY, S. (2002) Introduction to the special issue on qualitative methods in entrepreneurship research. *Journal of Business Venturing*. 17 (5). pp.387-96.
- GHAURI, P. N., GRONHAUG, K. and KRITIANSLUND, I. (2005) *Research methods in business studies: A practical guide*. Dorchester: Prentice Hall.
- GHOSH and BLOCK (1993-1994) Audiences for entrepreneurship education: Characteristics and needs' in HAY, F., MONROY, T. and REICHERT, J. (eds) *The art and science of entrepreneurship*. Berea, OH: The project for Excellence in Entrepreneurship Education.
- GIBB, A. (1990) Entrepreneurship and Intrapreneurship – exploring the difference. In DONCKELS, R. and MIETTINEN, A. (eds). *New Findings and Perspectives in Entrepreneurship*. Aldershot: Gower, 75-93.
- GIBB, A. (1993) The Enterprise Culture and Education: Understanding Enterprise Education and its Links with Small Business, Entrepreneurship and Wider Educational Goals. *International Small Business Journal*. 11 (3). pp.11-34.
- GIBB, A. (1996) Entrepreneurship and small business management: Can we afford to neglect them in the twenty-first century business school? *British Journal of Management*. 7 (4). pp.309-324.
- GIBB, A. (2002) Creating conducive environment for learning and entrepreneurship: Living with, dealing with, creating and enjoying uncertainty and complexity. *Industry and Higher Education*. 16 (30). pp.135-148.

- GIBB, A. (2002) In pursuit of a new enterprise and entrepreneurship paradigm for learning: Creative destruction, new values, new ways of doing things and new combinations of knowledge. *International Journal of Management Reviews*. 4. pp.213-231.
- GIBB, A. (2006) Entrepreneurship: Unique solutions for unique environments: Is it possible to achieve this with the existing paradigm? Background paper to the plenary presentation to the International Council for Small Business World Conference. Melbourne Australia June 18-21.
- GIBB, A. (2007) Creating the entrepreneurial university: Do we need a wholly different model of entrepreneurship. In FAYOLLE, A. (ed.). *Handbook of Research in Entrepreneurship Education: General Perspectives*. Cheltenham: Edward Elgar Publishing.
- GIBB, A. and HANNON, P. D. (2006) Towards the Entrepreneurial University?, Birmingham: National Council for Graduate Entrepreneurship, Working Paper 035/2006.
- GIBB, A. (1986) Education for enterprise: Training for small-business initiation – some contrasts. *Journal of Small Business and Entrepreneurship*. 4 (3). pp.42-47.
- GIBSON, D., SCOTT, J. M. and HARKIN, A. (2009) New Venture Based Learning - An Experiential Pedagogy for High-Growth Entrepreneurship. Queen's University Management School Working Paper Series.
- GORMAN, G., HANLON, D. and KING, W. (1997) Some research perspectives on entrepreneurial education, enterprise education and education for small business management: A ten-year review. *International Small Business Journal*. 15 (3). pp.56-77.
- GRANT, A. (1998) Entrepreneurship – the major academic discipline for the business education curriculum for the 21st century. In SCOTT, M. G., ROSA, P. and KLANDT, H. (eds.). *Educating Entrepreneurs for Wealth Creation*. Aldershot: Ashgate.
- GREEN, W. S. (2009) From commerce to culture: entrepreneurship in the mainstream. In WEST III, G. P., GATEWOOD, E. J. and SHAVER, K. G. (eds.). *Handbook of University-wide Entrepreneurship Education*. Cheltenham: Edward Elgar.
- GREENE, P. G, and RICE, M. P. (2007) Entrepreneurship education: Moving from 'whether' to 'what', 'how', and 'why'. In Greene, P. G. and Rice, M.P. (eds.). *Entrepreneurship education*. Cheltenham: Edward Elgar.
- GRILO, I. and TURIK, R. (2005) Latent and Actual Entrepreneurship in Europe and the US: Some Recent Developments. *International Entrepreneurship and Management Journal*. 1. pp.441–459.
- GUBA, E. G. AND LINCOLN, Y. S. (1994) Competing paradigms in qualitative research in DENZIN, N. K. and LINCOLN, Y. S. (eds.). *Handbook of Qualitative Research*. London: Thousand Oaks.
- GUIRONG, D., JINQUAN, Y., and LEI, X. (2011) Chinese entrepreneurship education. In Thomas, H. and Kelley, D. (eds.). *Entrepreneurship education in Asia*. Cheltenham: Edward Elgar.

- GUSTAFSON, J. (2009) Entrepreneurship as a liberal art. In WEST III, G.P., GATEWOOD, E.J. and SHAVER, K.G. *Handbook of University-wide Entrepreneurship Education*. Cheltenham: Edward Elgar.
- HANNON, P. D. (2006) Teaching pigeons to dance: Sense and meaning in entrepreneurship education. *Education and Training*. 48 (5). pp.296-308.
- HART, D. M. (2003) *The emergence of entrepreneurship policy: Governance, Start-up and Growth in the U.S. Knowledge Economy*. Cambridge: Cambridge University Press.
- HARTSHORN, C. (2002) Understanding notions of enterprise in the higher education sector. *Industry and Higher Education*. 16 (3). pp.149-158.
- HARTSHORN, C. and HANNON, P. D. (2005) Paradoxes in entrepreneurship education: Chalk and talk or chalk and cheese? A case approach. *Education and Training*. 47 (8/9). pp.616-627.
