

## **Interface Between Entrepreneurship Practice And Curriculum**

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### **Abstract**

Although recent research questions the relevance and value of university entrepreneurship programmes to practice, the nature and effectiveness of these programmes has received little academic attention. Previous research overseas suggests these programmes have had varying levels of success in demonstrating how particular courses in tertiary-level instruction lead to future entrepreneurial success. However, no such studies have examined the overall global discipline of entrepreneurship with Critical Success Factors (CSFs) of practitioners and curriculum. This represents an important gap in the literature. This research examines university entrepreneurship courses through investigating links with identified CSFs of practicing entrepreneurs. Identified factors are specific to the entrepreneur, the organisation and the environment. Content analysis results revealed significant differences between CSFs used by practicing entrepreneurs and the nature/mix of university curriculum.

### **Introduction**

The nature and effectiveness of entrepreneurship education has received moderate academic attention (Louckes et al., 2000; McMullan and Gillin, 2001; Rosa, 2003) and many university entrepreneurship programs are perceived as having limited relevance to industry (McMullen and Gillin, 1998; Fiet, 2000). In addition, there is no consensus on what types of curriculum contribute to future entrepreneurial success (Gibb, 2002; Rosa, 2003). Although early research apportions this lack of success to the infancy of many university entrepreneurship programmes (Vesper and Gartner, 1997) more recent research cites a need to investigate the effectiveness of current entrepreneurship courses, with the view of altering content delivery so as to promote successful entrepreneurial performance outcomes (Hayward, 2000; Rosa, 2003). To this end, this research examines university entrepreneurship education through investigating the links between critical success factors (CSFs) of practicing entrepreneurs and university entrepreneurship curriculum.

This paper is organised as follows. In the next section of the paper, the research problem is defined within the scope of the existing literature. Then the methodology used to conduct the research and analysis of results are discussed. Finally, conclusions and recommendations for theory and practice are presented.

### **Literature Review**

Entrepreneurship has been identified as an important contributor to job creation, economic growth and the delivery of products and services (KCEL, 2002). Additionally, entrepreneurship curriculum has been shown to aid in the improvement of knowledge areas outside of venture development, but considered critical to organisations in a corporate or social entrepreneurship context (Cannon, 2000), this is evidenced by its increased inclusion in programs across school disciplines (Fleming, 1999). While entrepreneurship education has grown significantly throughout Australia and the rest of the world in recent years (Vesper and Gartner, 1997; Hindle,

2001; Katz, 2002), educational curriculum between universities often appears inconsistent with current entrepreneurship research and practice (Gibb, 2002). Research on entrepreneurship education is limited (Vesper and Gartner, 1997), and the lack of uniformity in programme offerings may hamper current acceptance and the future growth in tertiary level entrepreneurship education (Gorman et al., 1997). Finally, many courses failed to instruct students on factors, techniques and tactics relevant to future entrepreneurial success (Hindle, 2001). That is, many courses neglected to identify, examine and present entrepreneurial CSFs which is curious given the growing popularity of this area within entrepreneurship literature.

In comparison to the paucity of research examining entrepreneurship education, considerable academic interest has been shown towards determining common underlying success factors associated with new venture performance (Luk, 1996). Previous research suggests that entrepreneurial success is a complex phenomenon that is dependent upon internal and external factors (Watson et al., 1998). In particular, the probability of launching a successful business is not singularly reliant upon a fixed set of attributes, but is a function of the interplay between a series of personal, organisational and environmental correlates (Van De Hen, 1993). For the purposes of this research, CSFs were collected, analysed and categorised into entrepreneur (personal), organisational and environmental factors, through a preliminary assessment of the extant literature.

*Entrepreneur.* The assessment of individual attributes is one of the most widely researched areas within the entrepreneurship discipline (Filion, 1997). These attributes may be categorised into personality and mentality correlates. In relation personality attributes, entrepreneurs are viewed as calculated risk takers that have a high need for achievement and internal locus of control, a high tolerance for ambiguity, and a high need for autonomy (Hisrich and Peters, 1996; McClelland, 1961; Pandey and Tewary, 1979; Schere, 1982; Sexton and Bowman, 1984). However, debate continues as to when and how entrepreneurs acquire these traits (McClelland, 1961; Pandey and Tewary, 1979). In addition, an individual's mentality or outlook may influence entrepreneurial success. Mentality refers to a transitory state rather than an embedded personality trait and may be a function of previous experience (Hood and Young, 1993). Typically entrepreneurs have ability to visualise, forecast and position a company for future success (Bird and Jelinek, 1988; Villiers, 1989). This integrative skill is referred to as convergent or divergent thinking (Guilford, 1959; Lipper, 1987) and is often associated with future success (Julien, 1989; Kirzner, 1982). Next, organisational-specific CSFs will be detailed.