- HASSELGREN, B. and BEACH, D. (1997) Phenomenography – A ‘good-for-nothing brother’ of phenomenology? Outline of an analysis. *Higher Education Research and Development*. 16. pp.191-202.
- HEBERT, R. F. and LINK, A. N. (1988) *The entrepreneur: mainstream, views and radical critiques*. New York: Praeger.
- HENRY, C. and TITTERINGTON, A. (2001) 'The use of enterprise training programs as a mechanism for assessing entrepreneurial suitability. In Brochaus, R. H., Hills, G. E. and Welsch, H. P. (eds.). *Entrepreneurship Education: A Global View*. Aldershot: Ashgate Publishing Ltd.
- HENRY, C., HILL, F. and LEITCH, C. (2005) Entrepreneurship education and training: Can entrepreneurship be taught? Part I. *Education and Training*. 47 (2). pp.98-111.
- HENRY, C., HILL, F., and LEITCH, C. (2003) *Entrepreneurship education and training*. Aldershot: Ashgate.
- HILLS, G. E. and MORRIS, M. H. (1998) Entrepreneurship education: A conceptual model and review. In SCOTT, M. G., ROSA, P. and KLANDT, H. (eds.). *Educating Entrepreneurs for Wealth Creation*. Aldershot: Ashgate.
- HINDLE, K. (2007) Teaching entrepreneurship at university: From the wrong building to the right philosophy. In FAYOLLE, A. (ed.). *Handbook of Research in Entrepreneurship Education*. Cheltenham: Edward Elgar Publishing.
- HISRICH, R. D. (2006) Entrepreneurship research and education in the world: Past, present and future. In ACHLEITNER, A. K., KLANDT, H., KOCH, L.T. and VOIGT, K. I. (Eds.). *Jahrbuch entrepreneurship*. New York: Springer.
- HJORTH, D. and JOHANNISSON, B. (2001) Training for entrepreneurship: Playing and language games – An inquiry into the Swedish education system. In BROCHAUS, R. H., HILLS, G. E. and WELSCH, H. P. (eds.). *Entrepreneurship Education: A Global View*. Aldershot: Ashgate Publishing Ltd.
- HJORTH, D. and JOHANNISSON, B. (2007) Learning as an entrepreneurial process. In FAYOLLE, A. (ed.). *Handbook of Research in Entrepreneurship Education: General Perspectives*. Cheltenham: Edward Elgar Publishing.

- HOFSTEDE, G., *et al.* (2004) Culture's role in entrepreneurship: self-employment out of dissatisfaction. In BROWN, T. E. and ULIJN, L. M. (eds.). *Innovation, Entrepreneurship and Culture: The Interaction between Technology, Progress and Economic Growth*. Cheltenham: Edward Elgar Publishing.
- HOWE, K. R. and EISENHARDT, M. (1990) Standards for qualitative and quantitative research: A prolegomenon. *Educational Researcher*. 19 (4). pp.2-9.
- HOWORTH, C., TEMPEST, S., and COUPLAND, C. (2005) Rethinking entrepreneurship methodology and definitions of the entrepreneur. *Journal of Small Business and Enterprise Development*. 12 (1). p.24-40.
- HUGHES, J. (1990) *The Philosophy of Social Research*, 2nd edition, Essex: Longman.
- HUSSAIN, J. G., SCOTT, J. M. and HANNON, P. D. (2008) The new generation: characteristics and motivations of BME graduate entrepreneurs. *Education and Training*. 50 (7). pp.582-596.
- HYNES, B. (1996) Entrepreneurship education and training - Introducing entrepreneurship into non-business disciplines. *Journal of European Industrial Training*. 20 (8). pp.10-17.
- HYTTI, U. and KUOPUSJARVI, P. (2007) Evaluating entrepreneurship education: Play of power between evaluators, programme promoters and policy makers. In FAYOLLE, A. (ed.). *Handbook of Research in Entrepreneurship Education: Contextual perspective*. Cheltenham: Edward Elgar Publishing.
- HYTTI, U. and O'GORMAN, C. (2004) What is enterprise education? An analysis of the objectives and methods of enterprise education program in four European Countries. *Education and Training*. 46 (1). pp.11-23.
- JACK, S. L. and ANDERSON, A. R. (1999) Entrepreneurship education within the enterprise culture producing reflective practitioners. *International Journal of Entrepreneurial Behaviour and Research*. 5 (3). pp.110.
- JOHANNISSON, B. (1991) University training for entrepreneurship: Swedish approaches. *Entrepreneurship and Regional Development*. 3. pp.67-82.
- JOHANNISSON, B., HALVARSSON, D. and LOVSTAL, E. (2001) Stimulating and fostering entrepreneurship through university training-learning within an organizing context. In BROCHAUS, R. H., HILLS, G. E. and WELSCH, H. P. (eds.). *Entrepreneurship Education: A Global View*. Aldershot: Asghate Publishing Ltd.
- JOHANNISSON, B., LANDSTROM, H. and ROSENBERG, J. (1998) University training for entrepreneurship - An action frame of reference. *European Journal of Engineering Education*. 23 (4). pp.477-495.
- JOHANSEN, V. (2010) Entrepreneurship education and entrepreneurial activity. *International Journal Entrepreneurship and Small Business*. 9 (1). pp.74-85.
- JOHANSSON, B., *et al.* (1985). An approach to describing learning as change between qualitatively different conceptions. Cognitive structure and conceptual change. In WEST, L.H.T and PINES, A. L. (eds). *Cognitive structure and conceptual change*. New York: Academic Press.

- JOHNSTONE, B. A. (2007) Ethnographic method in entrepreneurship research. In NEERGAARD, H. and ULHOI, J. P. (eds.). *Handbook of Qualitative Research Methods in Entrepreneurship*. Cheltenham: Edward Elgar Publishing.
- JONES, C. (2010) Accounting for student/educator diversity: resurrecting co-action theory. In Fayolle, A. (ed.). *Handbook of Research in Entrepreneurship Education: International perspective*. Cheltenham: Edward Elgar Publishing.
- JONES, C. (2010) Entrepreneurship education: Revisiting our role and its purpose. *Journal of Small Business and Enterprise Development*. 17 (4). pp.500-513.
- JONES, C. and ENGLISH, J. (2004) A contemporary approach to entrepreneurship education. *Education and Training*. 46 (8). pp.416-423.
- JONES, C. and MATLAY, H. (2011) Understanding the heterogeneity of entrepreneurship education: Going beyond Gartner. *Education and Training*. 53 (8). pp.692-703.
- KABONGO, J. D. and MCCASCEY, P. H. (2011) An examination of entrepreneurship educator profiles in business programs in the United States. *Journal of Small Business and Enterprise Development*. 18 (1). pp.27-42.
- KAILER, N. (2007) Evaluation of entrepreneurship education: planning problems, concepts and proposals for evaluation design. In FAYOLLE, A. (ed.). *Handbook of Research in Entrepreneurship Education: International perspective*. Cheltenham: Edward Elgar Publishing.
- KALANTARIDIS, C. (2004) *Understanding the entrepreneur: an institutionalist perspective*. Aldershot: Ashgate.
- KANTIS, H., ISHIDA, M., and KOMORI, M. (eds) (2002) *Entrepreneurship in Emerging Economies: the creation and development of New firms in Latin America and East America*. Inter-American Development bank. Department of Sustainable Development, Micro, Small and Medium Business Division.
- KATZ, J. A. (2003) Chronology and intellectual trajectory of American entrepreneurship education 1876-1999. *Journal of Business Venturing*. 18 (2). pp.283-300.
- KATZ, J. A. (2007) Ph.D. Programs in Entrepreneurship, St. Louis, MO: St. Louis University. Available from: www.slu.edu/x17968.xml (accessed 15 January 2008).
- KATZ, J. and GARTNER, W. B. (1988) Properties of emerging organisations. *Academy of Management Review*. 13 (3). pp.429-441.
- KAYED, R. N. and HASSAN, K. (2013) *Islamic entrepreneurship*. London: Routledge.
- KENT, C. A. (1990) Entrepreneurship education at collegiate level: A synopsis and evaluation. In KENT, C. A. (ed.). *Entrepreneurship Education*. Westport, CT: Quorum Books.
- KETS DE VRIES, M. F. R. (1977) The entrepreneurial personality: a person at the crossroads. *The Journal of Management Studies*. February. pp.34-57.
- KHAN, H. and MATLAY, H. (2009) Implementing service excellence in higher education. *Education and Training*. 51 (8/9). pp.769-780.
- KICKUL, J. and FAYOLLE, A. (2007) Cornerstone of change: Revisiting and challenging new perspectives on research in entrepreneurship education. In

- FAYOLLE, A. (ed.). *Handbook of Research in Entrepreneurship Education: General perspective*. Cheltenham: Edward Elgar Publishing.
- KIESNER, W. F. (1990) Post-Secondary Entrepreneurship Education for the Practising Venture Initiator. In KENT, C. A. (ed.). *Entrepreneurship Education*. Westport, CT: Quorum Books.
- KIRBY, D. A. (2003) *Entrepreneurship*. London, McGraw-Hill.
- KIRBY, D. A. (2006) Entrepreneurship education: Can business schools can meet the challenge? In FAYOLLE, A. (ed.). *Handbook of Research in Entrepreneurship Education*. Cheltenham: Edward Elgar Publishing.
- KIRBY, D. A. (2007) Changing the entrepreneurship education paradigm. In FAYOLLE, A. (ed.). *Handbook of Research in Entrepreneurship Education: International perspective*. Cheltenham: Edward Elgar Publishing.
- KLANDT, H. and VOLKMANN, C. (2006) Development and prospects of academic entrepreneurship education in Germany. *Higher Education in Europe*. 31 (2). pp.195-208.
- KLAPPER, R. (2004) Government goals and entrepreneurship education – An investigation at a Grande Ecole in France. *Education and Training*. 46 (3). pp.127-137.
- KNIGHT, P. T. and YORKE, M. (2002) Employability through the curriculum. *Tertiary Education and Management*. 8. pp.261-276.
- KOGAN, M. (1999) The impact of research on policy. In COFFIELD, F. (ed.). *Speaking truth to power: Research and policy on lifelong learning*. Bristol: The Policy Press University of Bristol.
- KOLVEREID, L. and AMO, B. W. (2007) 'Entrepreneurship among graduates from business schools: A Norwegian case' In FAYOLLE, A. (ed.). *Handbook of Research in Entrepreneurship Education: Contextual perspective*. Cheltenham: Edward Elgar Publishing.