*Organisation.* Research suggests that entrepreneurial success is dependent upon an entrepreneur's traditional and non-traditional organisational competencies (Alberti, 1999). Traditional business and commercial knowledge skills may be learned and courses in finance, management and marketing are favoured by most universities. Additional areas such as product/service knowledge and effective communication skills have only receive limited attention in entrepreneurship programmes (Ronstadt, 1985; Vesper and McMullan, 1988). Non-traditional areas of expertise focus upon innovation, opportunity recognition and evaluation (Shane, 2000; Timmons, 2000). Although the recognition of an opportunity may be the critical first step in the entrepreneurial process (Chandler, et al., 2002; Hills, et al., 1999; Timmons, 2000), these competencies have not been traditionally taught in universities. Environmental influences on entrepreneurial success is considered next.

*The Environment.* An understanding of a supportive environment is identified by practitioners is an important factor contributing to success (KCEL, 2002). From

an ecological economic perspective, entrepreneurial success if viewed as dependent upon resource accessibility and utilisation within highly competitive and interdependent economies (Aldrich, 1979, 1990; Hannan and Freeman, 1977; 1989). For the purposes of this research, the entrepreneurial process is assumed to have micro and macro elements impacting upon firm performance. Micro-environmental factors relate to the immediate entrepreneurial environment and include (for example) local community networks, local government, associations, industry collaborations and clusters (Morris et al., 2001; Gibb, 2002). Macro environmental elements include technology, economic conditions, public policy influences, political events and cultural norms (Morris et al., 2001; Feindt et al., 2002).

An assessment of the nature and inter-relationship of the identified CSFs should be reflected in current entrepreneurship curriculum to support the realisation of desired entrepreneurial outcomes (Rosa, 2003). In addition, entrepreneurship education should reflect emerging thought and current practice. This research represents a preliminary step in addressing a gap in the literature regarding the assessment of the effectiveness of entrepreneurship education in promoting positive entrepreneurial outcomes in the future. Specifically, this research investigates the following research question: *What is the alignment of current entrepreneurship curriculum to the critical success factors (CSFs) of practicing entrepreneurs?*

### **Methodology**

A *mixed or quantifying* content analysis procedure was used in this research (Bos and Tarnai, 1999). This method provided a multi-tiered theoretic perspective to the identification of relevant entrepreneurship factors using CSFs as a unit of analysis (Bos and Tarnai, 1999). The methodological process consisted of two steps. Firstly, content analysis of the entrepreneur CSF literature was conducted; this allowed a thorough examination of the extant literature and a practical basis for the CSF categories. This led to the formation of three categories; entrepreneur; organisation and environment. Secondly, a content analysis of the entrepreneurship curriculum from university entrepreneurship courses was conducted utilising the same criteria of CSFs to reveal evidence of alignment or misalignment. The examination of course outlines offers the most time-efficient and cost-effective method of obtaining this data, as they represent a contract with students and administration as to course content. Further investigation on the actual delivery of the content would involve direct observation and may become a latter-stage sample to compare and contrast results. Constructs of entrepreneurship are operationalised via a coding system to systematically observe and record content from the text through units of analysis specific to research findings (Cavana et al., 2001). Course outlines from universities were reviewed and coded according to corresponding categories from the CSFs identified in the literature review. Next the research findings will be discussed.

### **Analysis of Research Findings**

Through the content analysis of the research literature and university course outlines, our research shows that *interaction between the entrepreneur and their environment is under-represented in university entrepreneurship curriculum*. The breakdown of CSFs by category, area focus and curriculum is provided in Table 1.

Overall, the findings within the CSF categories indicate that CSFs were considered to be at the highest level within the organisational level at 64 percent. The

Environment category ranked second with 27 percent and the Entrepreneur category ranked third with nine percent. Organisational-level results show that the Traditional category areas of Finance/Cash Management, Marketing/Sales and Management are the top three factors most important for success. Non-Traditional category results show that Opportunity Recognition, Business Concepts/Models and Environmental Scanning are considered the top three most valuable. Environmental factors in the CSF category had a heavier focus on micro-factors versus macro-factors. Entrepreneur CSFs ranked last with nine percent in the CSF categories, the heaviest proportion of scores were attributed to Mentality factors, including areas of vision, innovation and creativity/imagination as the top three ranked most important. Personality ranked second behind Mentality factors with risk-taking, self-efficacy and independence/autonomy as the top three.