- KOMPAS, 11 November 2008. *Entrepreneurship is Encouraged in Higher Education*. Available from: <http://cetak.kompas.com/read/xml/2008/11/11/00514012/kewirausahaan.digalakan.di.ptn-pts>. (Accessed 13 February 2009).
- KOURILSKY, M. (1980) Predictors of entrepreneurship in a simulated economy. *Journal of Creative Behavior*. 14 (3). pp.175-198.
- KOURILSKY, M. (1990) Entrepreneurial thinking and behaviour: What role the classroom. In KENT, C.A. (ed.). *Entrepreneurship Education*. Westport, CT: Quorum Books.
- KRAAIJENBRINK, J., BOS, G. and GROEN, A. (2010) What do students think of the entrepreneurial support given by their universities. *International Journal Entrepreneurship and Small business*. 9 (1). pp.110-125.
- KRUEGER, N. F. (2007) The micro foundations of entrepreneurial learning and education: The experiential essence of entrepreneurial cognition. In WEST III, G. P., GATEWOOD, E. J. and SHAVER, K. G. *Handbook of University-wide Entrepreneurship Education*. Cheltenham: Edward Elgar.

- KRUEGER, N. F. and CARSRUD, A. L. (1993) Entrepreneurial intentions: Applying the theory of planned behaviour. *Entrepreneurship and Regional Development*. 5 (4). pp.315-330.
- KRUEGER, N. F., REILLY, M. D. and CARSRUD, A. L. (2000) Competing models of entrepreneurial intentions. *Journal of Business Venturing*. 15 (5/6). pp.411-32.
- KUSWARA, H. Strategi Perguruan Tinggi Mewujudkan Entrepreneurial Campus (Higher education strategy to develop an entrepreneurial campus). Available from www.dikti.go.id (accessed 7th June 2011).
- KVALE, S. (2002) The social construction of validity. In Denzin, N. K. and Lincoln, Y. S. (eds.) *The Qualitative Inquiry Reader*. London: SAGE.
- KYRO, P. (2006) The continental and Anglo-American approaches to entrepreneurship education - differences and bridges. In FAYOLLE, A. and KLANDT, H (eds.), *International Entrepreneurship Education- Issues and Newness*. Cheltenham: Edward Elgar Publishing.
- LAMB, P., SANDBERG, J. and LIESCH, P. W. (2011) Small firm internationalisation unveiled through phenomenography. *Journal of International Business Studies*. 42. pp.672-693.
- LANCASTER, G. (2005) *Research Methods in Management*. Oxford: Elsevier Butterworth Heinemann.
- LANDES, J. S., MOKYR, J. and BAUMOL, W. J. (2010) *The invention of enterprise: Entrepreneurship from ancient Mesopotamia to modern times*. Woodstock: Princeton University Press.
- LARSSON, J. and HOLMSTROM, I. (2007) Phenomenographic or phenomenological analysis: Does it matter? Examples from a study on anaesthesiologists' work. *International Journal of Qualitative Studies on Health and Well-being*. 2. pp.55-64.
- LEE, L. and WONG, P. K. (2005) *Entrepreneurship education: A compendium of related issues*. NUS Entrepreneurship Centre. Working Paper.
- LENA, L. and WONG, P. K. (2003) Attitude towards entrepreneurship education and new venture creation. *Journal of Enterprising Culture*. 11 (4). pp.339-357.
- LIAO, J. (2004) Entrepreneurial growth: Predictors and indicators. In WELSCH, H.P. (ed.). *Entrepreneurship The Way Ahead*. London: Routledge.
- LINAN, F. (2007) The role of entrepreneurship education in the entrepreneurial process. In FAYOLLE, A. (ed.). *Handbook of Research in Entrepreneurship Education: General*. Cheltenham: Edward Elgar Publishing.
- LINCOLN, Y. S. (2002) Emerging criteria for quality in qualitative and interpretive research. In DENZIN, N. K. and LINCOLN, Y. S. (eds.). *The Qualitative Inquiry Reader*. London: SAGE.
- LINDGREN, M. and PACKENDORFF, J. (2009) Social constructionism and entrepreneurship: basic assumptions and consequences for theory and research. *International Journal of Entrepreneurial Behaviour and Research*. 15(1). pp.25-47.

- LINGYU, H., LIJUN, L. and YING, W. (2011) Entrepreneurship education for engineering and science students: A comparison between China and the US. In THOMAS, H. and KELLEY, D. (eds.) *Entrepreneurship education in Asia*. Cheltenham: Edward Elgar.
- LORD YOUNG OF GRAFFHAM (1992) Enterprise regained. In HEELAS, P. and MORRIS, P. (eds). *Enterprise culture: Its values and value*. London: Routledge.
- LOW, M. and MCMILLAN, I. (1988) Entrepreneurship: Past research and future challenges. *Journal of Management*. 32. pp.139-61.
- LUNDSTROM, A. and STEVENSON, L. (2005) *Entrepreneurship Policy: Theory and Practice*. New York: Springer.
- MARTON, F. (1981) Phenomenography: Describing conceptions of the world around us. *Journal of Instructional Science*. 10. pp.177-200
- MARTON, F. (1986) Phenomenography: A research approach to investigating different understanding of reality. *Journal of Thought*. 21 (3). pp.28-48.
- MARTON, F. (1988) Phenomenography: Exploring different conceptions of reality. In Fetterman, D. (ed.). *Qualitative Approaches to Evaluation in Education*, New York: Praeger.
- MARTON, F. (1992) Phenomenography and 'the art of teaching all things to all men'. *Qualitative Studies in Education*. 5. pp.253-267.
- MARTON, F. (1994) On the structure of awareness. In BOWDEN, J.A. and WALSH, E (eds). *Phenomenographic research: Variations in method: the Warburton Symposium*. Melbourne: RMIT.
- MARTON, F. and BOOTH, S. (1997) *Learning and Awareness*. New Jersey: Lawrence Erlbaum Associates.
- MASON, J. (2002) *Qualitative Researching*. 2nd edition, London: SAGE Publication.
- MATLAY, H. (2005) Researching entrepreneurship and education: Part 1: What is entrepreneurship and does it matter? *Education and Training*. 47 (8/9). pp.665-677.
- MATLAY, H. (2006) Researching entrepreneurship and education: Part 2: What is entrepreneurship and does it matter? *Education and Training*. 48 (8/9). pp.704-718.
- MATLAY, H. (2009) Entrepreneurship education in the UK: A critical analysis of stakeholder involvement and expectations. *Journal of Small Business and Enterprise Development*. 16 (2). pp.183-210.
- MATLAY, H. (2011) The influence of stakeholders on developing enterprising graduates in UK HEIs. *International Journal of Entrepreneurial Behaviour and Research*. 17 (2). pp.166-182.
- MCCLELLAND, D. (1961) The achievement motive in economic growth. In KILBY, P. (ed.), *Entrepreneurship and economic growth*, New York: The Free Press.
- MCMULLAN, W. E. and GILLIN, L. M. (2001) Entrepreneurship education in the nineties: Revisited. In BROCHAUS, R. H., HILLS, G. E. and WELSCH, H. P. (eds.). *Entrepreneurship Education: A Global View*. Aldershot: Ashgate Publishing Ltd.

- MCMULLAN, W. E. and LONG, W. A. (1987) Entrepreneurship education in the nineties. *Journal of Business Venturing*. 2 (3). pp.261-275.
- MENDES, A. and KEHOE, C. (2009) Academic entrepreneurship: Possibilities and pitfalls. In WEST III, G. P., GATEWOOD, E. J. and SHAVER, K. G. *Handbook of University-wide Entrepreneurship Education*. Cheltenham: Edward Elgar.
- MICHALSKI, G. V. and COUSINS, J. B. (2000) Differences in stakeholder perceptions about training evaluation: A concept mapping/pattern matching investigation. *Evaluation and Program Planning*. 23 (2). pp.211-230.
- MINNITI, M., BYGRAVE, W. D. and AUTIO, E. (2006) *Global Entrepreneurship Monitor: 2005 Executive Report*. Babson College and London Business School.
- MITRA, J., and MANIMALA, M. J. (2008) Higher education's role in entrepreneurship and economic development. In POTTER, J. (ed.). *Entrepreneurship and Higher Education*. OECD.
- MOHAN-NEILL, S. (2001) The perceived needs, benefits and potential target markets for entrepreneurship education. In BROCHAUS, R. H., HILLS, G. E. and WELSCH, H. P. (eds.). *Entrepreneurship Education: A Global View*. Aldershot: Ashgate Publishing Ltd.
- MYRAH, K. K. and CURRIE, R. R. (2006) Examining undergraduate entrepreneurship education. *Journal of Small Business and Entrepreneurship*. 19 (3). pp.233-254.
- NABI, G., HOLDEN, R. and WALMSLEY, A. (2010) Entrepreneurial intention among students: Towards a re-focused research agenda. *Journal of Small Business and Enterprise Development*. 17 (4). pp.537-551.
- NCGE/UKSEC (2007) *Views from NCGE/UKSEC International Entrepreneurs Educators Conference: Shaping the Future Today*. Cambridge: Author.
- NECK, H. M. and GREENE, P. G. (2011) Entrepreneurship education: Known worlds and new frontiers. *Journal of Small Business Management*. 49 (1). pp.55-70.
- NEERGAARD, H. and ULHOI, J. P. (2007) *Handbook of Qualitative Research Methods in Entrepreneurship*. Cheltenham: Edward Elgar Publishing.
- NEUMAN, W. L. (2000) *Social Research Methods: Qualitative and Quantitative Approaches*. 4th edition. Boston: Allyn and Bacon.
- NICHOLLS, A. (2006) *Social Entrepreneurship: New Models of Sustainable Social Change*. Oxford: Oxford University Press.
- NILSSON, J. E. (2006) *The role of universities in regional innovative system: A Nordic perspective*. Copenhagen: Copenhagen Business School Press.
- OHE, T. (2011) Entrepreneurship education in Japan. In THOMAS, H. and KELLEY, D. (eds.) *Entrepreneurship education in Asia*. Cheltenham: Edward Elgar.
- PITTAWAY, L. and HANNON, P. (2008) Institutional strategies for developing enterprise education. *Journal of Small Business and Enterprise Development*. 15 (1). pp.202- 225.
- PLANT, R. A. and RYAN, R. J. (1994) Who is evaluating training? *Journal of European Industrial Training*. 18 (5). pp.27-30.

- PLASCHKA, G. R. and WELSCH, H. P. (1990) Emerging structures in entrepreneurship education: Curricular designs and strategies. *Entrepreneurship Theory and Practice*. 14 (3). pp.55-70.