**Table 1: CSF Category Breakdown, Area Focus and Curriculum Comparison**

<b>CRITICAL SUCCESS FACTOR CATEGORY BREAKDOWN</b>							
<b>ENTREPRENEUR</b>		<b>ORGANISATION</b>		<b>ENVIRONMENT</b>			
<b>Rank</b>	<b>Personality</b>	<b>Mentality</b>	<b>Traditional</b>	<b>Non-Traditional</b>	<b>Micro</b>	<b>Macro</b>	
1	Risk-taking	Vision	Finance	Opp. Rec.& Eval.	Ent. Environ.	Technology	
2	Self-efficacy	Innovative	Mktg/Sales	Bus. Concept	Local Mkt Ntwks	Econ. Cond.	
3	Independence/Aut.	Creativity	Management	Env. Scanning	Reg. ED Pol.	Global Issues	
<b>CSF CATEGORY</b>		<b>CSFs AREA FOCUS</b>		<b>CSFs TO CURRICULUM</b>			
<b>Rank</b>	<b>%</b>	<b>Focus</b>	<b>Focus (%)</b>	<b>Rank</b>	<b>%</b>	<b>Focus (%)</b>	
1	<b>ORGANISATION</b>	64%	Traditional	22%	<b>(#1)</b>	82%	53%
			Non-Traditional	78%			47%
2	<b>ENVIRONMENT</b>	27%	Micro	73%	<b>(#3)</b>	7%	33%
			Macro	27%			67%
3	<b>ENTREPRENEUR</b>	9%	Personality	27%	<b>(#2)</b>	11%	32%
			Mentality	73%			68%

University curriculum results show that while some entrepreneur CSFs are aligned with curriculum, there are also distinct variations. Organisational factors ranked highest in curriculum as they did with CSFs, but with a significant difference in percentage proportion (82 percent curriculum versus 64 percent CSFs). The CSF literature emphasises non-traditional factors (78 percent) rather than traditional disciplinary areas (22 percent). However, this is not mirrored within entrepreneurship curriculum. Most courses consist of instruction centred toward traditional business discipline areas, indicating that traditional business courses are still dominant in the entrepreneurship curriculum and discrepancies exist between the two areas. Within the three categories, *Environmental factors show the most significant misalignment, ranked as more important in the CSF category at 27 percent, while curriculum content reached only seven percent.* This indicates a stronger movement towards understanding how the environment interacts with the entrepreneur and their organisation. Factors such as external resources, potential collaborative partners and other macro-perspective global issues all can affect how an individual entrepreneur makes decisions and manages their firm (Van De Hen, 1993). In addition, *CSFs more heavily emphasise micro-environmental elements above a macro emphasis.* In contrast, curriculum content favours macro-level factors as opposed to micro-environmental elements. This disparity suggests that these factors are insufficiently considered and under-represented within entrepreneurship curriculum. This divergence can be understood through a history of reluctance and slow change on the

part of many business schools to integrate new research issues into existing curriculum (Rosa, 2002). Evidence also suggests that many courses are listed with titles representing current research issues but content remains within the area of traditional disciplines (Vesper and Gartner, 2001). Entrepreneur category data suggests that these two category areas remain close in content. These findings may be explained by recent falls in research investigating entrepreneurial characteristics (Gorman et al., 1997), possibly due to difficulties in establishing a causal link between entrepreneurial traits, performance and success (Gartner, 1989).

Organisational factors may have received the highest score within the CSF categories as these functional areas of the entrepreneurial process have been shown to be the most measurable and obvious elements for success (Gibb, 2002) and also in the assessment of failure (Robertson et al., 2003). Interestingly, the results also suggest that there is a strong shift away from many traditional elements of organisational factors such as marketing/sales, and moving towards more entrepreneurial-specific, or non-traditional factors such as opportunity recognition. While there is evidence of new innovative curriculum, such as 'entrepreneurial marketing', the results indicate that traditional business courses are still dominant in entrepreneurship curriculum and discrepancies exist between the two areas.

The most significant results show a discrepancy in environmental factors. This gap between the two variables warrants further understanding of the relationship between entrepreneurs and entrepreneurship curriculum, and can impact several facets of curriculum development and strategic planning at the tertiary level. Entrepreneurship education models have been criticised as being loosely constructed (Harrison and Leitch, 1996; Laukkanen, 1997) and challenged for lacking in uniformity and practical significance (Rosa, 2003; Vesper and Gartner, 2001; Gibb, 2002). As shown in these initial results, these discrepancies can lead to inconsistency of courses and programs in entrepreneur curriculum (Vesper and Gartner, 2001) and has emphasised the need for a more systematic approach to entrepreneurship curriculum development in line with factors identified as critical to success of entrepreneurs. This gap can be reduced through a conceptual framework to understand the balance between practice and curriculum, and offer meaningful development in entrepreneurial education, providing realistic advantages to students and a systematic model of curriculum development.

### **Conclusion and Recommendation for Future Research**

This research provides preliminary investigation into practitioner CSFs and university entrepreneurship curriculum so as to better assess the practical significance of courses. The research shows that critical success factors as represented in organisational and environmental factors are significantly different across entrepreneurship research and curriculum. Firstly, environmental success factors, or factors external to the entrepreneur and the organisation are not well represented in curriculum. Secondly, organisational factors are incongruent with entrepreneurship curriculum, and show varying levels of focus when broken down into sub-categories of specific content, namely Traditional versus Non-traditional courses.

This research found that these areas require greater synthesis to improve entrepreneurial outcomes. In many cases university entrepreneurship curriculum does not reflect emphasis on similar issues and many current entrepreneurship courses and programs do not incorporate relevant subject matter important for the future success

of entrepreneurs. This study will form the basis for a large scale quantitative analysis of entrepreneurship research and curriculum in the near future.

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