- POLITIS (2008) The process of entrepreneurial learning: a conceptual framework. In HARRISON, R. T. and LEITCH, C. (Eds.). *Entrepreneurial Learning: Conceptual Frameworks and Applications*. Routledge, London, pp.44-71.
- PORTER, L.W. and MCKIBBIN, L. E. (1988) *Management, education and development: Drift or thrust into the 21st century?* New York: McGraw-Hill.
- POSTIGO, S., IACOBUCI, D. and TAMBORINI, M. F. (2006) Undergraduate students as a source of potential entrepreneur: A comparative study between Italy and Argentina. In FAYOLLE, A. and KLANDT, H. (eds.). *International Entrepreneurship Education: Issues and Newness*. Cheltenham: Edward Elgar Publishing.
- PURWADI, A. (2011) *Student Entrepreneurship Programme 2009: First year experience and lesson learnt*. 15th UNESCO-APEID International Conference, Jakarta, 6-8 December.
- PURWADI, A. and TANTRA, D. K. (2007) The Role of Indonesian University in Community Development. 11th UNESCO-APEID Conference. *Reinventing Higher Education: Toward Participatory and Sustainable Development*. Bangkok, Thailand, 12-14 December 2007. Available from: <http://209.85.229.132/search> (Accessed 12 December 2009).
- QUAGLIA, R. (1989) Student aspiration: A critical dimension in effective schools. *Research in Rural Education*. 6 (2). pp.7-9.
- RABBIOR, G. (1990) Elements of a successful entrepreneurship/economics/education program. In Kent, C.A. (ed.). *Entrepreneurship Education*. Westport, CT: Quorum Books.
- RAE, D. (2004) Entrepreneurial learning: A practical model from the creative industries. *Education and Training*. 46 (8/9). pp.492-500.
- RAE, D. *et al.* (2012) Enterprise and entrepreneurship in English higher education: 2010 and beyond. *Journal of Small Business and Enterprise Development*. 19 (3). pp.380- 401.
- RAIHANI (2007) Education reforms in Indonesia in the twenty-first century. *International Education Journal*. 8 (1). pp.172-183.
- RAMSDEN, P. (2003) *Learning to Teach in Higher Education*. London: Routledge Falmer.
- RAPOSO, M. (2008) Propensity to Firm Creation: Empirical research using Structural Equations. *International Entrepreneurship Management Journal*. 4 (4). pp. 485-504.
- RAPOSO, M. (2009) Support policies to entrepreneurship. In LEITAO, J. and BAPTISTA, R. (eds.). *Public Policies for Fostering Entrepreneurship: A European Perspective*. London: Springer.
- REED, B. (2006) *Phenomenography as a way to research the understanding by students of technical concepts*. Núcleo de Pesquisa em Tecnologia da Arquitetura e Urbanismo (NUTAU): Technological Innovation and Sustainability. Sao Paulo, Brazil, 1-11.

- REYNOLDS, P. D. and WHITE, S. B. (1997) *The entrepreneurial process*. Westport, CT: Quorum Books.
- REYNOLDS, P. D. *et al.*, (2000) *Global Entrepreneurship Monitor: 2000 Executive Report*. Babson College and Kauffman Center for Entrepreneurial Leadership and the Marion Kauffman Foundation, London Business School.
- REYNOLDS, P. D. *et al.*, (2001) *Global Entrepreneurship Monitor: 2000 Executive Report*. London Business School and Kauffman Center for Entrepreneurial Leadership.
- REYNOLDS, P. D., HAY, M. and CAMP, S.M. (1999) *Global Entrepreneurship Monitor: 1999 Executive Report*. Babson College and Kauffman Center for Entrepreneurial Leadership and London Business School.
- RICHARDSON, I. and HYNES, B. (2008) Entrepreneurship education: towards an industry sector approach. *Education and Training*. 50 (3). pp.188-198
- RICHARDSON, J. (2004) Entrepreneurship and development in Asia. *International Journal Entrepreneurship and Innovation Management*. 4 (5). pp.469-484.
- ROBINSON, P. and MALACH, S. (2007) Multi-disciplinary entrepreneurship clinic: Experiential education in theory and practice. In FAYOLLE, A. (ed.). *Handbook of Research in Entrepreneurship Education*. Cheltenham: Edward Elgar Publishing.
- RONSTADT, R. (1990) The educated entrepreneurs: A new era of entrepreneurial education is beginning. In KENT, C. A. (ed.). *Entrepreneurship Education: Current Developments, Future Directions*. Westport: Quorum Books.
- ROSA, P. (1992) *Entrepreneurial training in the UK: Past confusion and future premise*. Conference Paper Series 81/92, University of Stirling, Stirling.
- ROSENBERG, N. (2003) America's Entrepreneurial Universities. In HART, D. M. (ed.). *The emergence of entrepreneurship policy: Governance, Start-up and Growth in the U.S. Knowledge Economy*. Cambridge: Cambridge University Press.
- RUSHING, F. W. (1990) Entrepreneurship and education. In KENT, C.A. (ed.). *Entrepreneurship Education*. Westport, CT: Quorum Books.
- SANDBERG, J. (1997) Are phenomenographic results reliable? *Higher Education Research and Development*. 16 (2). pp.203-212.
- SANDBERG, J. (2000) Understanding human competence at work: An interpretative approach. *Academy of Management Journal*. 43 (1). pp.9-25.
- SANDERCOCK, P. (2004) Innovations in Entrepreneurship education: Strategy and tactics for joining the ranks of innovative entrepreneurship programs in higher education. In WELSCH, H. P. (ed.). *Entrepreneurship The Way Ahead*. London: Routledge.
- SAUNDERS, M., LEWIS, P. and THORNHILL, A. (2007) *Research Methods for Business Students*. 4th edition. London: Prentice Hall.
- SCHEMBRI, S. and SANDBERG, J. (2002) Service quality and the consumer's experience: Towards an interpretive approach. *Marketing Theory*. 2 (2). pp.189-205.

- SCHWARTZ, D. and MALACH-PINES, A. (2009) Entrepreneurship education for students: How should universities prepare for the challenge of teaching entrepreneurship? *Industry and Higher Education*. 23 (3). pp.221-231.
- SCOTT, M. F. and TWOMEY, D. F. (1988) The long term supply of entrepreneurs: Students career aspirations in relation to entrepreneurship. *Journal of Small Business Management*. 26 (4). pp.5-14.
- SCOTT, M. G., ROSA, P. and KLANDT, H. (1998) *Educating Entrepreneurs for Wealth Creation*. Aldershot: Ashgate.
- SEMBIRING, I., SANDJAJA, I. A. and ANTONIO, T. (2011) *Ciputra's Way in Shaping Entrepreneurship Spirit in Indonesia: Best Practice of Entrepreneurship Education Programme in Universitas Ciputra Surabaya*. Paper presented in 15th UNESCO-APEID International Conference, Inspiring education: Creativity and entrepreneurship. Jakarta 6-8 December.
- SEWELL, P. and POOL, L. D. (2010) Moving from conceptual ambiguity to operational clarity: Employability, enterprise, and entrepreneurship in higher education. *Education and Training*. 52 (1). pp. 89-94.
- SEXTON, D. L. (1994) Re-conceptualizing entrepreneurship: An input-output perspective. *SAM Advanced Management Journal*. January 1.
- SEXTON, D. L. and KASARDA, J. D. (1992) *The State of the Art of Entrepreneurship*. Boston: PWS-Kent Publishing.
- SHAPERO, A. and SOKOL, L. (1982) Some social dimensions of entrepreneurship. In KENT, C.A. (ed.). *Encyclopedia of Entrepreneurship*. Englewood Cliffs, NJ: Prentice Hall.
- SHEPHERD, D. A. and DOUGLAS, E. J. (1997) *Is Management Education Developing or Killing the Entrepreneurial Spirit?* Proceedings of the 1997 USASBE Annual National Conference Entrepreneurship: The Engine of Global Economic Development, San Francisco, California.
- SINGH, J. B. (1990) Entrepreneurship education as a catalyst of development in the third world. *Journal of Small Business and Entrepreneurship*. 7 (4). pp.56-63.
- SMITH, R. and ANDERSON, A. R. (2007) Recognising meaning: Semiotics in entrepreneurial research. In NEERGAARD, H. and ULHOI, J. P. (eds.). *Handbook of Qualitative Research Methods in Entrepreneurship*. Cheltenham: Edward Elgar Publishing.
- SOLESVIK, M.Z., WESTHEAD, P., MATLAY, H. AND PARSYAK, V.N. (2013) Entrepreneurial assets and mindsets Benefit from university entrepreneurship education investment. *Education and Training*. 55 (8/9). pp. 748-762.
- SOLOMON, G. (2007) An examination of entrepreneurship education in the United States. *Journal of Small Business and Enterprise Development*. 14 (2). pp.168-182.
- SOLOMON, G. T. and FERNALD, L. W. (1991) Trends in small business management and entrepreneurship education in the United States. *Entrepreneurship Theory and Practice*. 15 (3). pp. 25-39.

- STATISTICS INDONESIA (2009) *Population 15 Years of Age and Over By Main Employment Status 2004, 2005, 2006, 2007 and 2008*. Available from: <http://www.bps.go.id/sector/employ/table3.shtml>. (Accessed 25 February 2009).
- STEPHENSON, J. (1998) The concept of capability and its importance in higher education. In STEPHENSON, J. and YORKE, M. (eds.). *Capability and quality in higher education*. London: Kogan Page.
- STEVENSON, H. H. (2004) Intellectual foundations of entrepreneurship unfinished business (entrepreneurship) of the twentieth century. In WELSCH, H. P. (ed.). *Entrepreneurship The Way Ahead*. London: Routledge.
- STEVENSON, H. H. and JARILLO, J. C. (1990) A paradigm of entrepreneurship: Entrepreneurial management. *Strategic Management Journal*. 11. pp.17-27.
- STOKES, D. and BERGIN, R. (2006) Methodology or methodolatry? An evaluation of focus groups and depth interviews. *Qualitative Market Research*. 9 (1). pp.26-38.
- STOREY, D. J. (2003) Entrepreneurship, Small and Medium Sized Enterprises and Public Policies. In ACS, Z. J. and AUDRETSCH, D. B. (eds.). *Handbook of Entrepreneurship Research*. Boston: Kluwer Academic Publishers.
- STRAUSS, A. and CORBIN, J. (1998) *Basics of Qualitative Research Techniques and Procedures for Developing Grounded Theory*. 2nd edition. London: Sage Publications.
- SURLEMONT, B. (2007) School resistance toward entrepreneurship education. In FAYOLLE, A. (ed.) *Handbook of Research in Entrepreneurship Education: Contextual Perspectives*. Cheltenham: Edward Elgar Publishing.
- TESTA, S. (2010) Establishing entrepreneurship education with a bottom-up approach: Insights from a longitudinal case study. *International Journal Entrepreneurship and Small Business*. 10 (2). pp.241-256.
- THE JAKARTA POST (2009) *Government prepares entrepreneurship-based curriculum*. Monday, 2 November 2009. 12:44 PM.
- THOMAS, H. and KELLEY, D. (2011) *Entrepreneurship education in Asia*. Cheltenham: Edward Elgar Publishing.
- TRIGWELL, K. (2000) Phenomenography: Variation and discernment. In RUST, C. (ed.) *Improving Student Learning*. Proceedings of the 1999. 7th International Symposium. Oxford Centre for Staff and Learning Development. Oxford, pp.75-85.
- UNIVERSITAS CIPUTRA (2009) *About Universitas Ciputra*. Available from: <http://www.ciputra.ac.id/about-uc.html>. (Accessed 4 February 2009).
- UNIVERSITAS GADJAH MADA (2009) Educational Program. Available from: <http://www.ugm.ac.id/content.php?page=1> (Accessed 4 February 2009).
- VECIANA, J. M., APONTE, M. and URBANO, D. (2005) University students' attitudes towards entrepreneurship: A two countries comparison. *International Entrepreneurship and Management Journal*. 1. pp.165-182.
- VERZAT, C. and BACHELET, R. (2006) Developing an entrepreneurial spirit among engineering college students: What are the educational factors? In

- FAYOLLE, A. and KLANDT, H. (eds.). *International Entrepreneurship Education-Issues and Newness*. Cheltenham: Edward Elgar Publishing.
- VESPER, K. H. (2002) Entrepreneurial academics: How can we tell when the field is getting somewhere. In KRUEGER, N. F. (ed.). *Entrepreneurship: Critical Perspectives on Business and Management*. London: Routledge.
- VESPER, K. H. (2004) Unfinished business (entrepreneurship) of the twentieth century. In WELSCH, H. P. (ed.). *Entrepreneurship The Way Ahead*. London: Routledge.
- VESPER, K. H. and GARTNER, W. B. (1997) Measuring progress in entrepreneurship education. *Journal of Business Venturing*. 12 (5). pp.403-21.
- VESPER, K. H. and MCMULLEN, W. E. (1988) Entrepreneurship today courses, tomorrow degrees? *Entrepreneurship Theory and Practice*. 13 (1). pp.7-13.
- VINCETT, P. S. and PARLOW, S. (2008) Start-a-Business: An experiment in education through entrepreneurship. *Journal of Small Business and Enterprise Development*. 15 (2). pp.274-288.
- VOLKMANN, C., *et al.* (2009) *Educating the next wave of entrepreneurs: Unlocking entrepreneurial capabilities to meet the global challenges of the 21st century*. World Economic Forum.
- WAGNER, K., *et al.* (2006) Regional differences in entrepreneurship education. In Fritsch, M. and Schmude, J. *Entrepreneurship in the Region*. New York: Springer.
- WATSON, C. H. (2001) Small Business versus Entrepreneurship revisited. In BROCKHAUS, R., HILLS, G., KLANDT, H. and WELSCH, H. (eds) *Entrepreneurship Education. A global view*. Aldershot: Ashgate.
- WATTS, A. G. (1984) Education for enterprise: the concept and the context. In WATTS, A. G. and MORAN, P. (eds.). *Education for enterprise*. Cambridge: CRAC Publications.
- WEAVER, K. M., *et al.* (2009) Building an entrepreneurial university: A case study using a new venture development approach. In WEST III, G. P., GATEWOOD, E. J. and SHAVER, K. G. *Handbook of University-wide Entrepreneurship Education*. Cheltenham: Edward Elgar.
- WELSCH, H. P. (2004) *Entrepreneurship The Way Ahead*. London: Routledge.
- WEST III, G. P., *et al.* (2009) *Handbook of University-wide Entrepreneurship Education*. Cheltenham: Edward Elgar.
- WESTHEAD, P., STOREY, D. J. and MARTIN, F. (2001) Outcomes reported by students who participated in the 1994 Shell Technology Enterprise Programme. *Entrepreneurship and Regional Development*. 13. pp.163-85.
- WHITEHEAD, A. N. (1957) *The aims of education and other essays*. New York: Macmillan Co.
- WHYTE, W. F. and BRAUN, R. R. (1965) Heroes, homework and industrial growth. *Columbia Journal of World Business*. 1 (2). pp.51-57.
- WICKHAM, P. A. (2006) *Strategic entrepreneurship*. Essex: Pearson Education Limited.

- WILLIAM, G. (2003) *The Enterprising University*. Buckingham: SRHE and Open University Press.
- WILLIAMS, M. and MAY, T. (1996) *Introduction to the Philosophy of Social Research*. London: UCL Press.
- WILSON, K. (2008) Entrepreneurship education in Europe. In POTTER, J. (ed.). *Entrepreneurship and Higher Education*. OECD.
- WINGHAM, D. W. (2004) Entrepreneurship through the ages. In WELSCH (ed.). *Entrepreneurship The Way Ahead*. London: Routledge.
- WISSEMA, J. G. (2009) *Towards the Third Generation University*. Cheltenham: Edward Elgar Publishing.
- YORKE, M. (2004) *Employability in Higher Education: What it is – what it is not*. The Learning and Employability Series.